| Spill Volume(Bbls) Calculator<br>*Inputs in blue, Outputs in red* | | |
|---|---|---|
| Length(Ft) | Width(Ft) | Depth(In) |
| 234.000 | 120.000 | 48.000 |
| Cubic Feet Impacted | | 112320.000 |
| Barrels | | 20003.56 |
| Soil Type | | Clay/Sand |
| Bbls Assuming 100% Saturation | | 3000.53 |
| Saturation | Fluid present with shovel/backhoe | |
| Estimated Barrels Released | | 3000.60000 |

| Instructions |
|---|
| *1.Input spill measurements below. Length and width need to be input in feet and depth in inches.*<br>*2. Select a soil type from the drop down menu.*<br>*3. Select a saturation level from the drop down menu.* |
| (For data gathering instructions see appendix tab) |

| Measurements | |
|---|---|
| | |
| Length (ft) | 234 |
| Width (ft) | 120 |
| Depth (in) | 48.000 |







District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

| | |
|---|---|
| Incident ID | nAPP2321152013 |
| District RP | |
| Facility ID | |
| Application ID | |

# Release Notification

## Responsible Party

| | | | |
|---|---|---|---|
| Responsible Party | Spur Energy Partners LLC | OGRID | 328947 |
| Contact Name | Katherine Purvis | Contact Telephone | (575) 441-8619 |
| Contact email | katherine.purvis@spurenergy.com | Incident # *(assigned by OCD)* | nAPP2321152013 |
| Contact mailing address | 9655 Katy Freeway; Houston, TX 77024 | | |

## Location of Release Source

Latitude 32.78833 Longitude -103.74687
*(NAD 83 in decimal degrees to 5 decimal places)*

| | | | |
|---|---|---|---|
| Site Name | CURLY FEDERAL #1 SWD | Site Type | SWD |
| Date Release Discovered | 07/29/2023 | API# *(if applicable)* | 30-025-38442 |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| I | 34 | 17S | 32E | LEA |

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

## Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

| | | |
|---|---|---|
| ☐ Crude Oil | Volume Released (bbls) | Volume Recovered (bbls) |
| ☒ Produced Water | Volume Released (bbls) 3000 BBLS | Volume Recovered (bbls) 2975 BBLS |
| | Is the concentration of dissolved chloride in the produced water >10,000 mg/l? | ☐ Yes ☒ No |
| ☐ Condensate | Volume Released (bbls) | Volume Recovered (bbls) |
| ☐ Natural Gas | Volume Released (Mcf) | Volume Recovered (Mcf) |
| ☐ Other (describe) | Volume/Weight Released (provide units) | Volume/Weight Recovered (provide units) |

Cause of Release

6" FIBERGLASS PARTED UNDERNEATH A 90 ON THE MAIN LINE COMING IN THE FACILITY RELEASING PRODUCED WATER INTO CONTAINMENT, ONTO THE PAD, AND INTO THE PASTURE

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2321152013 |
| District RP | |
| Facility ID | |
| Application ID | |

| | |
|---|---|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br>☒ Yes ☐ No | If YES, for what reason(s) does the responsible party consider this a major release?<br>THE RELEASE IS GREATER THAN 25 BBLS. |

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

YES BY KATHY PURVIS OF SPUR ENERGY TO NMOCD VIA NOR SUBMISSION TO THE PERMITTING PORTAL ON 07/30/2023

## Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

N/A

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Katherine Purvis  Title: EHS Coordinator

Signature: Katherine Purvis  Date: 07/31/2023

email: katherine.purvis@spurenergy.com  Telephone: (575) 441-8619

**OCD Only**

Received by: Shelly Wells  Date: 7/31/2023

**District I**
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
**District II**
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
**District III**
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
**District IV**
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
# 1220 S. St Francis Dr.
# Santa Fe, NM 87505



## CONDITIONS

| | |
|---|---|
| Operator:<br>Spur Energy Partners LLC<br>9655 Katy Freeway<br>Houston, TX 77024 | OGRID:<br>328947 |
| | Action Number:<br>245909 |
| | Action Type:<br>[C-141] Release Corrective Action (C-141) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| scwells | None | 7/31/2023 |

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2321152013 |
| District RP | |
| Facility ID | |
| Application ID | |

# Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

| | |
|---|---|
| What is the shallowest depth to groundwater beneath the area affected by the release? | >66 (ft bgs) |
| Did this release impact groundwater or surface water? | ☐ Yes ☑ No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? | ☐ Yes ☑ No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? | ☐ Yes ☑ No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? | ☐ Yes ☑ No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | ☐ Yes ☑ No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? | ☐ Yes ☑ No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? | ☐ Yes ☑ No |
| Are the lateral extents of the release within 300 feet of a wetland? | ☐ Yes ☑ No |
| Are the lateral extents of the release overlying a subsurface mine? | ☐ Yes ☑ No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | ☐ Yes ☑ No |
| Are the lateral extents of the release within a 100-year floodplain? | ☐ Yes ☑ No |
| Did the release impact areas **not** on an exploration, development, production, or storage site? | ☑ Yes ☐ No |

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

**Characterization Report Checklist**: ***Each of the following items must be included in the report.***

- ☑ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☑ Field data
- ☑ Data table of soil contaminant concentration data
- ☑ Depth to water determination
- ☑ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☑ Boring or excavation logs
- ☑ Photographs including date and GIS information
- ☑ Topographic/Aerial maps
- ☑ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2321152013 |
| District RP | |
| Facility ID | |
| Application ID | |

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Katherine Purvis Title: EHS Coordinator

Signature: Katherine Purvis Date: 02/26/2024

email: katherine.purvis@spurenergy.com Telephone: (575) 441-8619

**OCD Only**

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2321152013 |
| District RP | |
| Facility ID | |
| Application ID | |

# Remediation Plan

**Remediation Plan Checklist**: ***Each of the following items must be included in the plan.***

- [X] Detailed description of proposed remediation technique
- [X] Scaled sitemap with GPS coordinates showing delineation points
- [X] Estimated volume of material to be remediated
- [X] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [X] Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only**: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- [ ] Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- [ ] Extents of contamination must be fully delineated.
- [ ] Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Katherine Purvis  Title: EHS Coordinator

Signature: Katherine Purvis  Date: 02/26/2024

email: katherine.purvis@spurenergy.com  Telephone: (575) 441-8619

**OCD Only**

Received by: _____  Date: _____

- [ ] Approved
- [ ] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: _____  Date: _____

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2321152013 |
| District RP | |
| Facility ID | |
| Application ID | |

# Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist**: ***Each of the following items must be included in the closure report.***

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☑ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Katherine Purvis Title: EHS Coordinator

Signature: Katherine Purvis Date: 02/26/2024

email: katherine.purvis@spurenergy.com Telephone: (575) 441-8619

**OCD Only**

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Terracon
4518 W. Pierce St. Carlsbad NM, 88220

January 19, 2024
Spur Energy Partners LLC
9655 Katy Fwy Suite 500
Houston, TX 77024

Attn: New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: **Release Investigation, and Closure Report**
Curly Federal #2 SWD
Unit I, Section 34, Township 17 South, Range 32 East
32.78833°, -103.74687°
Eddy County, New Mexico
Terracon Project No. KH237051

To Whom it May Concern:

Terracon Consultants, Inc. (Terracon) is pleased to submit our Release Investigation and Closure Report for the site referenced above. The scope of services was developed in accordance with the New Mexico Oil Conservation Division (NMOCD) regulations concerning clean-up actions required for releases of crude oil and produced water. The response actions were taken as the result of a produced water release from a separation of a fiberglass fitting from the main line. The below sections detail Terracon's assessment and remedial actions in response to the noted release.

## Action Items

**Completed Actions**

| | |
|---|---|
| 1) | Conducted an initial site assessment and a series of sampling events. |
| 2) | All conditions needed for approval of closure have been met. |
| 3) | All Maps and associated data for approval have been provided. |
| 4) | Soil samples collected from the excavation were submitted to an approved laboratory for analysis to determine levels of impact vertically and horizontally. |
| 5) | Excavation of the inferred release area was completed with the intent to remove impacted soil as determined by the Closure Criteria set by NMOCD. |
| 6) | All soil stockpiles on site were placed on plastic and bermed around the edges to reduce loss. |
| 7) | All confirmation samples were collected every 200 square feet. |
| 8) | Remedial activities were terminated when a confirmation sample was collected below the NMOCD RALs for Oil and Gas impacted soils. |
| 9) | Following the acceptance of this closure report all areas of the excavation will be backfilled and brought to the surrounding grade and reseeded. |

**Spur Energy Partners, LLC**
Curly Federal #2 SWD
32.78833°, -103.74687°
NMOCD Reference # nAPP2321152013
Terracon Project # KH237051

**Anticipated Actions**

1) Approval by the NMOCD.

We at Terracon are deeply grateful for the opportunity to offer our environmental services to Spur Energy Partners, LLC. We are committed to providing the highest level of service and support. Should you need further information or have any queries, we encourage you to reach out to our office at your earliest convenience.

Sincerely,

**Travis Casey**
Senior Staff Scientist
Carlsbad

**John Grams, P.G. (TX)**
Environmental Department Manager
Lubbock

**TABLE OF CONTENTS**

# Table of Contents

Section 1 – Incident Information....1
Section 2 – General Site Characteristics....2
Section 3 – Regulatory Framework and Response Action Levels....3
Section 4 – Remediation Activities....4
Section 5 – Remediation Confirmation Assessment....4
Section 6 – Analytical Results....4
Section 7 – Conclusion and Closure Request....4

**Attachments:**

**Appendix A – Exhibits**
Exhibit 1 – Topographic Map
Exhibit 2 – Site Location Map
Exhibit 3 – Site Sample Map
Exhibit 3.1 – Floors & Walls
Exhibit 3.2 – Floors & Walls
Exhibit 3.3 – Floors & Walls
Exhibit 3.4 – Release Assessment
Exhibit 4 – NMOSE POD Location Map
Exhibit 5 – Designated Wetland Area Map
Exhibit 6 – Cave Karst Public UCP Map

**Appendix B – Tables and Well Data**
Table 1 – Soil Sample Analytical Results
NMOCD & BLM Water Well Variance

A**ppendix C – Photographic Log**
**Appendix D – Analytical Report and Chain of Custody**
**Appendix E – Initial Form C-141 and Final Form C-141**
**Appendix F – Terracon Standard of Care, Limitation, and Reliance**

## Section 1 – Incident Information

The following table provides detailed information regarding the July 29, 2023, produced water release at the Curly Federal #2 SWD (Curly) site in Lea County, New Mexico:

| Required Information | Site and Release information | |
|---|---|---|
| Responsible party | The pipeline is operated by Spur Energy Partners, LLC. | |
| Local contact | Contact:<br>Ms. Katherine Purvis | P: (575)441-8619<br>E: katherine.purvis@spurenergy.com |
| NMOCD Notification | Notice of the release was provided to the NMOCD District 2 Artesia Office by Ms. Katherine Purvis on July 29, 2023.<br>NMOCD Reference ID: nAPP2321152013 | |
| Facility Description | Curly SWD is in Lea County, New Mexico. It is an area located within Unit I, Section 34, Township 17 South, Range 32 East, approximately 4.62 miles southeast of Maljamar, New Mexico. The site is predominantly developed oil and gas Right of Way (ROW) surrounded by native pastureland owned by the Bureau of Land Management (BLM). | |
| Time of incident | July 29, 2023, discovered during daily operations. | |
| Discharge event | A 6-inch fiberglass fitting's separation from the main line led to a discharge of produced water onto the pad and into the pasture. The site is depicted in Appendix A's Exhibits 1 and 2. | |
| Type of discharge | The documented produced water release occurred on pad, and spilled onto, federal-owned, native pastureland area. Soils at the site are affected at the surface and surrounding the containment. | |
| Quantity of spilled material | Total Fluids: 3000 bbls | Produced Water: 3000 bbls |
| Inferred release area | Surface area: 33,848 $ft^2$ | Depth: 0-4' bgs (below ground surface) |
| Remediated excavation area | Excavation area:<br>14,000Sq.ft./1,500 Cu.yd. | Depth: 0-4' bgs |
| Site characteristics | Relatively flat with drainage following the natural ground surface; very gently sloping to the south. | |
| Immediate corrective actions | The leaking line was repaired preventing further release. | |

**Spur Energy Partners, LLC**
Curly Federal #2 SWD
32.78833°, -103.74687°
NMOCD Reference # nAPP2321152013
Terracon Project # KH237051

## Section 2 – General Site Characteristics

| Physical Characteristic | Site Ranking Characteristics |
|---|---|
| **Groundwater**<br>NMOSE POD Location Map – (Exhibit 4 in Appendix A) | POD Number: (SB-1R)<br>Depth to Groundwater: Greater than 66 ft. bgs<br>Distance to Well: 0.60 miles to the northwest<br>NMOCD & Bureau Land Management (BLM) approved variance well (see Appendix B)<br>Date Drilled: October 12, 2017<br>Last Date Meter Reading: October 12, 2017 |
| | Groundwater Quality: The well record available is from a dry hole drilled to 66 feet bgs. Due to the distance of 0.60 miles from the inferred release a Variance was requested and approved by both NMOCD and BLM agencies. Variance request and approval can be reviewed (see Appendix B). Water quality data is not available. |
| **Surface Water**<br>NM Wetland Map – (Exhibit 5 in Appendix A) | Fresh Water Pond (Conoco Pond), approximately 1.47 miles to the north. |
| **100-Year Flood Plain** | This site is located outside of the 100-year flood plain of the Pecos River. |
| **Soil Characteristics** | Soils at the site are mapped as Pyote and Maljamar fine sands series soils, 1 to 3 percent slopes, well-drained; few coarse roots; common pores; gradual smooth boundary. (3 to 10 inches thick). The formation is categorized with a negligible runoff classification. |
| **Karst Characterization**<br>Cave Karst Public UCP Map – (Exhibit 6 in Appendix A) | Terracon evaluated data from the NMOCD Public FTP Site, Karst map designations in reference to the site location. The site appears to be within a low-level Karst risk area. Based on on-site observations within the extent of the release margins the potential for Karst formations in this specific area are of low potential. Restrictive features were not encountered from surface to 48 inches below grade surface (bgs) within the release margins. The full extent of release quantities and excavation activities did not extend greater than 48 inches bgs. |

**Spur Energy Partners, LLC**
Curly Federal #2 SWD
32.78833°, -103.74687°
NMOCD Reference # nAPP2321152013
Terracon Project # KH237051

## Section 3 – Regulatory Framework and Response Action Levels

Oil and gas exploration and production facilities in New Mexico are generally regulated by the New Mexico Oil Conservation Division (NMOCD). The NMOCD has issued the *Closure Criteria for Soils Impacted by a Release, June 21, 2018,* and *Restoration, Reclamation, and Re-vegetation (19.15.29.13) NMAC – D (Reclamation of areas no longer in use)* as guidance documents for the remediation and reclamation of sites impacted by releases from oil and gas exploration and production activities. Sections detailed below present sections of the guidance document that are relevant to the release.

### Section 3.1 – Reclamation Levels (Surface to 4 ft. bgs off pad)

The below Reclamation Limits for chlorides, TPH (GRO+DRO+MRO), BTEX (includes benzene, toluene, ethylbenzene, and xylenes), and benzene are defined within New Mexico Administration Code (NMAC) *Restoration, Reclamation, and Re-vegetation* (19.15.29.13) *New Mexico Administration Code (NMAC) – D (Reclamation of areas no longer in use)* for soils extending to 4 ft. bgs.:

| Constituent | Remediation Limits |
|---|---|
| Chloride | 600 mg/kg |
| TPH (GRO+DRO+MRO) | 100 mg/kg |
| BTEX | 50 mg/kg |
| Benzene | 10 mg/kg |

### Section 3.2 – Remediation Levels (> 4 ft. bgs on pad)

Based on the site-specific characteristics, the applicable NMOCD remediation levels for Total BTEX, chloride, and TPH within soils, exclusive of the Reclamation Zone (surface to 4 ft. bgs), are as follows:

| Constituent | Remediation Limit |
|---|---|
| Chloride | 10,000 mg/kg |
| TPH (GRO+DRO+MRO) | 2,500 mg/kg |
| BTEX | 50 mg/kg |
| Benzene | 10 mg/kg |

**Spur Energy Partners, LLC**
Curly Federal #2 SWD
32.78833°, -103.74687°
NMOCD Reference # nAPP2321152013
Terracon Project # KH237051

## Section 4 – Remediation Activities

Soil remediation activities were completed between December 4, 2023, and December 18, 2023. During this work areas exhibiting visual impact were excavated to a depth of approximately 2 to 4 feet bgs.

Approximately 1,500 cubic yards of soil were excavated by RCS and stockpiled atop a polyethylene liner pending waste characterization and disposal under an approved Form C-138. Excavation efforts ceased based on the results of removing visual impacts. Excavated materials were disposed of at Lea Land Landfill.

Soil remediation activities on pad within and around the inferred area were conducted between December 4, 2023, and December 18, 2023. Results of on pad soil samples were confirmed to be within NMODC RALs. Therefore, the only excavation operations conducted on pad was scraping to remove visible staining.

## Section 5 - Remediation Confirmation Assessment

Terracon collected total of 145 composite soil samples (N-SW01 through 06, S-SW01 through 05, E-SW01 through 10.2, W-SW01 through 09, and FS-01 through 80) from the excavation. The samples were placed in laboratory-provided sample containers, preserved with ice, and transported under a chain of custody to Eurofin Laboratories in Hobbs, New Mexico for analysis of BTEX, TPH, and chlorides.

## Section 6 – Analytical Results

Composite soil samples collected on December 4, 2023, through December 18, 2023. Five samples exhibited concentrations of TPH (EPA Method 8015M) above sample detection limits (SDLs). However, all five of these detections were under the NMOCD closure criteria.

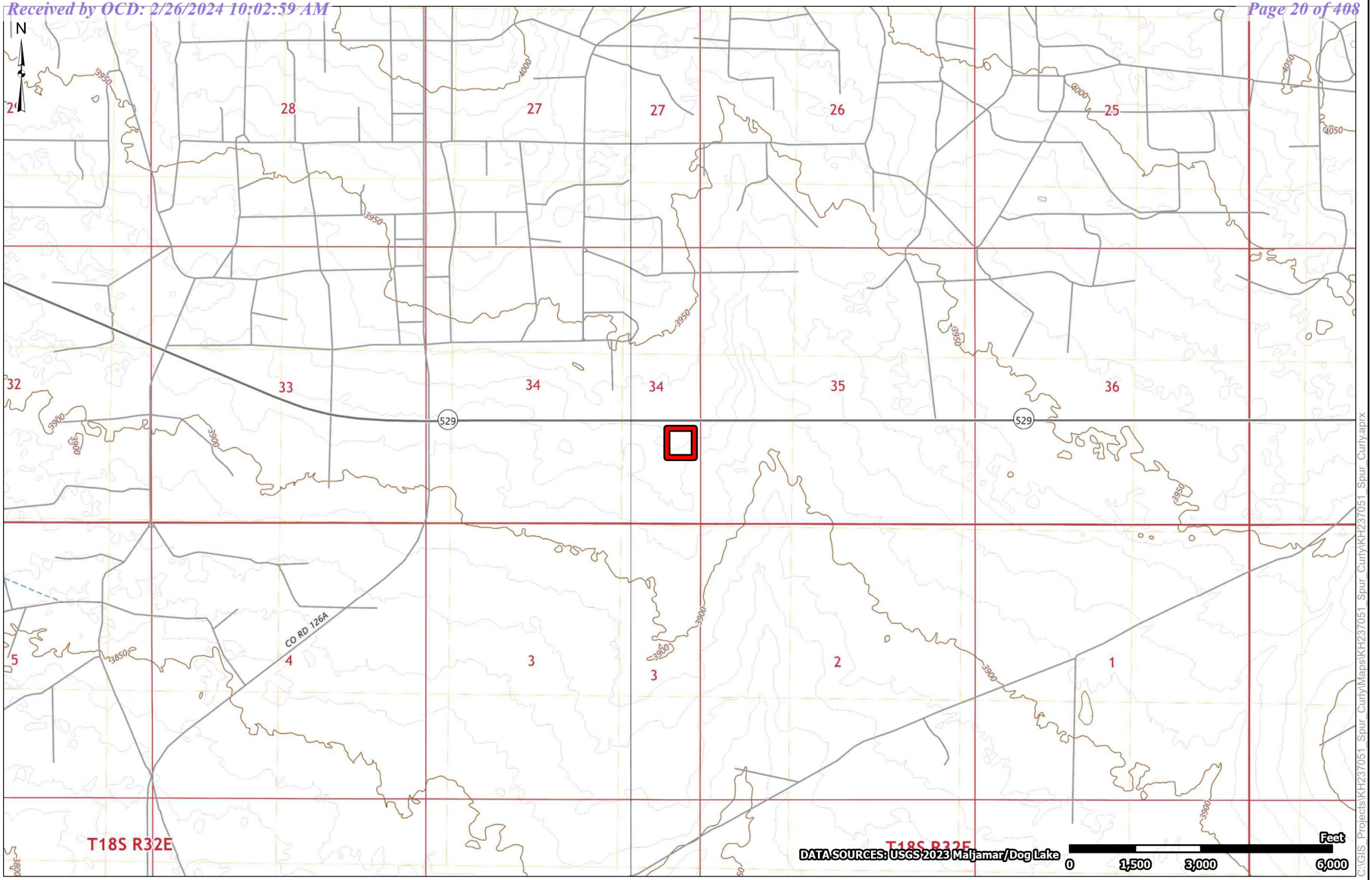
All composite samples collected from the excavation area exhibited concentrations of chloride above laboratory sample detection limits. The results ranged from <4.86 mg/kg in E-SW01 (0-4 feet) to 1,310 mg/kg in FS 65 (4 feet).

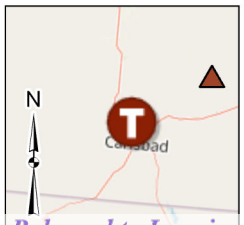
A summary of BTEX, chloride and TPH concentrations of all collected soil samples is attached as Table 1.

## Section 7 – Conclusion and Closure Request

Based on the laboratory results of the confirmation sampling following excavation activities. The remediation actions have met the closure criteria defined in accordance with NMAC 19.15.29.12. Terracon respectfully requests regulatory closure of incident nAPP2321152013 on the behalf of Spur Energy Partners.

# APPENDIX A – EXHIBITS




Site Boundary

| | |
|---|---|
| Project No.: | KH237051 |
| Date: | Dec 20 2023 |
| Drawn By: | JWL |
| Reviewed By: | JRG |

terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140
terracon.com

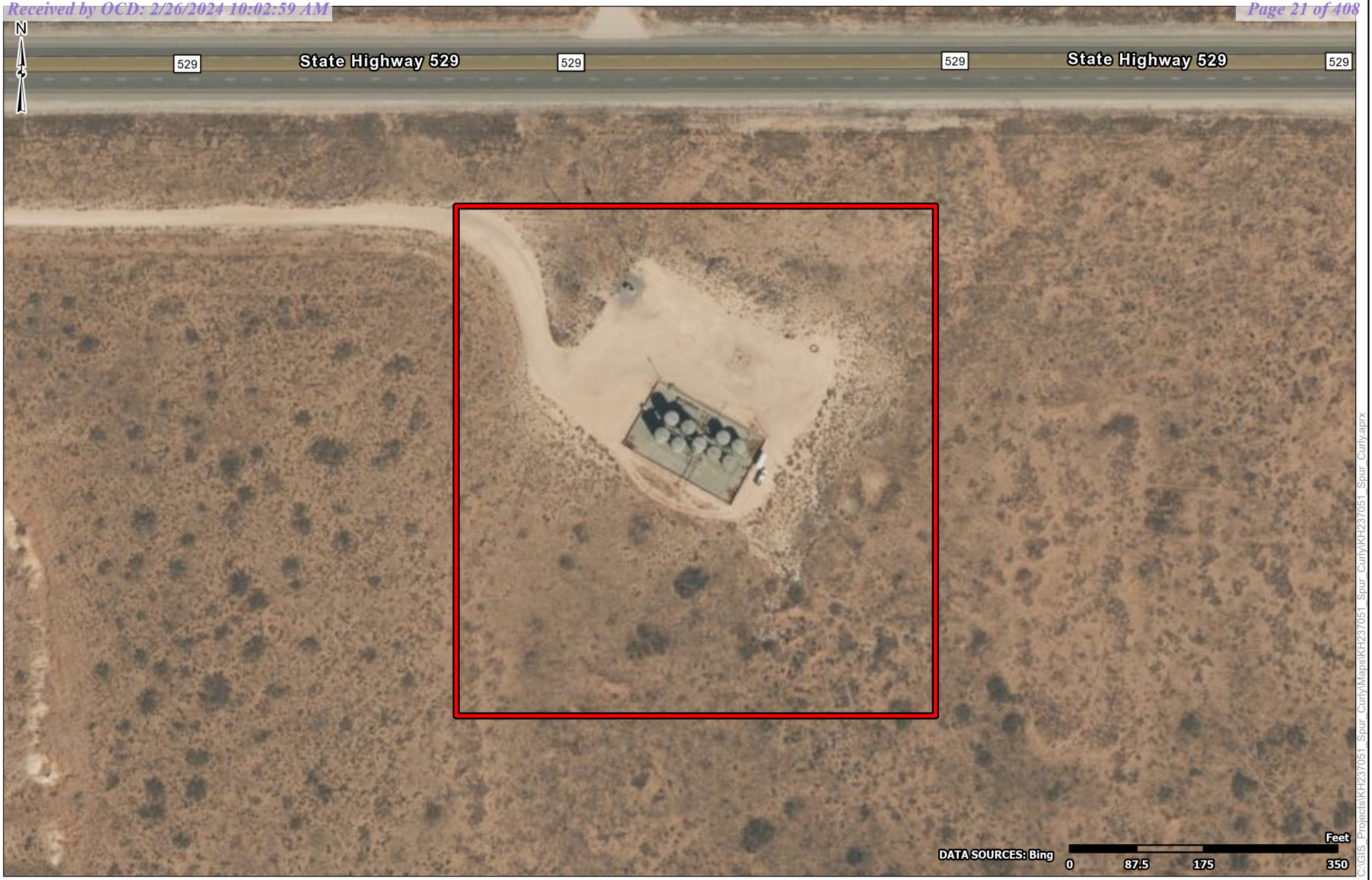
**Topographic Map**

Curly SWD
Spur Energy Partners, LLC
Lea County, New Mexico
32.78833, -103.74687

**Exhibit**

**1**

C:\GIS_Projects\KH237051_Spur_CurlyMaps\KH237051_Spur_Curly\KH237051_Spur_Curly.aprx







Site Boundary

| | |
|---|---|
| Project No.: | KH237051 |
| Date: | Jan 08 2024 |
| Drawn By: | JWL |
| Reviewed By: | JRG |

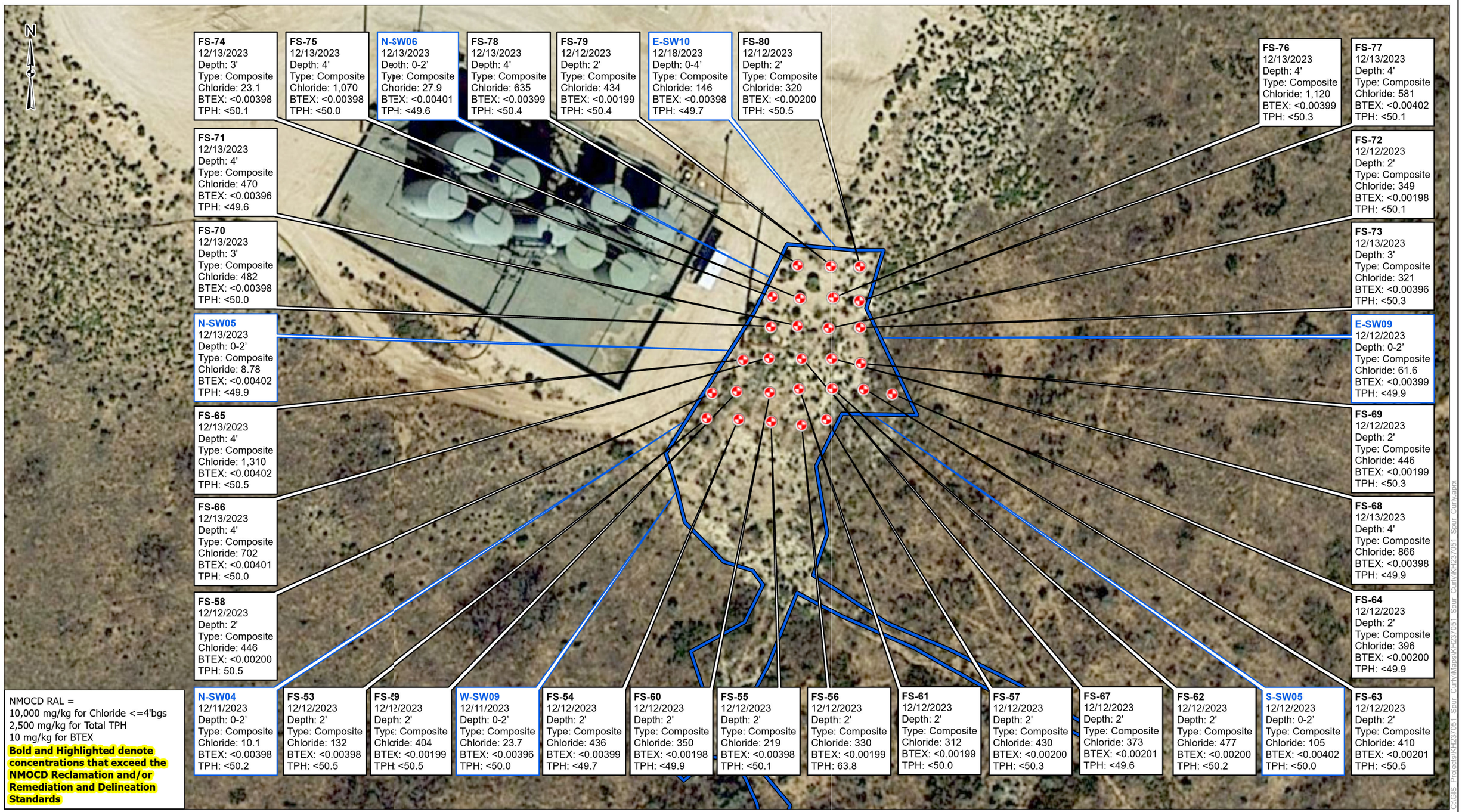
Terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140 terracon.com

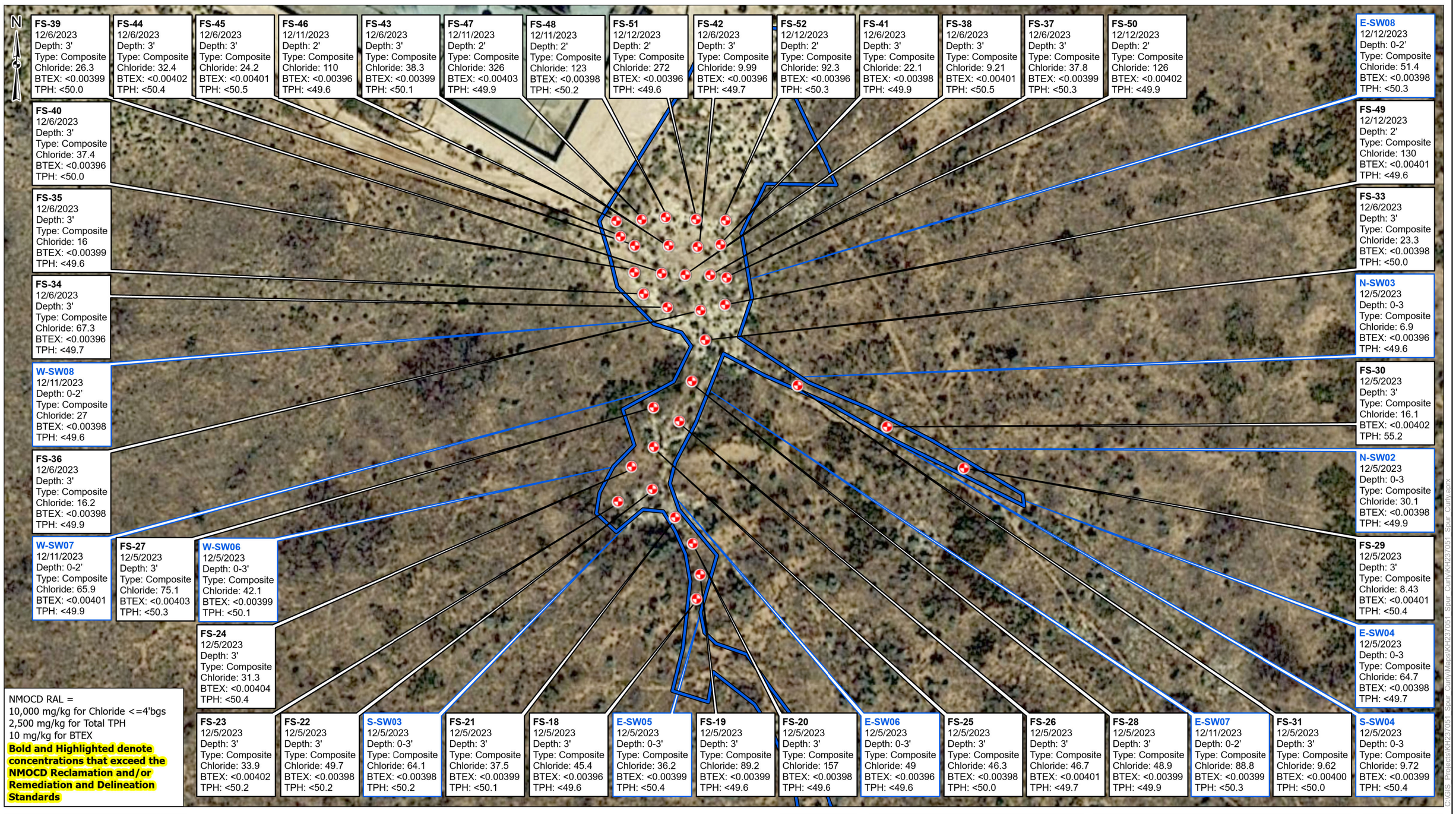
**Site Location Map**

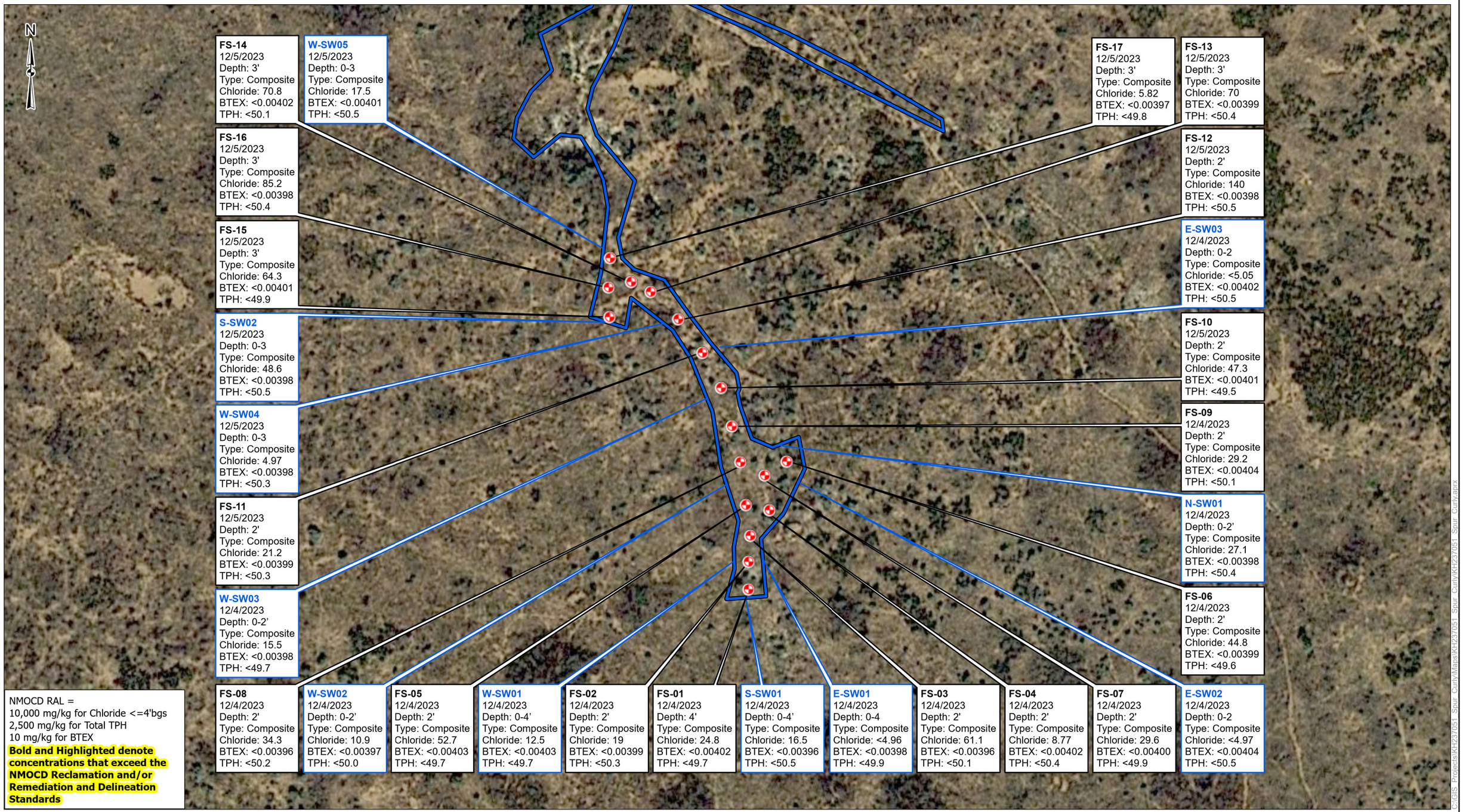
Curly SWD
Spur Energy Partners, LLC
Lea County, New Mexico
32.78833, -103.74687

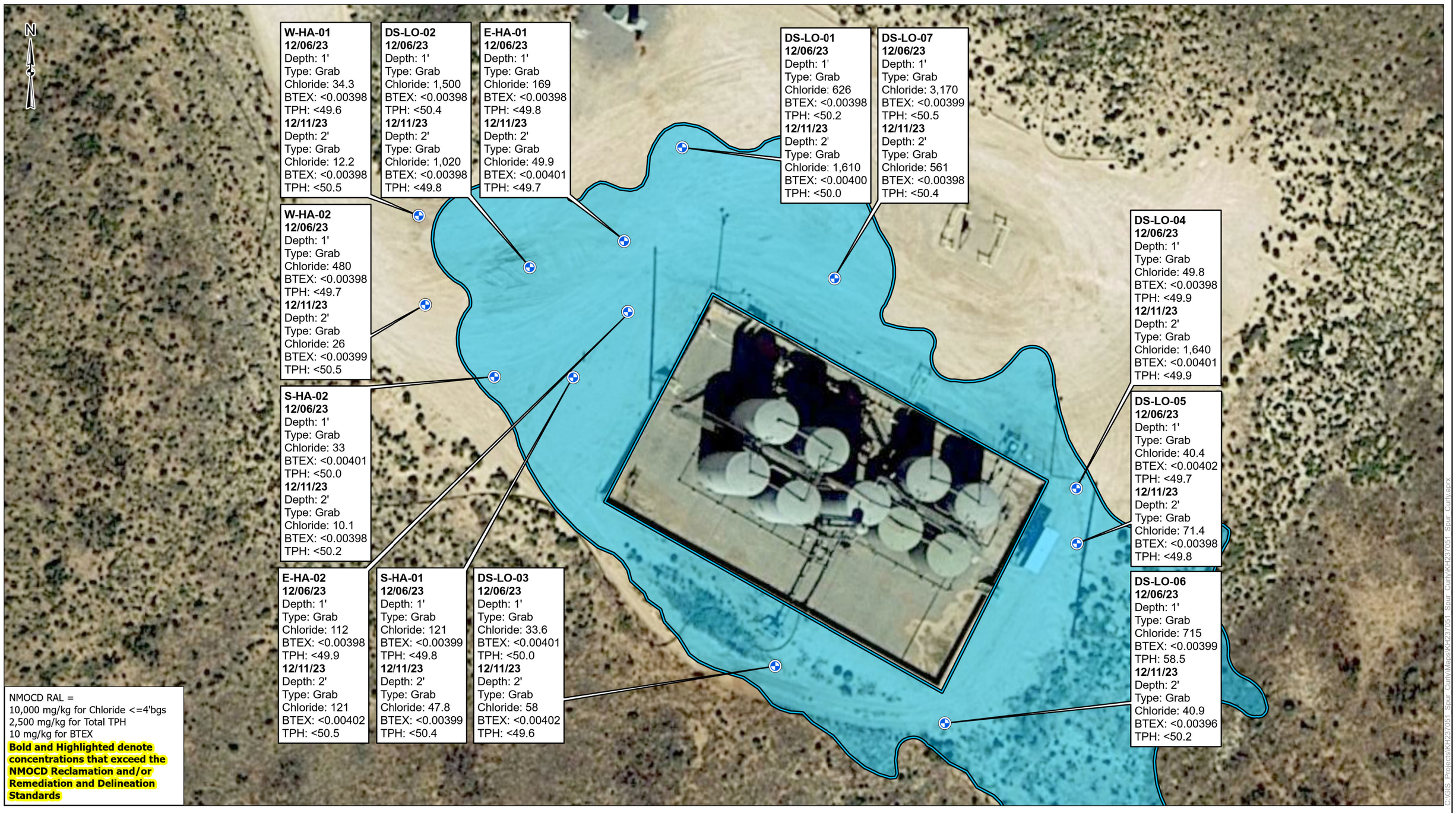
**Exhibit**

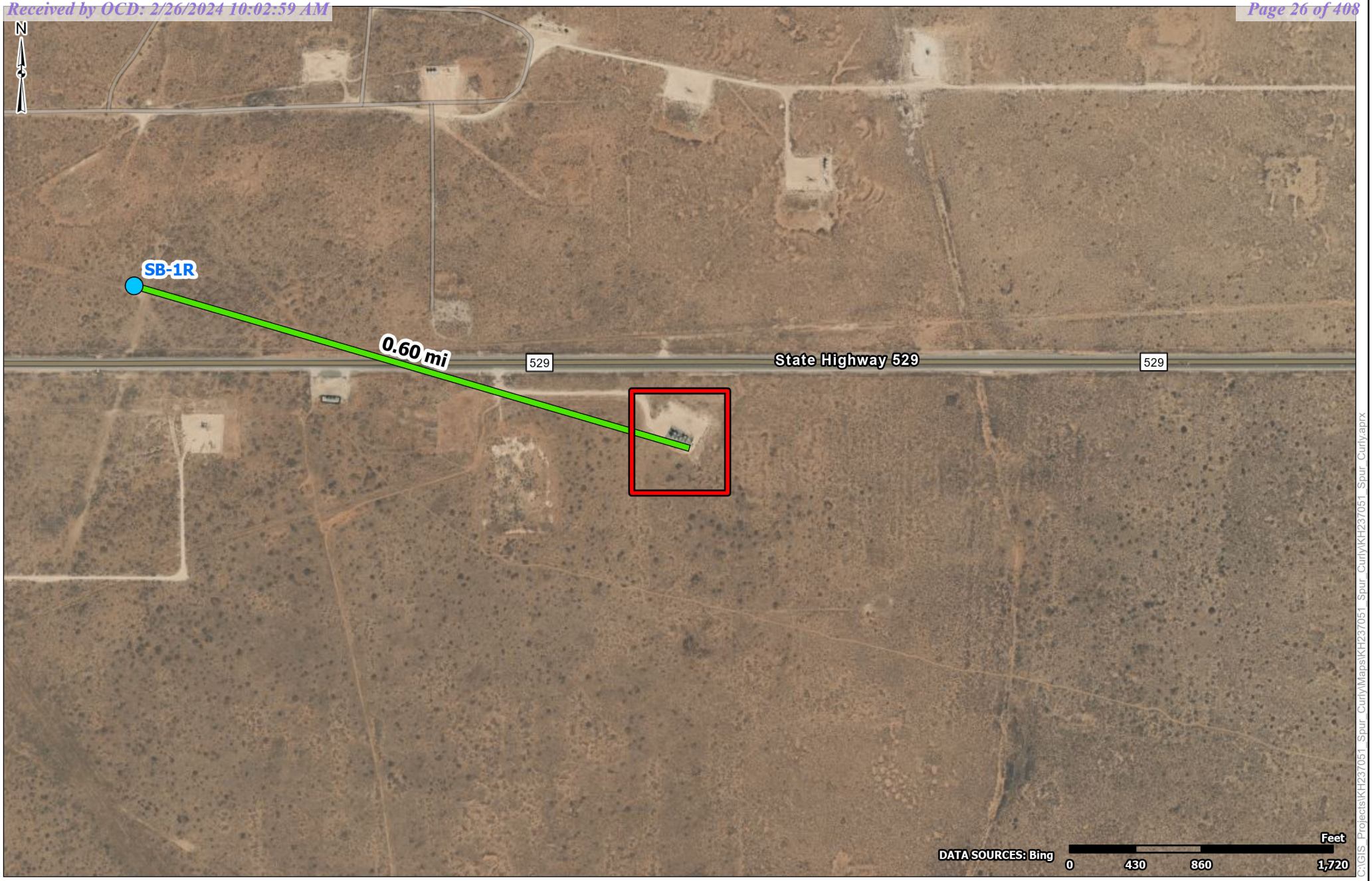
**2**


N
FS-74
12/13/2023
Depth: 3'
Type: Composite
Chloride: 23.1
BTEX: <0.00398
TPH: <50.1
FS-75
12/13/2023
Depth: 4'
Type: Composite
Chloride: 1,070
BTEX: <0.00398
TPH: <50.0
N-SW06
12/13/2023
Depth: 0-2'
Type: Composite
Choride: 27.9
BTEX: <0.00401
TPH: <49.6
FS-78
12/13/2023
Depth: 4'
Type: Composite
Chloride: 635
BTEX: <0.00399
TPH: <50.4
FS-79
12/12/2023
Depth: 2'
Type: Composite
Chloride: 434
BTEX: <0.00199
TPH: <50.4
E-SW10
12/18/2023
Depth: 0-4'
Type: Composite
Chloride: 146
BTEX: <0.00398
TPH: <49.7
FS-80
12/12/2023
Depth: 2'
Type: Composite
Chloride: 320
BTEX: <0.00200
TPH: <50.5
FS-76
12/13/2023
Depth: 4'
Type: Composite
Chloride: 1,120
BTEX: <0.00399
TPH: <50.3
FS-77
12/13/2023
Depth: 4'
Type: Composite
Chloride: 581
BTEX: <0.00402
TPH: <50.1
FS-71
12/13/2023
Depth: 4'
Type: Composite
Chloride: 470
BTEX: <0.00396
TPH: <49.6
FS-72
12/12/2023
Depth: 2'
Type: Composite
Chloride: 349
BTEX: <0.00198
TPH: <50.1
FS-70
12/13/2023
Depth: 3'
Type: Composite
Chloride: 482
BTEX: <0.00398
TPH: <50.0
FS-73
12/13/2023
Depth: 3'
Type: Composite
Chloride: 321
BTEX: <0.00396
TPH: <50.3
N-SW05
12/13/2023
Depth: 0-2'
Type: Composite
Chloride: 8.78
BTEX: <0.00402
TPH: <49.9
E-SW09
12/12/2023
Depth: 0-2'
Type: Composite
Chloride: 61.6
BTEX: <0.00399
TPH: <49.9
FS-65
12/13/2023
Depth: 4'
Type: Composite
Chloride: 1,310
BTEX: <0.00402
TPH: <50.5
FS-69
12/12/2023
Depth: 2'
Type: Composite
Chloride: 446
BTEX: <0.00199
TPH: <50.3
FS-66
12/13/2023
Depth: 4'
Type: Composite
Chloride: 702
BTEX: <0.00401
TPH: <50.0
FS-68
12/13/2023
Depth: 4'
Type: Composite
Chloride: 866
BTEX: <0.00398
TPH: <49.9
FS-58
12/12/2023
Depth: 2'
Type: Composite
Chloride: 446
BTEX: <0.00200
TPH: 50.5
FS-64
12/12/2023
Depth: 2'
Type: Composite
Chloride: 396
BTEX: <0.00200
TPH: <49.9
N-SW04
12/11/2023
Depth: 0-2'
Type: Composite
Chloride: 10.1
BTEX: <0.00398
TPH: <50.2
FS-53
12/12/2023
Depth: 2'
Type: Composite
Chloride: 132
BTEX: <0.00398
TPH: <50.5
FS-59
12/12/2023
Depth: 2'
Type: Composite
Chloride: 404
BTEX: <0.00199
TPH <50.5
W-SW09
12/11/2023
Depth: 0-2'
Type: Composite
Chloride: 23.7
BTEX: <0.00396
TPH: <50.0
FS-54
12/12/2023
Depth: 2'
Type: Composite
Chloride: 436
BTEX: <0.00399
TPH: <49.7
FS-60
12/12/2023
Depth: 2'
Type: Composite
Chloride: 350
BTEX: <0.00198
TPH: <49.9
FS-55
12/12/2023
Depth: 2'
Type: Composite
Chloride: 219
BTEX: <0.00398
TPH: <50.1
FS-56
12/12/2023
Depth: 2'
Type: Composite
Chloride: 330
BTEX: <0.00199
TPH: 63.8
FS-61
12/12/2023
Depth: 2'
Type: Composite
Chloride: 312
BTEX: <0.00199
TPH: <50.0
FS-57
12/12/2023
Depth: 2'
Type: Composite
Chloride: 430
BTEX: <0.00200
TPH: <50.3
FS-67
12/12/2023
Depth: 2'
Type: Composite
Chloride: 373
BTEX: <0.00201
TPH: <49.6
FS-62
12/12/2023
Depth: 2'
Type: Composite
Chloride: 477
BTEX: <0.00200
TPH: <50.2
S-SW05
12/12/2023
Depth: 0-2'
Type: Composite
Chloride: 105
BTEX: <0.00402
TPH: <50.0
FS-63
12/12/2023
Depth: 2'
Type: Composite
Chloride: 410
BTEX: <0.00201
TPH: <50.5
NMOCD RAL =
10,000 mg/kg for Chloride <=4'bgs
2,500 mg/kg for Total TPH
10 mg/kg for BTEX
Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards
N
Floor Sample Location
Wall Sample Location
DATA SOURCES: Google Earth
Feet
0
20
40
80
Project No.: KH237051
Date: Dec 28 2023
Drawn By: JWL
Reviewed By: JRG
terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140
terracon.com
Floor and Wall Sample Map
Curly SWD
Spur Energy Partners, LLC
Lea County, New Mexico
32.78833, -103.74687
Exhibit
3.1
C:\GIS Projects\KH237051 Spur Curly\Maps\KH237051 Spur Curly.aprx


N
FS-39
12/6/2023
Depth: 3'
Type: Composite
Chloride: 26.3
BTEX: <0.00399
TPH: <50.0
FS-44
12/6/2023
Depth: 3'
Type: Composite
Chloride: 32.4
BTEX: <0.00402
TPH: <50.4
FS-45
12/6/2023
Depth: 3'
Type: Composite
Chloride: 24.2
BTEX: <0.00401
TPH: <50.5
FS-46
12/11/2023
Depth: 2'
Type: Composite
Chloride: 110
BTEX: <0.00396
TPH: <49.6
FS-43
12/6/2023
Depth: 3'
Type: Composite
Chloride: 38.3
BTEX: <0.00399
TPH: <50.1
FS-47
12/11/2023
Depth: 2'
Type: Composite
Chloride: 326
BTEX: <0.00403
TPH: <49.9
FS-48
12/11/2023
Depth: 2'
Type: Composite
Chloride: 123
BTEX: <0.00398
TPH: <50.2
FS-51
12/12/2023
Depth: 2'
Type: Composite
Chloride: 272
BTEX: <0.00396
TPH: <49.6
FS-42
12/6/2023
Depth: 3'
Type: Composite
Chloride: 9.99
BTEX: <0.00396
TPH: <49.7
FS-52
12/12/2023
Depth: 2'
Type: Composite
Chloride: 92.3
BTEX: <0.00396
TPH: <50.3
FS-41
12/6/2023
Depth: 3'
Type: Composite
Chloride: 22.1
BTEX: <0.00398
TPH: <49.9
FS-38
12/6/2023
Depth: 3'
Type: Composite
Chloride: 9.21
BTEX: <0.00401
TPH: <50.5
FS-37
12/6/2023
Depth: 3'
Type: Composite
Chloride: 37.8
BTEX: <0.00399
TPH: <50.3
FS-50
12/12/2023
Depth: 2'
Type: Composite
Chloride: 126
BTEX: <0.00402
TPH: <49.9
E-SW08
12/12/2023
Depth: 0-2'
Type: Composite
Chloride: 51.4
BTEX: <0.00398
TPH: <50.3
FS-40
12/6/2023
Depth: 3'
Type: Composite
Chloride: 37.4
BTEX: <0.00396
TPH: <50.0
FS-49
12/12/2023
Depth: 2'
Type: Composite
Chloride: 130
BTEX: <0.00401
TPH: <49.6
FS-35
12/6/2023
Depth: 3'
Type: Composite
Chloride: 16
BTEX: <0.00399
TPH: <49.6
FS-33
12/6/2023
Depth: 3'
Type: Composite
Chloride: 23.3
BTEX: <0.00398
TPH: <50.0
FS-34
12/6/2023
Depth: 3'
Type: Composite
Chloride: 67.3
BTEX: <0.00396
TPH: <49.7
N-SW03
12/5/2023
Depth: 0-3
Type: Composite
Chloride: 6.9
BTEX: <0.00396
TPH: <49.6
W-SW08
12/11/2023
Depth: 0-2'
Type: Composite
Chloride: 27
BTEX: <0.00398
TPH: <49.6
FS-30
12/5/2023
Depth: 3'
Type: Composite
Chloride: 16.1
BTEX: <0.00402
TPH: 55.2
FS-36
12/6/2023
Depth: 3'
Type: Composite
Chloride: 16.2
BTEX: <0.00398
TPH: <49.9
N-SW02
12/5/2023
Depth: 0-3
Type: Composite
Chloride: 30.1
BTEX: <0.00398
TPH: <49.9
W-SW07
12/11/2023
Depth: 0-2'
Type: Composite
Chloride: 65.9
BTEX: <0.00401
TPH: <49.9
FS-27
12/5/2023
Depth: 3'
Type: Composite
Chloride: 75.1
BTEX: <0.00403
TPH: <50.3
W-SW06
12/5/2023
Depth: 0-3'
Type: Composite
Chloride: 42.1
BTEX: <0.00399
TPH: <50.1
FS-29
12/5/2023
Depth: 3'
Type: Composite
Chloride: 8.43
BTEX: <0.00401
TPH: <50.4
FS-24
12/5/2023
Depth: 3'
Type: Composite
Chloride: 31.3
BTEX: <0.00404
TPH: <50.4
E-SW04
12/5/2023
Depth: 0-3
Type: Composite
Chloride: 64.7
BTEX: <0.00398
TPH: <49.7
FS-23
12/5/2023
Depth: 3'
Type: Composite
Chloride: 33.9
BTEX: <0.00402
TPH: <50.2
FS-22
12/5/2023
Depth: 3'
Type: Composite
Chloride: 49.7
BTEX: <0.00398
TPH: <50.2
S-SW03
12/5/2023
Depth: 0-3'
Type: Composite
Chloride: 64.1
BTEX: <0.00398
TPH: <50.2
FS-21
12/5/2023
Depth: 3'
Type: Composite
Chloride: 37.5
BTEX: <0.00399
TPH: <50.1
FS-18
12/5/2023
Depth: 3'
Type: Composite
Chloride: 45.4
BTEX: <0.00396
TPH: <49.6
E-SW05
12/5/2023
Depth: 0-3'
Type: Composite
Chloride: 36.2
BTEX: <0.00399
TPH: <50.4
FS-19
12/5/2023
Depth: 3'
Type: Composite
Chloride: 89.2
BTEX: <0.00399
TPH: <49.6
FS-20
12/5/2023
Depth: 3'
Type: Composite
Chloride: 157
BTEX: <0.00398
TPH: <49.6
E-SW06
12/5/2023
Depth: 0-3'
Type: Composite
Chloride: 49
BTEX: <0.00396
TPH: <49.6
FS-25
12/5/2023
Depth: 3'
Type: Composite
Chloride: 46.3
BTEX: <0.00398
TPH: <50.0
FS-26
12/5/2023
Depth: 3'
Type: Composite
Chloride: 46.7
BTEX: <0.00401
TPH: <49.7
FS-28
12/5/2023
Depth: 3'
Type: Composite
Chloride: 48.9
BTEX: <0.00399
TPH: <49.9
E-SW07
12/11/2023
Depth: 0-2'
Type: Composite
Chloride: 88.8
BTEX: <0.00399
TPH: <50.3
FS-31
12/5/2023
Depth: 3'
Type: Composite
Chloride: 9.62
BTEX: <0.00400
TPH: <50.0
S-SW04
12/5/2023
Depth: 0-3
Type: Composite
Chloride: 9.72
BTEX: <0.00399
TPH: <50.4
NMOCD RAL =
10,000 mg/kg for Chloride <=4'bgs
2,500 mg/kg for Total TPH
10 mg/kg for BTEX
Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards
N
Floor Sample Location
Wall Sample Location
DATA SOURCES: Google Earth
Feet
0
20
40
80
Project No.: KH237051
Date: Dec 20 2023
Drawn By: JWL
Reviewed By: JRG
terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140
terracon.com
Floor and Wall Sample Map
Curly SWD
Spur Energy Partners, LLC
Lea County, New Mexico
32.78833, -103.74687
Exhibit
3.2
C:\GIS Projects\KH237051 Spur Curly\Maps\KH237051 Spur Curly.aprx


N
FS-14
12/5/2023
Depth: 3'
Type: Composite
Chloride: 70.8
BTEX: <0.00402
TPH: <50.1
W-SW05
12/5/2023
Depth: 0-3
Type: Composite
Chloride: 17.5
BTEX: <0.00401
TPH: <50.5
FS-17
12/5/2023
Depth: 3'
Type: Composite
Chloride: 5.82
BTEX: <0.00397
TPH: <49.8
FS-13
12/5/2023
Depth: 3'
Type: Composite
Chloride: 70
BTEX: <0.00399
TPH: <50.4
FS-16
12/5/2023
Depth: 3'
Type: Composite
Chloride: 85.2
BTEX: <0.00398
TPH: <50.4
FS-12
12/5/2023
Depth: 2'
Type: Composite
Chloride: 140
BTEX: <0.00398
TPH: <50.5
FS-15
12/5/2023
Depth: 3'
Type: Composite
Chloride: 64.3
BTEX: <0.00401
TPH: <49.9
E-SW03
12/4/2023
Depth: 0-2
Type: Composite
Chloride: <5.05
BTEX: <0.00402
TPH: <50.5
S-SW02
12/5/2023
Depth: 0-3
Type: Composite
Chloride: 48.6
BTEX: <0.00398
TPH: <50.5
FS-10
12/5/2023
Depth: 2'
Type: Composite
Chloride: 47.3
BTEX: <0.00401
TPH: <49.5
W-SW04
12/5/2023
Depth: 0-3
Type: Composite
Chloride: 4.97
BTEX: <0.00398
TPH: <50.3
FS-09
12/4/2023
Depth: 2'
Type: Composite
Chloride: 29.2
BTEX: <0.00404
TPH: <50.1
FS-11
12/5/2023
Depth: 2'
Type: Composite
Chloride: 21.2
BTEX: <0.00399
TPH: <50.3
N-SW01
12/4/2023
Depth: 0-2'
Type: Composite
Chloride: 27.1
BTEX: <0.00398
TPH: <50.4
W-SW03
12/4/2023
Depth: 0-2'
Type: Composite
Chloride: 15.5
BTEX: <0.00398
TPH: <49.7
FS-06
12/4/2023
Depth: 2'
Type: Composite
Chloride: 44.8
BTEX: <0.00399
TPH: <49.6
FS-08
12/4/2023
Depth: 2'
Type: Composite
Chloride: 34.3
BTEX: <0.00396
TPH: <50.2
W-SW02
12/4/2023
Depth: 0-2'
Type: Composite
Chloride: 10.9
BTEX: <0.00397
TPH: <50.0
FS-05
12/4/2023
Depth: 2'
Type: Composite
Chloride: 52.7
BTEX: <0.00403
TPH: <49.7
W-SW01
12/4/2023
Depth: 0-4'
Type: Composite
Chloride: 12.5
BTEX: <0.00403
TPH: <49.7
FS-02
12/4/2023
Depth: 2'
Type: Composite
Chloride: 19
BTEX: <0.00399
TPH: <50.3
FS-01
12/4/2023
Depth: 4'
Type: Composite
Chloride: 24.8
BTEX: <0.00402
TPH: <49.7
S-SW01
12/4/2023
Depth: 0-4'
Type: Composite
Chloride: 16.5
BTEX: <0.00396
TPH: <50.5
E-SW01
12/4/2023
Depth: 0-4
Type: Composite
Chloride: <4.96
BTEX: <0.00398
TPH: <49.9
FS-03
12/4/2023
Depth: 2'
Type: Composite
Chloride: 61.1
BTEX: <0.00396
TPH: <50.1
FS-04
12/4/2023
Depth: 2'
Type: Composite
Chloride: 8.77
BTEX: <0.00402
TPH: <50.4
FS-07
12/4/2023
Depth: 2'
Type: Composite
Chloride: 29.6
BTEX: <0.00400
TPH: <49.9
E-SW02
12/4/2023
Depth: 0-2
Type: Composite
Chloride: <4.97
BTEX: <0.00404
TPH: <50.5
NMOCD RAL =
10,000 mg/kg for Chloride <=4'bgs
2,500 mg/kg for Total TPH
10 mg/kg for BTEX
Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards
N
Floor Sample Location
Wall Sample Location
DATA SOURCES: Google Earth
Feet
0
20
40
80
Project No.: KH237051
Date: Dec 20 2023
Drawn By: JWL
Reviewed By: JRG
Terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140
terracon.com
Floor and Wall Sample Map
Curly SWD
Spur Energy Partners, LLC
Lea County, New Mexico
32.78833, -103.74687
Exhibit
3.3
©GIS Projects\KH237051 Spur Curly\Maps\KH237051 Spur Curly.aprx


N
W-HA-01
12/06/23
Depth: 1'
Type: Grab
Chloride: 34.3
BTEX: <0.00398
TPH: <49.6
12/11/23
Depth: 2'
Type: Grab
Chloride: 12.2
BTEX: <0.00398
TPH: <50.5
DS-LO-02
12/06/23
Depth: 1'
Type: Grab
Chloride: 1,500
BTEX: <0.00398
TPH: <50.4
12/11/23
Depth: 2'
Type: Grab
Chloride: 1,020
BTEX: <0.00398
TPH: <49.8
E-HA-01
12/06/23
Depth: 1'
Type: Grab
Chloride: 169
BTEX: <0.00398
TPH: <49.8
12/11/23
Depth: 2'
Type: Grab
Chloride: 49.9
BTEX: <0.00401
TPH: <49.7
DS-LO-01
12/06/23
Depth: 1'
Type: Grab
Chloride: 626
BTEX: <0.00398
TPH: <50.2
12/11/23
Depth: 2'
Type: Grab
Chloride: 1,610
BTEX: <0.00400
TPH: <50.0
DS-LO-07
12/06/23
Depth: 1'
Type: Grab
Chloride: 3,170
BTEX: <0.00399
TPH: <50.5
12/11/23
Depth: 2'
Type: Grab
Chloride: 561
BTEX: <0.00398
TPH: <50.4
W-HA-02
12/06/23
Depth: 1'
Type: Grab
Chloride: 480
BTEX: <0.00398
TPH: <49.7
12/11/23
Depth: 2'
Type: Grab
Chloride: 26
BTEX: <0.00399
TPH: <50.5
DS-LO-04
12/06/23
Depth: 1'
Type: Grab
Chloride: 49.8
BTEX: <0.00398
TPH: <49.9
12/11/23
Depth: 2'
Type: Grab
Chloride: 1,640
BTEX: <0.00401
TPH: <49.9
S-HA-02
12/06/23
Depth: 1'
Type: Grab
Chloride: 33
BTEX: <0.00401
TPH: <50.0
12/11/23
Depth: 2'
Type: Grab
Chloride: 10.1
BTEX: <0.00398
TPH: <50.2
DS-LO-05
12/06/23
Depth: 1'
Type: Grab
Chloride: 40.4
BTEX: <0.00402
TPH: <49.7
12/11/23
Depth: 2'
Type: Grab
Chloride: 71.4
BTEX: <0.00398
TPH: <49.8
E-HA-02
12/06/23
Depth: 1'
Type: Grab
Chloride: 112
BTEX: <0.00398
TPH: <49.9
12/11/23
Depth: 2'
Type: Grab
Chloride: 121
BTEX: <0.00402
TPH: <50.5
S-HA-01
12/06/23
Depth: 1'
Type: Grab
Chloride: 121
BTEX: <0.00399
TPH: <49.8
12/11/23
Depth: 2'
Type: Grab
Chloride: 47.8
BTEX: <0.00399
TPH: <50.4
DS-LO-03
12/06/23
Depth: 1'
Type: Grab
Chloride: 33.6
BTEX: <0.00401
TPH: <50.0
12/11/23
Depth: 2'
Type: Grab
Chloride: 58
BTEX: <0.00402
TPH: <49.6
DS-LO-06
12/06/23
Depth: 1'
Type: Grab
Chloride: 715
BTEX: <0.00399
TPH: 58.5
12/11/23
Depth: 2'
Type: Grab
Chloride: 40.9
BTEX: <0.00396
TPH: <50.2
NMOCD RAL =
10,000 mg/kg for Chloride <=4'bgs
2,500 mg/kg for Total TPH
10 mg/kg for BTEX
Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards
N
Release Assessment Sample Location
Inferred Release
DATA SOURCES: Google Earth
0 15 30 60
Feet
Project No.: KH237051
Date: Jan 04 2024
Drawn By: JWL
Reviewed By: JRG
terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140
terracon.com
Release Assessment Sample Map
Curly SWD
Spur Energy Partners, LLC
Lea County, New Mexico
32.78833, -103.74687
Exhibit
3.4
C:\GIS Projects\KH237051 Spur Curly\Maps\KH237051 Spur Curly.aprx







Site Boundary

NMOSE POD Location

| | |
|---|---|
| Project No.: | KH237051 |
| Date: | Jan 08 2024 |
| Drawn By: | JWL |
| Reviewed By: | JRG |

terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140 terracon.com

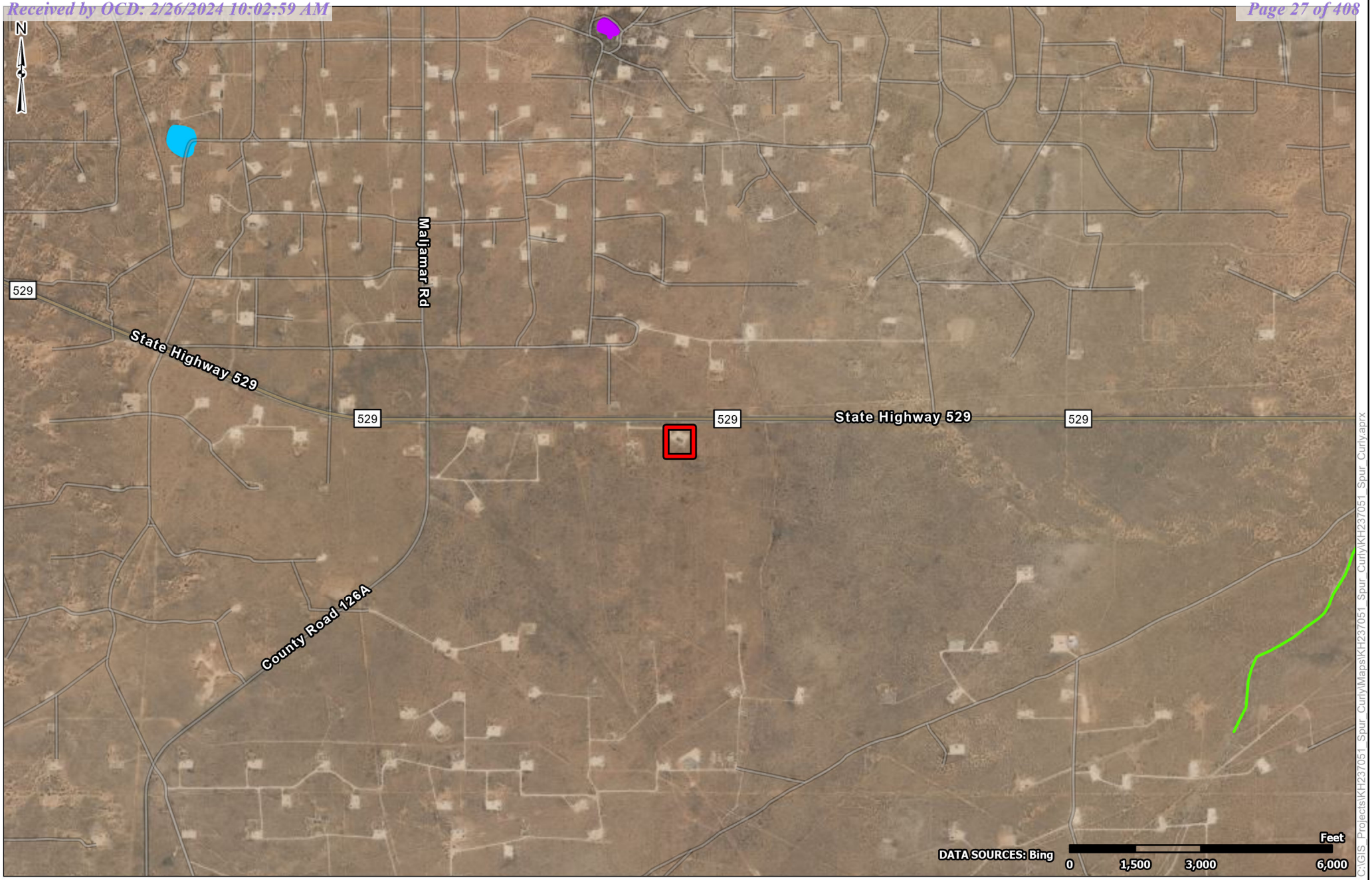
**NMOSE POD Location Map**

Curly SWD
Spur Energy Partners, LLC
Lea County, New Mexico
32.78833, -103.74687

**Exhibit**

**4**

C:\GIS_Projects\KH237051_Spur_Curly\Maps\KH237051_Spur_Curly\KH237051_Spur_Curly.aprx







- Site Boundary
- Freshwater Emergent Wetland
- Freshwater Pond
- Riverine

| | |
|---|---|
| Project No.: | KH237051 |
| Date: | Jan 08 2024 |
| Drawn By: | JWL |
| Reviewed By: | JRG |

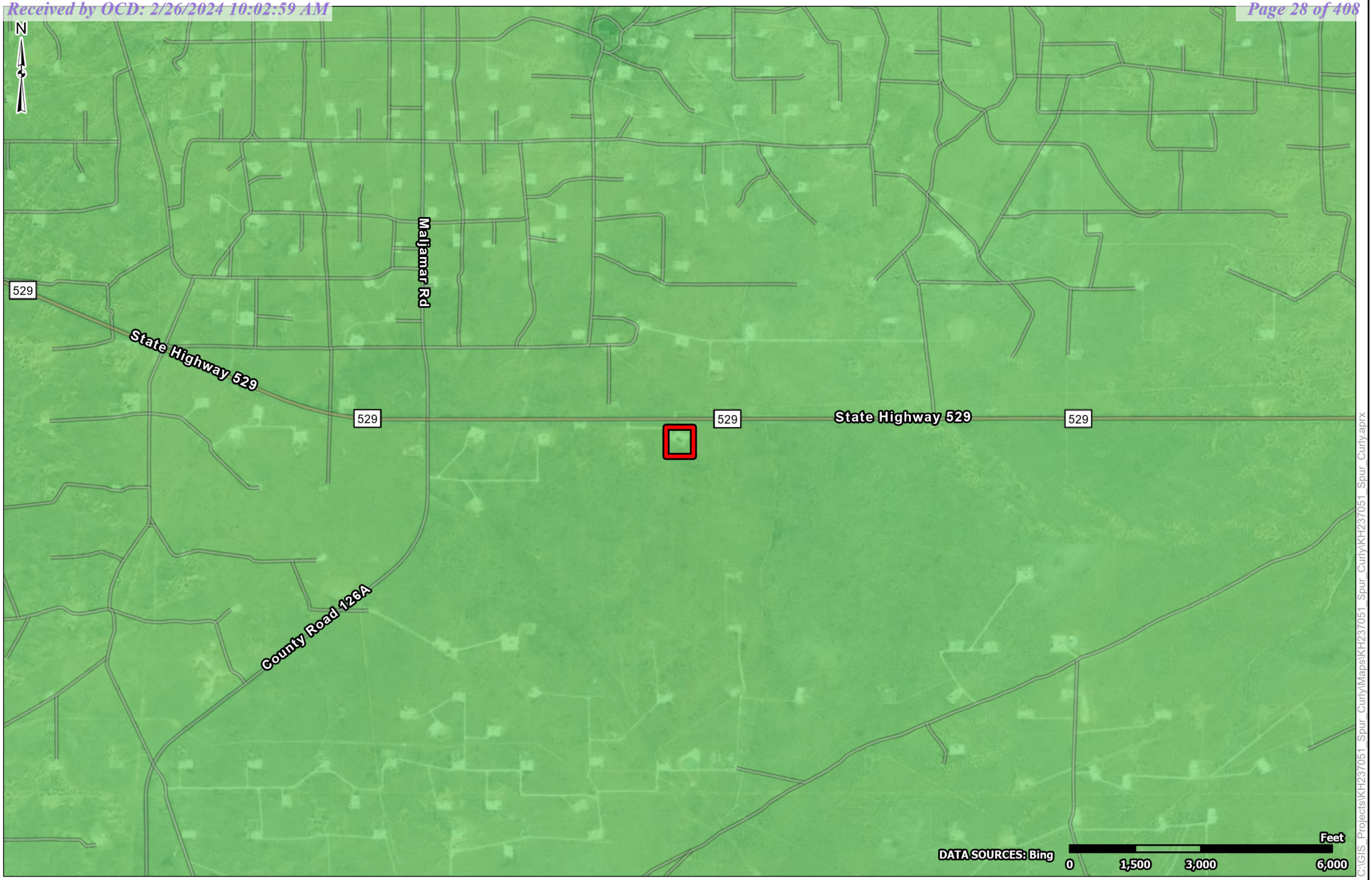
terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140 terracon.com

**Designated Wetland Area Map**

Curly SWD
Spur Energy Partners, LLC
Lea County, New Mexico
32.78833, -103.74687

**Exhibit**

**5**







Site Boundary

Karst Potential

Low

Medium

High

| | |
|---|---|
| Project No.: | KH237051 |
| Date: | Jan 08 2024 |
| Drawn By: | JWL |
| Reviewed By: | JRG |

terracon

4526 W Pierce St
Carlsbad, NM

PH. 806-300-0140 terracon.com

**Cave Karst Public UCP Map**

Curly SWD
Spur Energy Partners, LLC
Lea County, New Mexico
32.78833, -103.74687

**Exhibit**

**6**

# APPENDIX B – TABLES AND WELL DATA

**Table 1 On-Pad**
**Soil Analytical Results Summary - Release Assessment**

**NMOCD Reference No. nAPP2321152013**

| Sample ID | Sample Date | Sample Start Depth (ft bgs) | Sample Type | Sample Status | Chloride (mg/Kg) | Benzene (mg/Kg) | Total BTEX[1] (mg/Kg) | Total TPH[2] (mg/Kg) | Diesel Range Organics (Over C10-C28) (mg/Kg) | Gasoline Range Organics (C6-C10) (mg/Kg) | Oil Range Organics (Over C28-C36) (mg/Kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | EPA Method 300 | EPA Method 8021B | EPA Method 8021B | EPA Method 8015M | EPA Method 8015M | EPA Method 8015M | EPA Method 8015M |
| **Release Assessment** | | | | | | | | | | | |
| DS-LO-01 | 12/6/2023 | 1' | Grab | In-Situ | 626 | <0.00199 | <0.00398 | <50.2 | <50.2 | <50.2 | <50.2 |
| DS-LO-01 | 12/11/2023 | 2' | Grab | In-Situ | 1610 | <0.00200 | <0.00400 | <50.0 | <50.0 | <50.0 | <50.0 |
| DS-LO-02 | 12/6/2023 | 1' | Grab | In-Situ | 1500 | <0.00199 | <0.00398 | <50.4 | <50.4 | <50.4 | <50.4 |
| DS-LO-02 | 12/11/2023 | 2' | Grab | In-Situ | 1020 | <0.00199 | <0.00398 | <49.8 | <49.8 | <49.8 | <49.8 |
| DS-LO-03 | 12/6/2023 | 1' | Grab | In-Situ | 33.6 | <0.00200 | <0.00401 | <50.0 | <50.0 | <50.0 | <50.0 |
| DS-LO-03 | 12/11/2023 | 2' | Grab | In-Situ | 58 | <0.00201 | <0.00402 | <49.6 | <49.6 | <49.6 | <49.6 |
| DS-LO-04 | 12/6/2023 | 1' | Grab | In-Situ | 49.8 | <0.00199 | <0.00398 | <49.9 | <49.9 | <49.9 | <49.9 |
| DS-LO-04 | 12/11/2023 | 2' | Grab | In-Situ | 1640 | <0.00200 | <0.00401 | <49.9 | <49.9 | <49.9 | <49.9 |
| DS-LO-04 | 12/11/2023 | 2' | Grab | In-Situ | 84.9 | <0.00201 | <0.00402 | <50.5 | <50.5 | <50.5 | <50.5 |
| DS-LO-05 | 12/6/2023 | 1' | Grab | In-Situ | 40.4 | <0.00201 | <0.00402 | <49.7 | <49.7 | <49.7 | <49.7 |
| DS-LO-05 | 12/11/2023 | 2' | Grab | In-Situ | 71.4 | <0.00199 | <0.00398 | <49.8 | <49.8 | <49.8 | <49.8 |
| DS-LO-06 | 12/6/2023 | 1' | Grab | In-Situ | 715 | <0.00200 | <0.00399 | 58.5 | 58.5 | <50.5 | <50.0 |
| DS-LO-06 | 12/11/2023 | 2' | Grab | In-Situ | 40.9 | <0.00198 | <0.00396 | <50.2 | <50.2 | <50.2 | <50.2 |
| DS-LO-07 | 12/11/2023 | 1' | Grab | In-Situ | 3170 | <0.00200 | <0.00399 | <50.5 | <50.5 | <50.5 | <50.5 |
| DS-LO-07 | 12/11/2023 | 2' | Grab | In-Situ | 561 | <0.00199 | <0.00398 | <50.4 | <50.4 | <50.4 | <50.4 |
| E-HA 01 | 12/6/2012 | 1' | Grab | In-Situ | 169 | <0.00199 | <0.00398 | <49.8 | <49.8 | <49.8 | <49.8 |
| E-HA 01 | 12/11/2023 | 2' | Grab | In-Situ | 49.9 | <0.00200 | <0.00401 | <49.7 | <49.7 | <49.7 | <49.7 |
| E-HA 02 | 12/6/2023 | 1' | Grab | In-Situ | 112 | <0.00199 | <0.00398 | <49.9 | <49.9 | <49.9 | <49.9 |
| E-HA 02 | 12/11/2023 | 2' | Grab | In-Situ | 121 | <0.00201 | <0.00402 | <50.5 | <50.5 | <50.5 | <50.5 |
| S-HA 01 | 12/6/2023 | 1' | Grab | In-Situ | 121 | <0.00200 | <0.00399 | <49.8 | <49.8 | <49.8 | <49.8 |
| S-HA 01 | 12/11/2023 | 2' | Grab | In-Situ | 47.8 | <0.00200 | <0.00399 | <50.4 | <50.4 | <50.4 | <50.4 |
| S-HA 02 | 12/6/2023 | 1' | Grab | In-Situ | 33 | <0.00200 | <0.00401 | <50.0 | <50.0 | <50.0 | <50.0 |
| S-HA 02 | 12/11/2023 | 2' | Grab | In-Situ | 10.1 | <0.00199 | <0.00398 | <50.2 | <50.2 | <50.2 | <50.2 |
| W-HA 01 | 12/6/2023 | 1' | Grab | In-Situ | 34.3 | <0.00199 | <0.00398 | <49.6 | <49.6 | <49.6 | <49.6 |
| W-HA 01 | 12/11/2023 | 2' | Grab | In-Situ | 12.2 | <0.00199 | <0.00398 | <50.5 | <50.5 | <50.5 | <50.5 |
| W-HA 02 | 12/6/2023 | 1' | Grab | In-Situ | 480 | <0.00199 | <0.00398 | <49.7 | <49.7 | <49.7 | <49.7 |
| W-HA 02 | 12/11/2023 | 2' | Grab | In-Situ | 26 | <0.00200 | <0.00399 | <50.5 | <50.5 | <50.5 | <50.5 |
| V 3.2 | 12/6/2023 | 4' | Grab | In-Situ | 33.3 | <0.00200 | <0.00399 | <49.9 | <49.9 | <49.9 | <49.9 |
| V 4.2 | 12/6/2023 | 4' | Grab | In-Situ | 19.6 | <0.00199 | <0.00398 | <50.3 | <50.3 | <50.3 | <50.3 |
| V 5.2 | 12/6/2023 | 4' | Grab | In-Situ | 19.8 | <0.00198 | <0.00396 | <49.8 | <49.8 | <49.8 | <49.8 |
| V 6.2 | 12/6/2023 | 4' | Grab | In-Situ | 50.1 | <0.00200 | <0.00399 | <50.5 | <50.5 | <50.5 | <50.5 |
| **NMOCD Reclamation Standards[3]** | | | | | 10,000 | 10 | 50 | 2,500 | N/A | | |
| **NMOCD Remediation Standards[4]** | | | | | 10,000 | 10 | 50 | 2,500 | N/A | | |

1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes
2. TPH = Total petroleum hydrocarbons
3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegatation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft. bgs
4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N, 8/14/2018

< = Constituent was not detected above the indicated laboratory sample detection limit (SDL).
NA = Not Analyzed
**Bold denotes concentrations above applicable laboratory SDLs.**
**Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards.**
In-situ = Sample is representative of material which remains in-place at the site.
Excavated = Sample is representative of materials which was excavated and disposed of at a permited disposal facility.

**Table 2**
**Soil Analytical Results Summary - Confirmation Evaluation (Floor Samples)**

**NMOCD Reference No. nAPP2321152013**

| Sample ID | Sample Date | Sample Depth (ft bgs) | Sample Type | Chloride (mg/Kg) | Benzene (mg/Kg) | Total BTEX[1] (mg/Kg) | Total TPH[2] (mg/Kg) | Diesel Range Organics (Over C10-C28) (mg/Kg) | Gasoline Range Organics (C6-C10) (mg/Kg) | Oil Range Organics (Over C28-C36) (mg/Kg) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EPA Method 300 | EPA Method 8021B | EPA Method 8021B | EPA Method 8015M | EPA Method 8015M | EPA Method 8015M | EPA Method 8015M |
| **Confirmation Floor Samples** | | | | | | | | | | |
| FS-01 | 12/4/2023 | 4' | Composite | 24.8 | <0.00201 | <0.00402 | <49.7 | <49.7 | <49.7 | <49.7 |
| FS-02 | 12/4/2023 | 2' | Composite | 19 | <0.00200 | <0.00399 | <50.3 | <50.3 | <50.3 | <50.3 |
| FS-03 | 12/4/2023 | 2' | Composite | 61.1 | <0.00198 | <0.00396 | <50.1 | <50.1 | <50.1 | <50.1 |
| FS-04 | 12/4/2023 | 2' | Composite | 8.77 | <0.00201 | <0.00402 | <50.4 | <50.4 | <50.4 | <50.4 |
| FS-05 | 12/4/2023 | 2' | Composite | 52.7 | <0.00202 | <0.00403 | <49.7 | <49.7 | <49.7 | <49.7 |
| FS-06 | 12/4/2023 | 2' | Composite | 44.8 | <0.00200 | <0.00399 | <49.6 | <49.6 | <49.6 | <49.6 |
| FS-07 | 12/4/2023 | 2' | Composite | 29.6 | <0.00200 | <0.00400 | <49.9 | <49.9 | <49.9 | <49.9 |
| FS-08 | 12/4/2023 | 2' | Composite | 34.3 | <0.00198 | <0.00396 | <50.2 | <50.2 | <50.2 | <50.2 |
| FS-09 | 12/4/2023 | 2' | Composite | 29.2 | <0.00202 | <0.00404 | <50.1 | <50.1 | <50.1 | <50.1 |
| FS-10 | 12/5/2023 | 2' | Composite | 47.3 | <0.00200 | <0.00401 | <49.5 | <49.5 | <49.5 | <49.5 |
| FS-11 | 12/5/2023 | 2' | Composite | 21.2 | <0.00200 | <0.00399 | <50.3 | <50.3 | <50.3 | <50.3 |
| FS-12 | 12/5/2023 | 2' | Composite | 140 | <0.00199 | <0.00398 | <50.5 | <50.5 | <50.5 | <50.5 |
| FS-13 | 12/5/2023 | 3' | Composite | 70 | <0.00200 | <0.00399 | <50.4 | <50.4 | <50.4 | <50.4 |
| FS-14 | 12/5/2023 | 3' | Composite | 70.8 | <0.00201 | <0.00402 | <50.1 | <50.1 | <50.1 | <50.1 |
| FS-15 | 12/5/2023 | 3' | Composite | 64.3 | <0.00200 | <0.00401 | <49.9 | <49.9 | <49.9 | <49.9 |
| FS-16 | 12/5/2023 | 3' | Composite | 85.2 | <0.00199 | <0.00398 | <50.4 | <50.4 | <50.4 | <50.4 |
| FS-17 | 12/5/2023 | 3' | Composite | 5.82 | <0.00198 | <0.00397 | <49.8 | <49.8 | <49.8 | <49.8 |
| FS-18 | 12/5/2023 | 3' | Composite | 45.4 | <0.00198 | <0.00396 | <49.6 | <49.6 | <49.6 | <49.6 |
| FS-19 | 12/5/2023 | 3' | Composite | 89.2 | <0.00200 | <0.00399 | <49.6 | <49.6 | <49.6 | <49.6 |
| FS-20 | 12/5/2023 | 3' | Composite | 157 | <0.00199 | <0.00398 | <49.6 | <49.6 | <49.6 | <49.6 |
| FS-21 | 12/5/2023 | 3' | Composite | 37.5 | <0.00200 | <0.00399 | <50.1 | <50.1 | <50.1 | <50.1 |
| FS-22 | 12/5/2023 | 3' | Composite | 49.7 | <0.00199 | <0.00398 | <50.2 | <50.2 | <50.2 | <50.2 |
| FS-23 | 12/5/2023 | 3' | Composite | 33.9 | <0.00201 | <0.00402 | <50.2 | <50.2 | <50.2 | <50.2 |
| FS-24 | 12/5/2023 | 3' | Composite | 31.3 | <0.00202 | <0.00404 | <50.4 | <50.4 | <50.4 | <50.4 |
| FS-25 | 12/5/2023 | 3' | Composite | 46.3 | <0.00199 | <0.00398 | <50.0 | <50.0 | <50.0 | <50.0 |
| FS-26 | 12/5/2023 | 3' | Composite | 46.7 | <0.00200 | <0.00401 | <49.7 | <49.7 | <49.7 | <49.7 |
| FS-27 | 12/5/2023 | 3' | Composite | 75.1 | <0.00202 | <0.00403 | <50.3 | <50.3 | <50.3 | <50.3 |
| FS-28 | 12/5/2023 | 3' | Composite | 48.9 | <0.00200 | <0.00399 | <49.9 | <49.9 | <49.9 | <49.9 |
| FS-29 | 12/5/2023 | 3' | Composite | 8.43 | <0.00200 | <0.00401 | <50.4 | <50.4 | <50.4 | <50.4 |
| FS-30 | 12/5/2023 | 3' | Composite | 16.1 | <0.00201 | <0.00402 | 55.2 | 55.2 | <50.5 | <50.5 |
| FS-31 | 12/5/2023 | 3' | Composite | 9.62 | <0.00200 | <0.00400 | <50.0 | <50.0 | <50.0 | <50.0 |
| FS-32 | 12/6/2023 | 3' | Composite | 25.3 | <0.00200 | <0.00401 | <50.3 | <50.3 | <50.3 | <50.3 |
| FS-33 | 12/6/2023 | 3' | Composite | 23.3 | <0.00199 | <0.00398 | <50.0 | <50.0 | <50.0 | <50.0 |
| FS-34 | 12/6/2023 | 3' | Composite | 67.3 | <0.00198 | <0.00396 | <49.7 | <49.7 | <49.7 | <49.7 |
| FS-35 | 12/6/2023 | 3' | Composite | 16 | <0.00200 | <0.00399 | <49.6 | <49.6 | <49.6 | <49.6 |
| FS-36 | 12/6/2023 | 3' | Composite | 16.2 | <0.00199 | <0.00398 | <49.9 | <49.9 | <49.9 | <49.9 |
| FS-37 | 12/6/2023 | 3' | Composite | 37.8 | <0.00200 | <0.00399 | <50.3 | <50.3 | <50.3 | <50.3 |
| FS-38 | 12/6/2023 | 3' | Composite | 9.21 | <0.00200 | <0.00401 | <50.5 | <50.5 | <50.5 | <50.5 |
| FS-39 | 12/6/2023 | 3' | Composite | 26.3 | <0.00200 | <0.00399 | <50.0 | <50.0 | <50.0 | <50.0 |
| FS-40 | 12/6/2023 | 3' | Composite | 37.4 | <0.00198 | <0.00396 | <50.0 | <50.0 | <50.0 | <50.0 |
| FS-41 | 12/6/2023 | 3' | Composite | 22.1 | <0.00199 | <0.00398 | <49.9 | <49.9 | <49.9 | <49.9 |
| FS-42 | 12/6/2023 | 3' | Composite | 9.99 | <0.00198 | <0.00396 | <49.7 | <49.7 | <49.7 | <49.7 |
| FS-43 | 12/6/2023 | 3' | Composite | 38.3 | <0.00200 | <0.00399 | <50.1 | <50.1 | <50.1 | <50.1 |
| FS-44 | 12/6/2023 | 3' | Composite | 32.4 | <0.00201 | <0.00402 | <50.4 | <50.4 | <50.4 | <50.4 |
| FS-45 | 12/6/2023 | 3' | Composite | 24.2 | <0.00200 | <0.00401 | <50.5 | <50.5 | <50.5 | <50.5 |
| FS-46 | 12/11/2023 | 2' | Composite | 110 | <0.00198 | <0.00396 | <49.6 | <49.6 | <49.6 | <49.6 |
| FS-47 | 12/11/2023 | 2' | Composite | 326 | <0.00202 | <0.00403 | <49.9 | <49.9 | <49.9 | <49.9 |
| FS-48 | 12/11/2023 | 2' | Composite | 123 | <0.00199 | <0.00398 | <50.2 | <50.2 | <50.2 | <50.2 |
| FS-49 | 12/12/2023 | 2' | Composite | 130 | <0.00200 | <0.00401 | <49.6 | <49.6 | <49.6 | <49.6 |
| FS-50 | 12/12/2023 | 2' | Composite | 126 | <0.00201 | <0.00402 | <49.9 | <49.9 | <49.9 | <49.9 |
| FS-51 | 12/12/2023 | 2' | Composite | 272 | <0.00198 | <0.00396 | <49.6 | <49.6 | <49.6 | <49.6 |
| FS-52 | 12/12/2023 | 2' | Composite | 92.3 | <0.00198 | <0.00396 | <50.3 | <50.3 | <50.3 | <50.3 |
| FS-53 | 12/12/2023 | 2' | Composite | 132 | <0.00199 | <0.00398 | <50.5 | <50.5 | <50.5 | <50.5 |
| FS-54 | 12/12/2023 | 2' | Composite | 436 | <0.00200 | <0.00399 | <49.7 | <49.7 | <49.7 | <49.7 |
| FS-55 | 12/12/2023 | 2' | Composite | 219 | <0.00199 | <0.00398 | <50.1 | <50.1 | <50.1 | <50.1 |
| FS-56 | 12/12/2023 | 2' | Composite | 330 | <0.00199 | <0.00199 | 63.8 | 63.8 | <49.5 | <49.5 |
| FS-57 | 12/12/2023 | 2' | Composite | 430 | <0.00200 | <0.00200 | <50.3 | <50.3 | <50.3 | <50.3 |
| FS-58 | 12/12/2023 | 2' | Composite | 446 | <0.00200 | <0.00200 | 50.5 | 50.5 | <50.1 | <50.1 |
| FS-59 | 12/12/2023 | 2' | Composite | 404 | <0.00199 | <0.00199 | <50.5 | <50.5 | <50.5 | <50.5 |
| FS-60 | 12/12/2023 | 2' | Composite | 350 | <0.00198 | <0.00198 | <49.9 | <49.9 | <49.9 | <49.9 |
| **NMOCD Reclamation Standards[3]** | | | | 600 | 10 | 10 | 100 | 100 | | N/A |
| **NMOCD Remediation Standards[4]** | | | | 10,000 | 10 | 10 | 2,500 | 1,000 | | N/A |

1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes
2. TPH = Total petroleum hydrocarbons
3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegatation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft.
4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N, 8/14/2018

< = Constituent was not detected above the indicated laboratory sample detection limit (SDL).
NA = Not Analyzed
**Bold denotes concentrations above applicable laboratory SDLs.**
**Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards.**
In-situ = Sample is representative of material which remains in-place at the site.
Excavated = Sample is representative of materials which was excavated and disposed of at a permited disposal facility.

**Table 2 (continued)**
**Soil Analytical Results Summary - Confirmation Evaluation (Floor Samples)**

**NMOCD Reference No. nAPP2321152013**

| Sample ID | Sample Date | Sample Depth (ft bgs) | Sample Type | Chloride (mg/Kg) | Benzene (mg/Kg) | Total BTEX[1] (mg/Kg) | Total TPH[2] (mg/Kg) | Diesel Range Organics (Over C10-C28) (mg/Kg) | Gasoline Range Organics (C6-C10) (mg/Kg) | Oil Range Organics (Over C28-C36) (mg/Kg) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EPA Method 300 | EPA Method 8021B | EPA Method 8021B | EPA Method 8015M | EPA Method 8015M | EPA Method 8015M | EPA Method 8015M |
| **Confirmation Floor Samples** | | | | | | | | | | |
| FS-61 | 12/12/2023 | 2' | Composite | 312 | <0.00199 | <0.00199 | <50.0 | <50.0 | <50.0 | <50.0 |
| FS-62 | 12/12/2023 | 2' | Composite | 477 | <0.00200 | <0.00200 | <50.2 | <50.2 | <50.2 | <50.2 |
| FS-63 | 12/12/2023 | 2' | Composite | 410 | <0.00201 | <0.00201 | <50.5 | <50.5 | <50.5 | <50.5 |
| FS-64 | 12/12/2023 | 2' | Composite | 396 | <0.00200 | <0.00200 | <49.9 | <49.9 | <49.9 | <49.9 |
| FS-65 | 12/13/2023 | 4' | Composite | 1310 | <0.00201 | <0.00402 | <50.5 | <50.5 | <50.5 | <50.5 |
| FS-66 | 12/13/2023 | 4' | Composite | 702 | <0.00200 | <0.00401 | <50.0 | <50.0 | <50.0 | <50.0 |
| FS-67 | 12/12/2023 | 2' | Composite | 373 | <0.00201 | <0.00201 | <49.6 | <49.6 | <49.6 | <49.6 |
| FS-68 | 12/13/2023 | 4' | Composite | 866 | <0.00199 | <0.00398 | <49.9 | <49.9 | <49.9 | <49.9 |
| FS-69 | 12/12/2023 | 2' | Composite | 446 | <0.00199 | <0.00199 | <50.3 | <50.3 | <50.3 | <50.3 |
| FS-70 | 12/13/2023 | 3' | Composite | 482 | <0.00199 | <0.00398 | <50.0 | <50.0 | <50.0 | <50.0 |
| FS-71 | 12/13/2023 | 4' | Composite | 470 | <0.00198 | <0.00396 | <49.6 | <49.6 | <49.6 | <49.6 |
| FS-72 | 12/12/2023 | 2' | Composite | 349 | <0.00198 | <0.00198 | <50.1 | <50.1 | <50.1 | <50.1 |
| FS-73 | 12/13/2023 | 3' | Composite | 321 | <0.00198 | <0.00396 | <50.3 | <50.3 | <50.3 | <50.3 |
| FS-74 | 12/13/2023 | 3' | Composite | 23.1 | <0.00199 | <0.00398 | <50.1 | <50.1 | <50.1 | <50.1 |
| FS-75 | 12/13/2023 | 4' | Composite | 1070 | <0.00199 | <0.00398 | <50.0 | <50.0 | <50.0 | <50.0 |
| FS-76 | 12/13/2023 | 4' | Composite | 1120 | <0.00200 | <0.00399 | <50.3 | <50.3 | <50.3 | <50.3 |
| FS-77 | 12/13/2023 | 4' | Composite | 581 | <0.00201 | <0.00402 | <50.1 | <50.1 | <50.1 | <50.1 |
| FS-78 | 12/13/2023 | 4' | Composite | 635 | <0.00200 | <0.00399 | <50.4 | <50.4 | <50.4 | <50.4 |
| FS-78.2 | 12/18/2023 | 4' | Composite | 416 | <0.00200 | <0.00399 | <50.1 | <50.1 | <50.1 | <50.1 |
| FS-79 | 12/12/2023 | 2' | Composite | 434 | <0.00199 | <0.00199 | <50.4 | <50.4 | <50.4 | <50.4 |
| FS-79.2 | 12/18/2023 | 4' | Composite | 1150 | <0.00201 | <0000402 | 53.9 | 53.9 | <50.5 | <50.5 |
| FS-80 | 12/12/2023 | 2' | Composite | 320 | <0.00200 | <0.00200 | <50.5 | <50.5 | <50.5 | <50.5 |
| FS-80.2 | 12/18/2023 | 4' | Composite | 473 | <0.00200 | <0.00401 | <49.9 | <49.9 | <49.9 | <49.9 |
| **NMOCD Reclamation Standards[3]** | | | | 600 | 10 | 10 | 100 | 100 | | N/A |
| **NMOCD Remediation Standards[4]** | | | | 10,000 | 10 | 10 | 2,500 | 1,000 | | N/A |

1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes
2. TPH = Total petroleum hydrocarbons
3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegatation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft.
4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N, 8/14/2018

< = Constituent was not detected above the indicated laboratory sample detection limit (SDL).
NA = Not Analyzed
**Bold denotes concentrations above applicable laboratory SDLs.**
**Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards.**
In-situ = Sample is representative of material which remains in-place at the site.
Excavated = Sample is representative of materials which was excavated and disposed of at a permited disposal facility.

**Table 3**
**Soil Analytical Results Summary - Confirmation Evaluation (Wall Samples)**

**NMOCD Reference No. nAPP2321152013**

| Sample ID | Sample Date | Sample Start Depth (ft bgs) | Sample Final Depth (ft bgs) | Sample Type | Chloride (mg/Kg) | Benzene (mg/Kg) | Total BTEX[1] (mg/Kg) | Total TPH[2] (mg/Kg) | Diesel Range Organics (Over C10-C28) (mg/Kg) | Gasoline Range Organics (C6-C10) (mg/Kg) | Oil Range Organics (Over C28-C36) (mg/Kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | EPA Method 300 | EPA Method 8021B | EPA Method 8021B | EPA Method 8015M | EPA Method 8015M | EPA Method 8015M | EPA Method 8015M |
| **Confirmation Wall Samples** | | | | | | | | | | | |
| E-SW01 | 12/4/2023 | 0' | 4' | Composite | <4.96 | <0.00199 | <0.00398 | <49.9 | <49.9 | <49.9 | <49.9 |
| E-SW02 | 12/4/2023 | 0' | 2' | Composite | <4.97 | <0.00202 | <0.00404 | <50.5 | <50.5 | <50.5 | <50.5 |
| E-SW03 | 12/4/2023 | 0' | 2' | Composite | <5.05 | <0.00201 | <0.00402 | <50.5 | <50.5 | <50.5 | <50.5 |
| E-SW04 | 12/5/2023 | 0' | 3' | Composite | 64.7 | <0.00199 | <0.00398 | <49.7 | <49.7 | <49.7 | <49.7 |
| E-SW05 | 12/5/2023 | 0' | 3' | Composite | 36.2 | <0.00200 | <0.00399 | <50.4 | <50.4 | <50.4 | <50.4 |
| E-SW06 | 12/5/2023 | 0' | 3' | Composite | 49 | <0.00198 | <0.00396 | <49.6 | <49.6 | <49.6 | <49.6 |
| E-SW07 | 12/11/2023 | 0' | 2' | Composite | 88.8 | <0.00200 | <0.00399 | <50.3 | <50.3 | <50.3 | <50.3 |
| E-SW08 | 12/12/2023 | 0' | 2' | Composite | 51.4 | <0.00199 | <0.00398 | <50.3 | <50.3 | <50.3 | <50.3 |
| E-SW09 | 12/12/2023 | 0' | 2' | Composite | 61.6 | <0.00200 | <0.00399 | <49.9 | <49.9 | <49.9 | <49.9 |
| E-SW10 | 12/12/2023 | 0' | 2' | Composite | 757 | <0.00202 | <0.00404 | <49.7 | <49.7 | <49.7 | <49.7 |
| E-SW 10.2 | 12/18/2023 | 0' | 4' | Composite | 146 | <0.00199 | <0.00398 | <49.7 | <49.7 | <49.7 | <49.7 |
| W-SW01 | 12/4/2023 | 0' | 4' | Composite | 12.5 | <0.00202 | <0.00403 | <49.7 | <49.7 | <49.7 | <49.7 |
| W-SW02 | 12/4/2023 | 0' | 2' | Composite | 10.9 | <0.00198 | <0.00397 | <50.0 | <50.0 | <50.0 | <50.0 |
| W-SW03 | 12/4/2023 | 0' | 2' | Composite | 15.5 | <0.00199 | <0.00398 | <49.7 | <49.7 | <49.7 | <49.7 |
| W-SW04 | 12/5/2023 | 0' | 3' | Composite | 4.97 | <0.00199 | <0.00398 | <50.3 | <50.3 | <50.3 | <50.3 |
| W-SW05 | 12/5/2023 | 0' | 3' | Composite | 17.5 | <0.00200 | <0.00401 | <50.5 | <50.5 | <50.5 | <50.5 |
| W-SW06 | 12/5/2023 | 0' | 3' | Composite | 42.1 | <0.00200 | <0.00399 | <50.1 | <50.1 | <50.1 | <50.1 |
| W-SW07 | 12/11/2023 | 0' | 2' | Composite | 65.9 | <0.00200 | <0.00401 | <49.9 | <49.9 | <49.9 | <49.9 |
| W-SW08 | 12/11/2023 | 0' | 2' | Composite | 27 | <0.00199 | <0.00398 | <49.6 | <49.6 | <49.6 | <49.6 |
| W-SW09 | 12/11/2023 | 0' | 2' | Composite | 23.7 | <0.00198 | <0.00396 | <50.0 | <50.0 | <50.0 | <50.0 |
| N-SW01 | 12/4/2023 | 0' | 2' | Composite | 27.1 | <0.00199 | <0.00398 | <50.4 | <50.4 | <50.4 | <50.4 |
| N-SW02 | 12/5/2023 | 0' | 3' | Composite | 30.1 | <0.00199 | <0.00398 | <49.9 | <49.9 | <49.9 | <49.9 |
| N-SW03 | 12/5/2023 | 0' | 3' | Composite | 6.9 | <0.00198 | <0.00396 | <49.6 | <49.6 | <49.6 | <49.6 |
| N-SW04 | 12/11/2023 | 0' | 2' | Composite | 10.1 | <0.00199 | <0.00398 | <50.2 | <50.2 | <50.2 | <50.2 |
| N-SW05 | 12/13/2023 | 0' | 3' | Composite | 8.78 | <0.00201 | <0.00402 | <49.9 | <49.9 | <49.9 | <49.9 |
| N-SW06 | 12/13/2023 | 0' | 3' | Composite | 27.9 | <0.00200 | <0.00401 | <49.6 | <49.6 | <49.6 | <49.6 |
| S-SW01 | 12/4/2023 | 0' | 4' | Composite | 16.5 | <0.00198 | <0.00396 | <50.5 | <50.5 | <50.5 | <50.5 |
| S-SW02 | 12/5/2023 | 0' | 3' | Composite | 48.6 | <0.00199 | <0.00398 | <50.5 | <50.5 | <50.5 | <50.5 |
| S-SW03 | 12/5/2023 | 0' | 3' | Composite | 64.1 | <0.00199 | <0.00398 | <50.2 | <50.2 | <50.2 | <50.2 |
| S-SW04 | 12/5/2023 | 0' | 3' | Composite | 9.72 | <0.00200 | <0.00399 | <50.4 | <50.4 | <50.4 | <50.4 |
| S-SW05 | 12/12/2023 | 0' | 2' | Composite | 105 | <0.00201 | <0.00402 | <50.0 | <50.0 | <50.0 | <50.0 |
| **NMOCD Reclamation Standards[3] (Surface to 4 ft bgs)** | | | | | 600 | 10 | 50 | 100 | N/A | | |
| **NMOCD Remediation Standards[4] (Greater than Depths of 4 ft bgs)** | | | | | 10,000 | 10 | 50 | 1,000 | N/A | | |

1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes
2. TPH = Total petroleum hydrocarbons
3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegatation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft. bgs
4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N, 8/14/2018

< = Constituent was not detected above the indicated laboratory sample detection limit (SDL).
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**Bold denotes concentrations above applicable laboratory SDLs.**
**Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards.**
In-situ = Sample is representative of material which remains in-place at the site.
Excavated = Sample is representative of materials which was excavated and disposed of at a permited disposal facility.

**From:** CFO_Spill, BLM_NM
**To:** Katherine Purvis
**Cc:** Amos, James A; Braidy Moulder
**Subject:** Re: [EXTERNAL] nAPP2321152013, Curly Fed #2 SWD
**Date:** Tuesday, December 12, 2023 6:50:26 AM
**Attachments:** image003.png
Outlook-350adrqq.png
Seed_Mixture_2_LPC.doc

---

Kathy,

My Environmental Impact Review is as follows:

BLM surface/minerals
No cave/karst, botany, realty, potash, range, recreation, or special area stipulations.
The release is in Dunes Sagebrush Lizard and Lesser Prairie Chicken IPA Zones.
This location will require BLM #2 seed mixture for LPC. I have attached a copy for your records.

Please consider this BLM's approval for the 10,000mg/kg clean up standard. The **BLM acceptance/approval does not** relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not re-vegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws/regulations.

Please let me know if you have any additional questions.

Thank you,

**Crisha A. Morgan** |Certified - Environmental Protection Specialist | Program Officer|COR| Spills Coordinator| Orphaned & Idled Well POC Lead
Bureau of Land Management | Carlsbad Field Office
620 E. Greene Street Carlsbad, NM 88220
Cell 575-200-8648 | Office 575-234-5987 |camorgan@blm.gov

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**From:** Katherine Purvis <katherine.purvis@spurenergy.com>
**Sent:** Monday, October 23, 2023 1:36 PM
**To:** CFO_Spill, BLM_NM <BLM_NM_CFO_Spill@blm.gov>
**Cc:** Amos, James A <jamos@blm.gov>; Braidy Moulder <bmoulder@spurenergy.com>
**Subject:** [EXTERNAL] nAPP2321152013, Curly Fed #2 SWD

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Please see the information packet attached for this release. NMOCD has agreed to allow us a 10,000 mg/kg part closure on this release as long as the top four feet of soil are excavated. Is BLM on board with allowing this determination to guide the excavation of this release?

Kathy Purvis
EHS Coordinator
(575) 441-8619




---

**From:** Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
**Sent:** Wednesday, October 18, 2023 8:19 AM
**To:** Katherine Purvis <katherine.purvis@spurenergy.com>
**Cc:** Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
**Subject:** Re: [EXTERNAL] nAPP2321152013, Curly Fed #2 SWD, Groundwater determination

Good morning Kathy,

Thanks for the correspondence.

OCD accepts the groundwater depth determination that Spur has presented.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

**Nelson Velez** ● Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

---

**From:** Katherine Purvis <katherine.purvis@spurenergy.com>
**Sent:** Tuesday, October 17, 2023 11:59 AM
**To:** Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
**Subject:** [EXTERNAL] nAPP2321152013, Curly Fed #2 SWD, Groundwater determination

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Please find attached an NMOCD Siting information Packet that has been prepared for the Curly Federal #2 SWD release site. Based on an initial review of available resources the site should qualify for a 10,000 ppm chloride closure. The only problem is the most representative well is approximately .57 Mi west of the Site just outside the preferred 0.50 Mi radius.

Would you be willing to allow us to use this well to establish groundwater for this release site given that there are many wells to the northeast and southwest that are also >50ft? The USGS Well Proximity map shows this information.

Your consideration would be greatly appreciated.

If you have any questions or need any additional information, please feel free to contact me by phone or email. Thanks.

Kathy Purvis
EHS Coordinator
(575) 441-8619

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**From:** Velez, Nelson, EMNRD
**To:** Katherine Purvis
**Cc:** Bratcher, Michael, EMNRD
**Subject:** Re: [EXTERNAL] nAPP2321152013, Curly Fed #2 SWD, Groundwater determination
**Date:** Wednesday, October 18, 2023 8:19:00 AM
**Attachments:** image003.png
Outlook-350adrqq.png

Good morning Kathy,

Thanks for the correspondence.

OCD accepts the groundwater depth determination that Spur has presented.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

**Nelson Velez** • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

---

**From:** Katherine Purvis <katherine.purvis@spurenergy.com>
**Sent:** Tuesday, October 17, 2023 11:59 AM
**To:** Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
**Subject:** [EXTERNAL] nAPP2321152013, Curly Fed #2 SWD, Groundwater determination

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Please find attached an NMOCD Siting information Packet that has been prepared for the Curly

Federal #2 SWD release site. Based on an initial review of available resources the site should qualify for a 10,000 ppm chloride closure. The only problem is the most representative well is approximately .57 Mi west of the Site just outside the preferred 0.50 Mi radius.

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Your consideration would be greatly appreciated.

If you have any questions or need any additional information, please feel free to contact me by phone or email. Thanks.

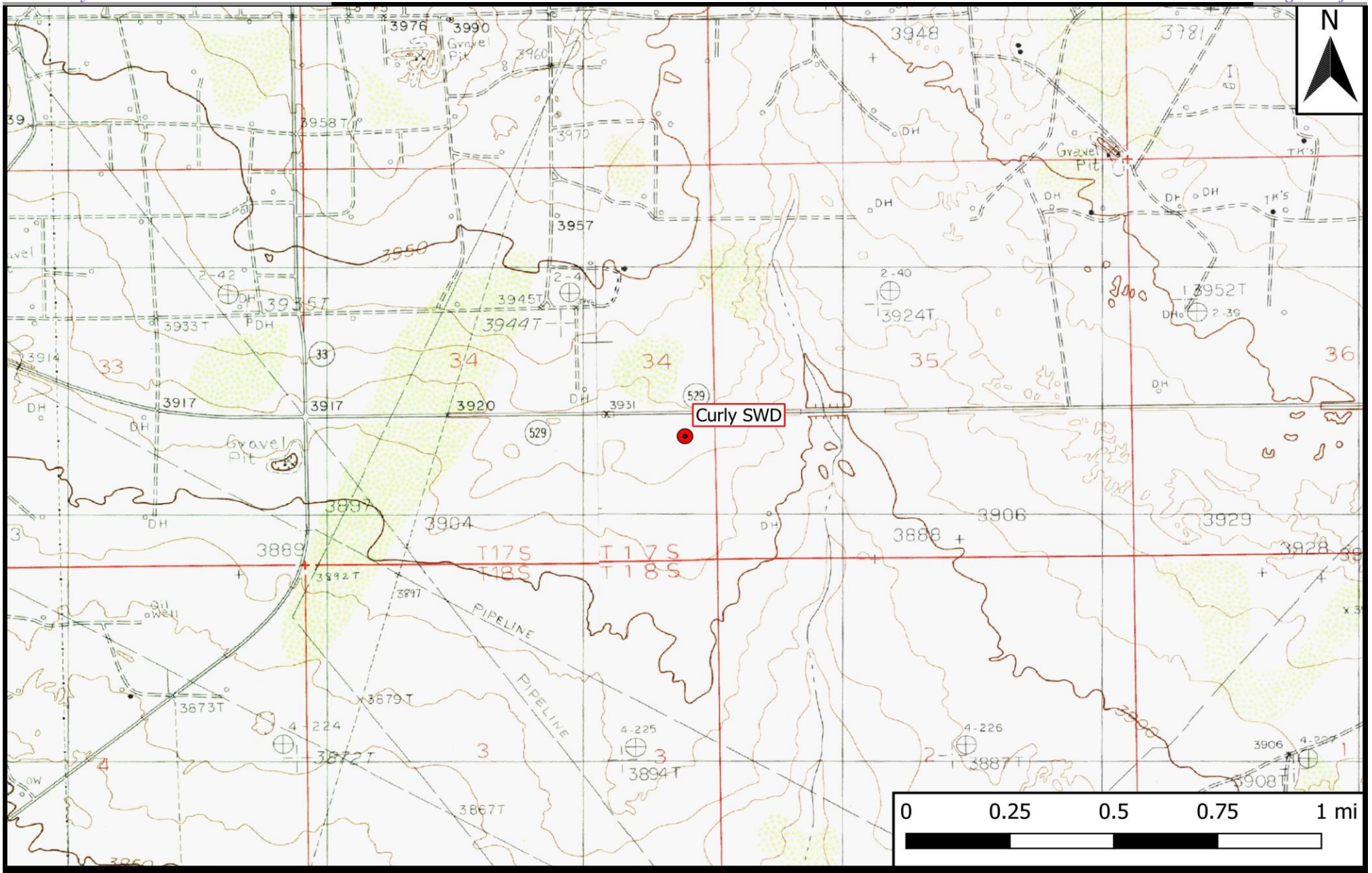
Kathy Purvis
EHS Coordinator
(575) 441-8619




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Legend

- Site Location

**Figure 1**

Topographic Map

Spur Energy Partners, LLC

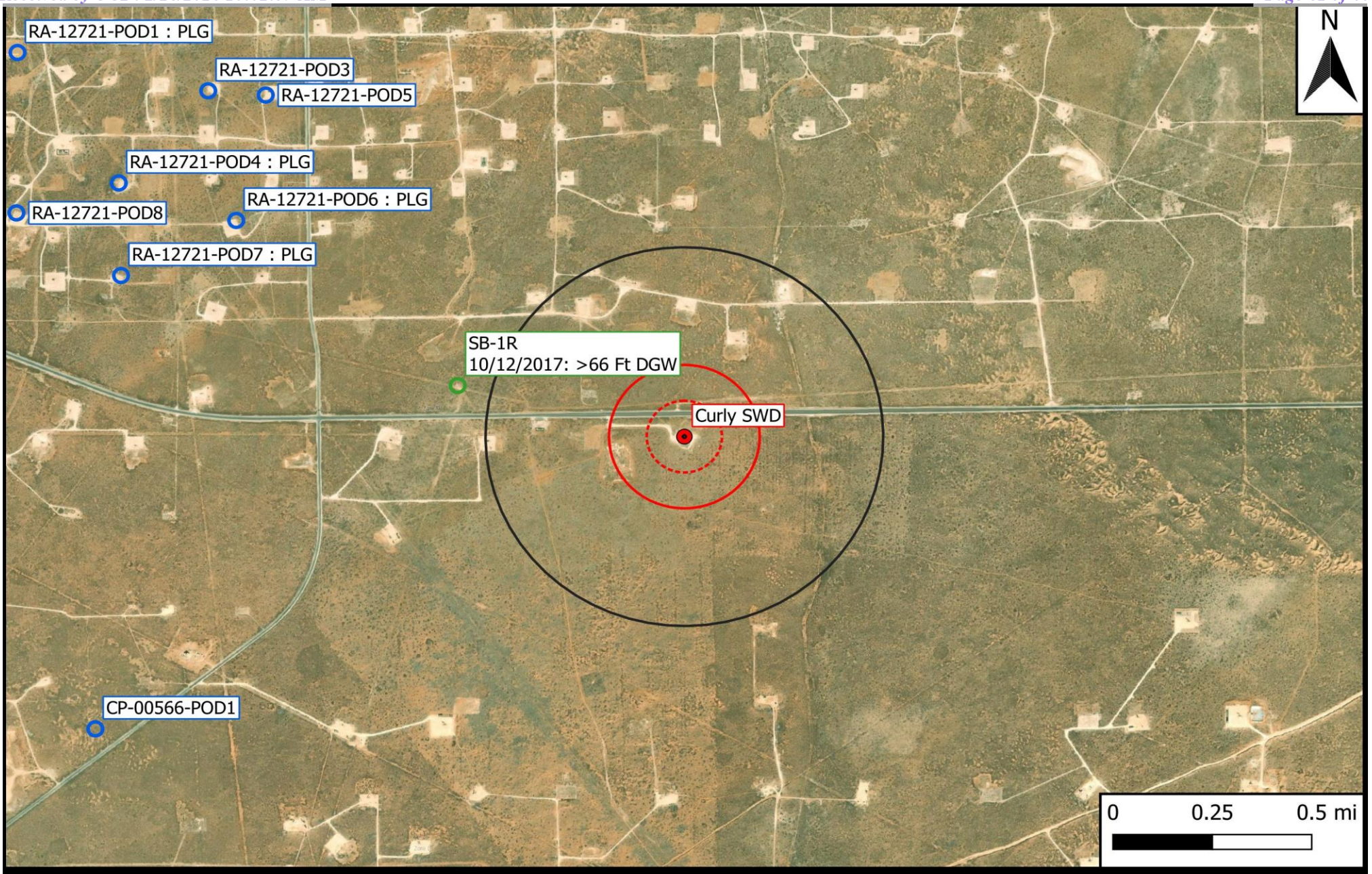
Curly SWD

GPS: 32.78833, -103.74687

Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 7/31/23

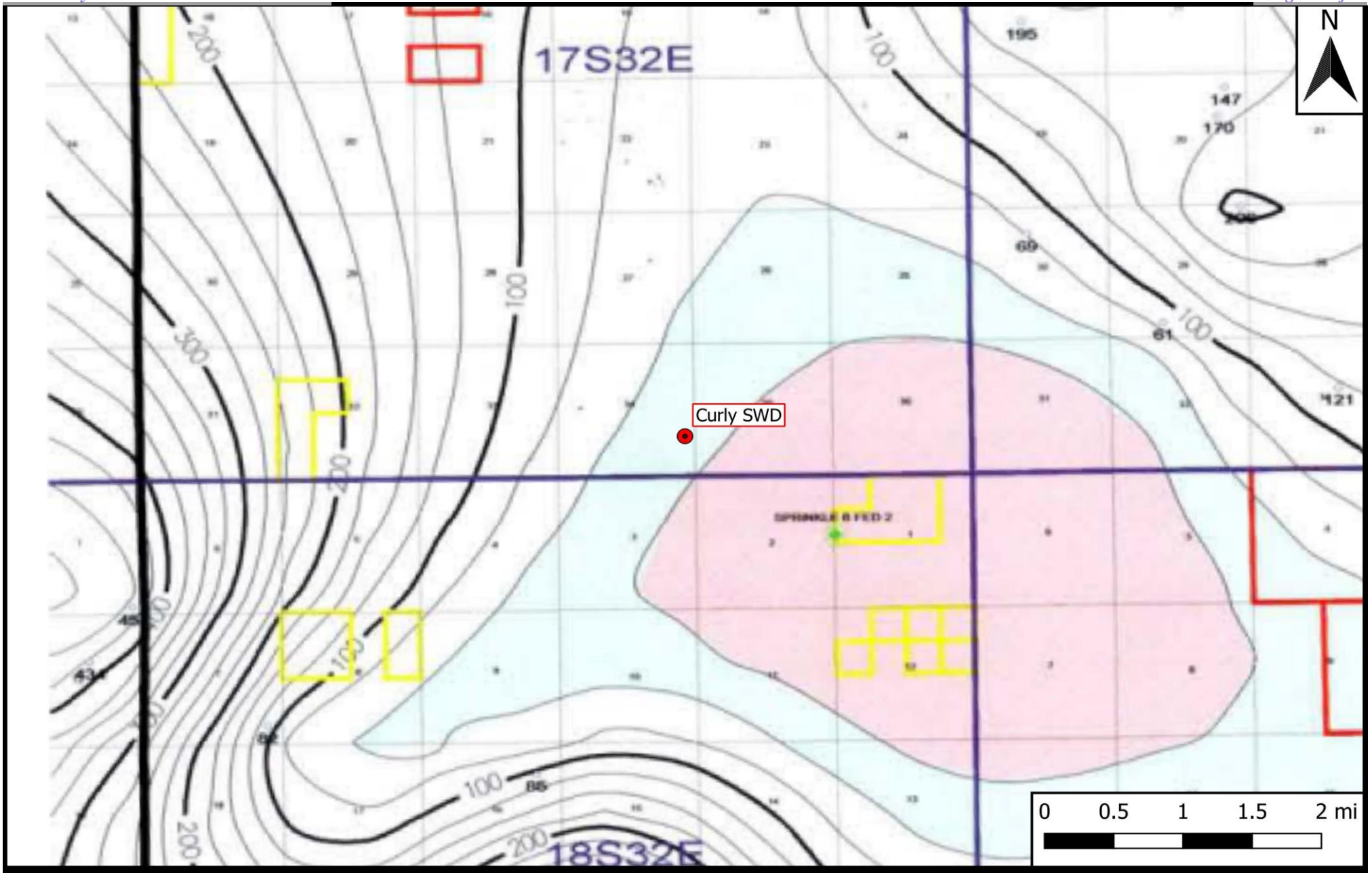



Site Location
Well - NMOSE
Well - USGS
Well - Other
Potash Mine Workings
Medium/High Karst
500 Ft Radius
1000 Ft Radius
0.5 Mi Radius
1% Annual Flood Chance
Lake/Freshwater Pond
Emergent/Forested Wetlands
Riverine

**Figure 2**
Aerial Proximity Map
Spur Energy Partners, LLC
Curly SWD
GPS: 32.78833, -103.74687
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 8/9/23




Legend

- Site Location

**Figure 4**

Inferred Depth to Groundwater Trend Map

Spur Energy Partners, LLC

Curly SWD

GPS: 32.78833, -103.74687

Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 7/31/23

# *New Mexico Office of the State Engineer*
# Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 617344.8 **Northing (Y):** 3628516.57 **Radius:** 1610

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

### 1. GENERAL AND WELL LOCATION

| OSE POD NO. (WELL NO.) | WELL TAG ID NO. | OSE FILE NO(S). |
|---|---|---|
| SB-1R | | |

| WELL OWNER NAME(S) | PHONE (OPTIONAL) |
|---|---|
| Concho Resources | |

| WELL OWNER MAILING ADDRESS | CITY | STATE | ZIP |
|---|---|---|---|
| One Concho Center, 600 W. Illinios Ave. | Midland | TX | 79701 |

| WELL LOCATION (FROM GPS) | | DEGREES | MINUTES | SECONDS | |
|---|---|---|---|---|---|
| | LATITUDE | 32 | 47 | 25.36 | N |
| | LONGITUDE | 103 | 45 | 23.91 | W |

*ACCURACY REQUIRED: ONE TENTH OF A SECOND

*DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

Loco Hills SWD Line

### 2. DRILLING & CASING INFORMATION

| LICENSE NO. | NAME OF LICENSED DRILLER | NAME OF WELL DRILLING COMPANY |
|---|---|---|
| WD-1456 | John W. White | White Drilling Company, Inc. |

| DRILLING STARTED | DRILLING ENDED | DEPTH OF COMPLETED WELL (FT) | BORE HOLE DEPTH (FT) | DEPTH WATER FIRST ENCOUNTERED (FT) |
|---|---|---|---|---|
| 10/12/2017 | 10/12/2017 | | 66.0 | Dry |

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT)

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM (inches) | CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen) | CASING CONNECTION TYPE (add coupling diameter) | CASING INSIDE DIAM. (inches) | CASING WALL THICKNESS (inches) | SLOT SIZE (inches) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
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| | | | | | | | |

### 3. ANNULAR MATERIAL

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM. (inches) | LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL | AMOUNT (cubic feet) | METHOD OF PLACEMENT |
|---|---|---|---|---|---|
| 0 | 66.0 | 6.25 | Type 2 Portland Cemt. w/5% Bent. quick gel mix | 12.96 | Pump Mix w/Tremmie |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

| FILE NO. | POD NO. | TRN NO. | |
|---|---|---|---|
| LOCATION | | WELL TAG ID NO. | PAGE 1 OF 2 |

**4. HYDROGEOLOGIC LOG OF WELL**

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | THICKNESS (feet) | COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units) | WATER BEARING? (YES / NO) | ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm) |
|---|---|---|---|---|---|
| 0 | 18.0 | 18.0 | Brown sand/clayey sand | Y ✓ N | |
| 18.0 | 22.0 | 4.0 | Brown sand w/sandstone | Y ✓ N | |
| 22.0 | 38.0 | 16.0 | Reddish brown sand | Y ✓ N | |
| 38.0 | 47.0 | 9.0 | Reddish brown silty clayey shale | Y ✓ N | |
| 47.0 | 56.0 | 9.0 | Reddish brown sand/clayey sand | Y ✓ N | |
| 56.0 | 61.0 | 5.0 | Reddish brown sand w/gravel mixed | Y ✓ N | |
| 61.0 | 64.0 | 3.0 | Reddish brown clay | Y ✓ N | |
| 64.0 | 66.0 | 2.0 | Reddish sandy shale/sandstone | Y ✓ N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

**5. TEST; RIG SUPERVISION**

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION: Chlorides present in soil

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

William B. Atkins

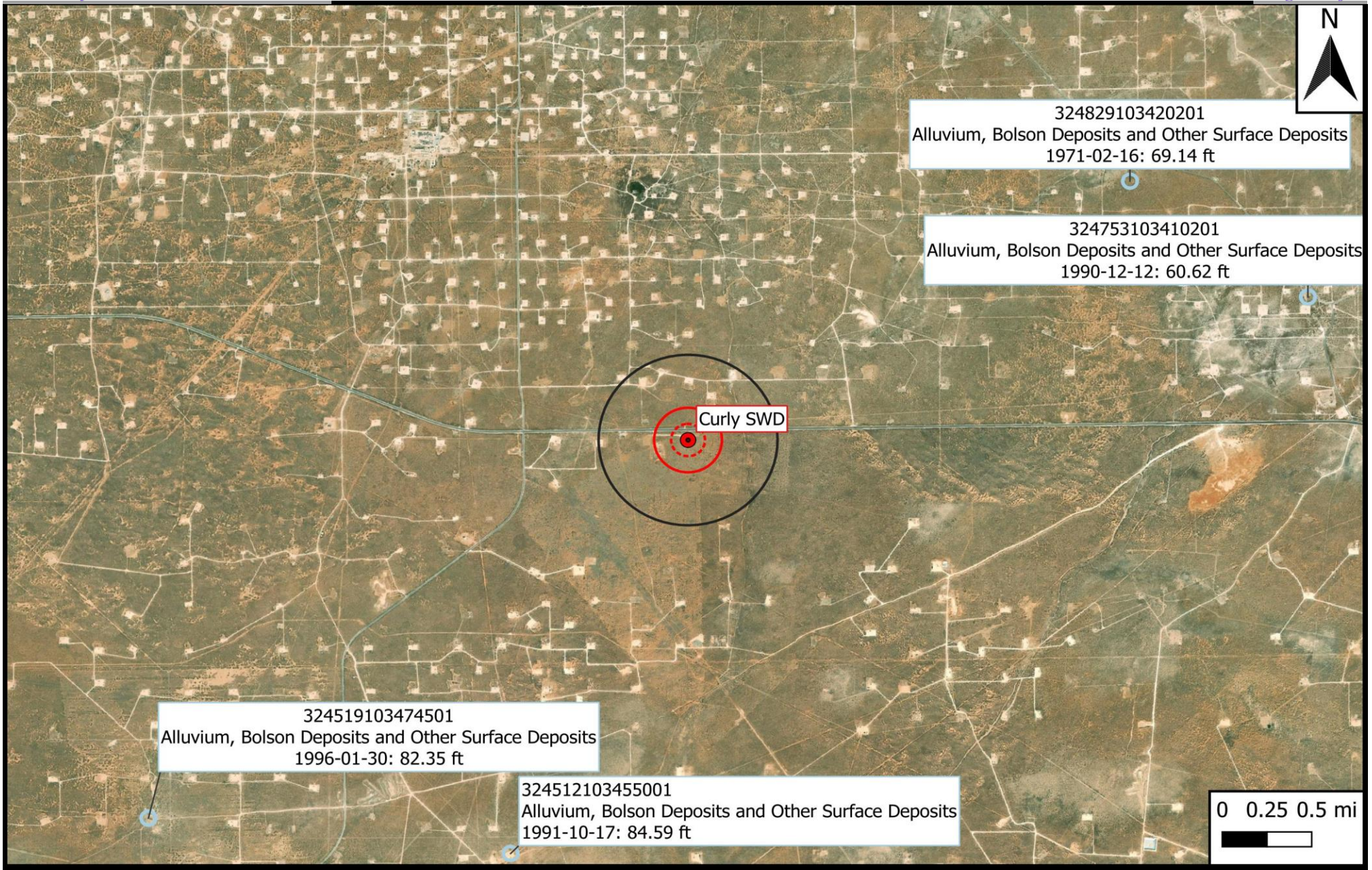
**6. SIGNATURE**

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE: 10/17/2017

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

| FILE NO. | POD NO. | TRN NO. | |
|---|---|---|---|
| LOCATION | | WELL TAG ID NO. | PAGE 2 OF 2 |




Legend
- Site Location
- Well - USGS
- 500 Ft Radius
- 1000 Ft Radius
- 0.5 Mi Radius

**Figure 5**
USGS Well Proximity Map
Spur Energy Partners, LLC
Curly SWD
GPS: 32.78833, -103.74687
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 7/31/23

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

## Search Results -- 1 sites found

**Agency code =** usgs
**site_no list =**
- 324512103455001

**Minimum number of levels =** 1
Save file of selected sites to local disk for future upload

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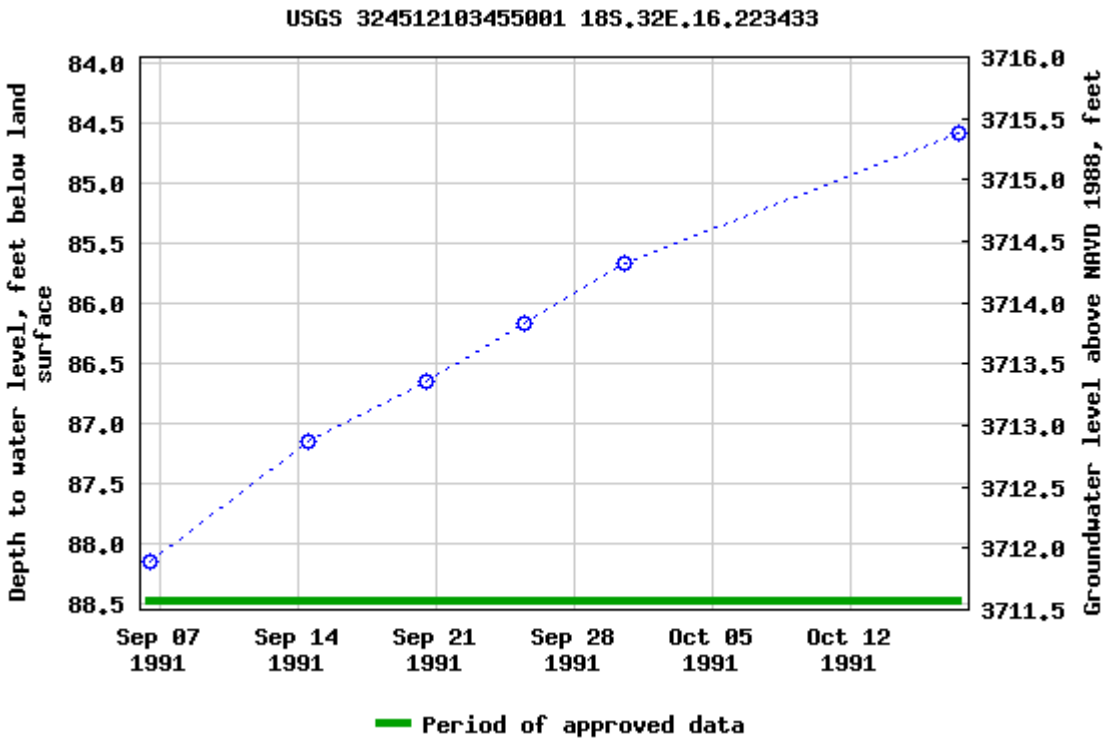
## USGS 324512103455001 18S.32E.16.223433

Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 12080003
Latitude 32°45'12", Longitude 103°45'50" NAD27
Land-surface elevation 3,800 feet above NAVD88
The depth of the well is 100 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

**Output formats**

| |
|---|
| Table of data |
| Tab-separated data |
| Graph of data |
| Reselect period |




Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

---

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U.S. Department of the Interior | U.S. Geological Survey

**Title: Groundwater for USA: Water Levels**
**URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?**

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2023-07-31 10:41:21 EDT
0.56 0.48 nadww02

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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## Search Results -- 1 sites found

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**site_no list =**
- 324519103474501

**Minimum number of levels =** 1
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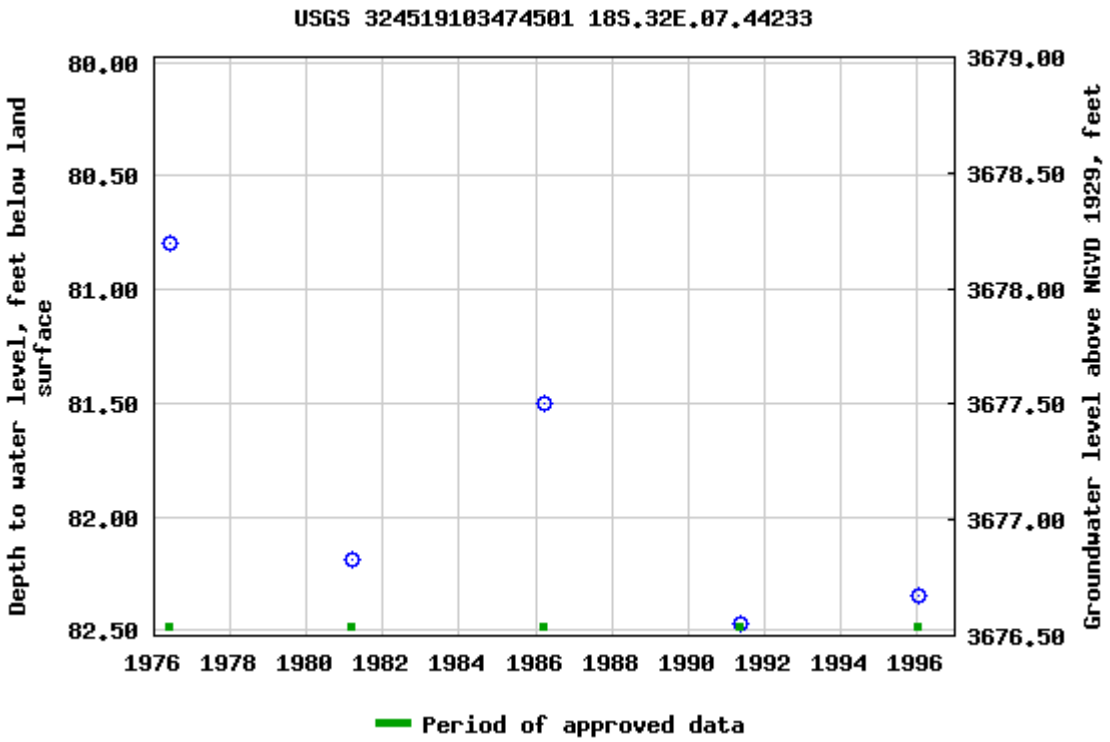
## USGS 324519103474501 18S.32E.07.44233

Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°45'24", Longitude 103°47'55" NAD27
Land-surface elevation 3,759.00 feet above NGVD29
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

**Output formats**

| |
|---|
| Table of data |
| Tab-separated data |
| Graph of data |
| Reselect period |




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Page Contact Information: USGS Water Data Support Team
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0.56 0.49 nadww02

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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## Search Results -- 1 sites found

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**site_no list =**
- 324753103410201

**Minimum number of levels =** 1
Save file of selected sites to local disk for future upload

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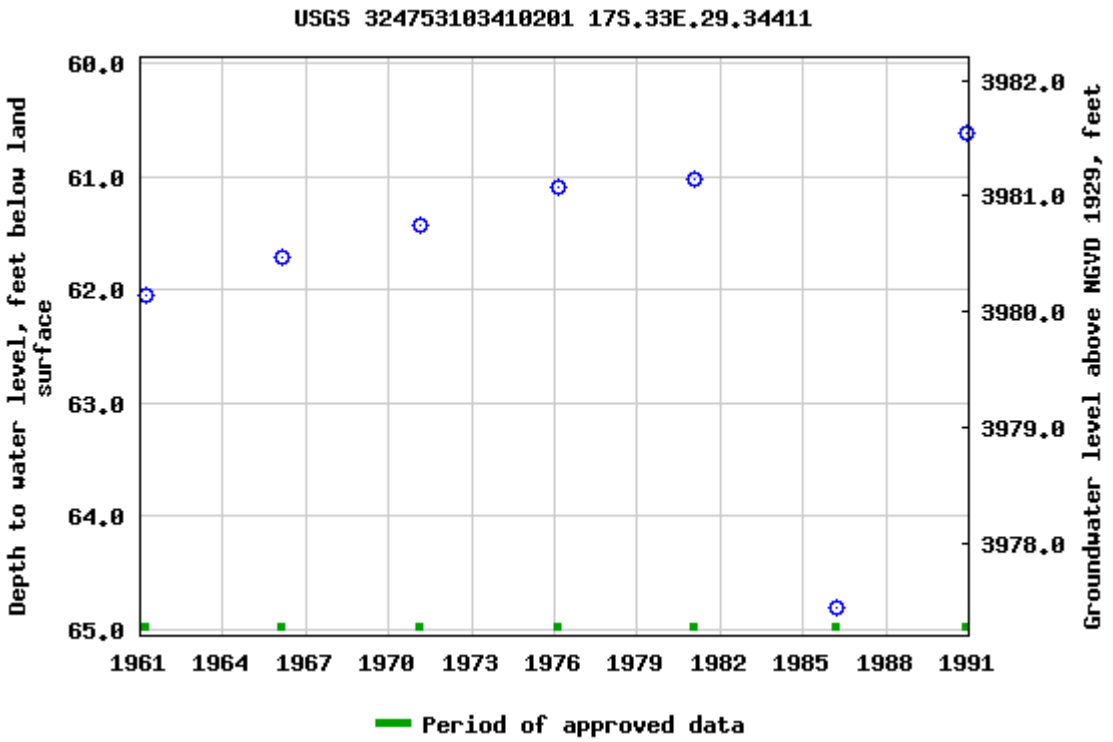
## USGS 324753103410201 17S.33E.29.34411

Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°47'59", Longitude 103°41'12" NAD27
Land-surface elevation 4,042.20 feet above NGVD29
This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

**Output formats**

| |
|---|
| Table of data |
| Tab-separated data |
| Graph of data |
| Reselect period |




Breaks in the plot represent a gap of at least one year between field measurements.
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Page Last Modified: 2023-07-31 10:42:06 EDT
0.57 0.49 nadww02

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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## Search Results -- 1 sites found

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**site_no list =**
- 324829103420201

**Minimum number of levels =** 1
Save file of selected sites to local disk for future upload

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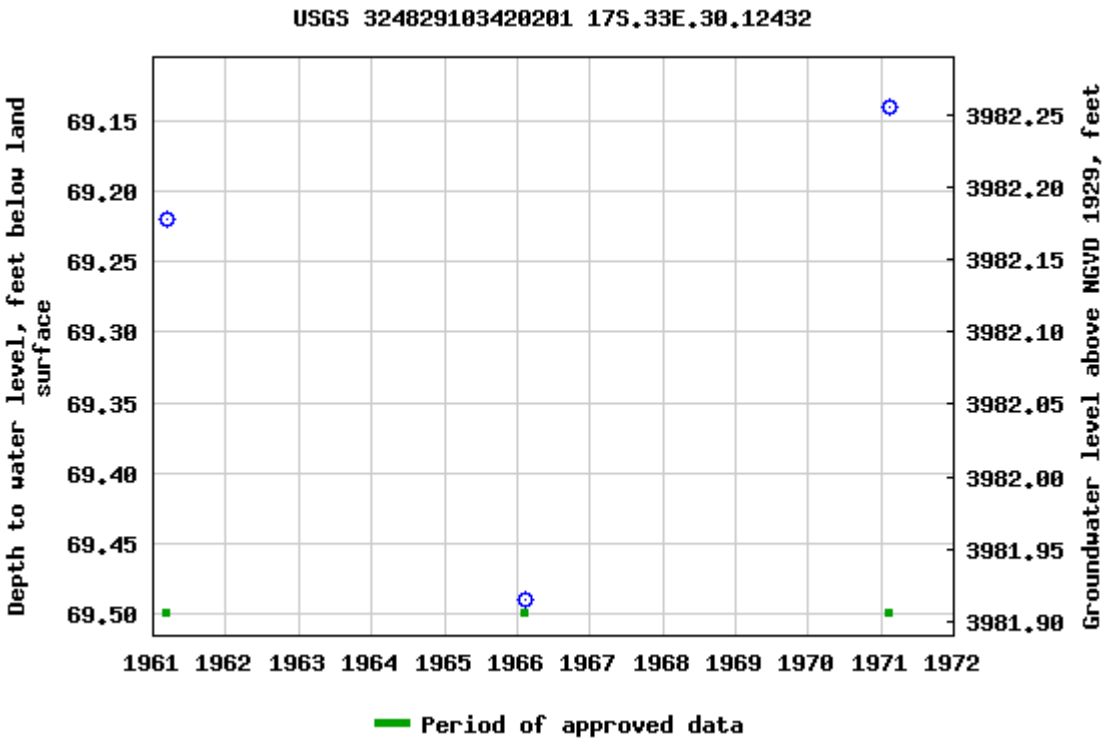
## USGS 324829103420201 17S.33E.30.12432

Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 12080003
Latitude 32°48'35", Longitude 103°42'13" NAD27
Land-surface elevation 4,051.40 feet above NGVD29
This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

**Output formats**

| |
|---|
| Table of data |
| Tab-separated data |
| Graph of data |
| Reselect period |




Breaks in the plot represent a gap of at least one year between field measurements.
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**Title: Groundwater for USA: Water Levels**
**URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?**

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2023-07-31 10:41:23 EDT
0.55 0.47 nadww02

# APPENDIX C – PHOTOGRAPHIC LOG




Photo 1: Site info




Photo 2: Listed site specific hazards




Photo 3: East facing view west of pad and battery




Photo 4: Southeast facing view of North pad and battery




Photo 5: South facing view of battery




Photo 6: Southwest facing view of the East side of battery




Photo 7: South facing view of natural drainage channel Northeast of battery




Photo 8: View of the field East of the pad




Photo 9: View of field Southeast of pad facing South




Photo 10: Vew of field Southeast of pad facing North




Photo 11: View of impacted area in the field Southeast of pad




Photo 12: View of impacted area in the field East of pad




| Photo 13: | View of S-SW-01 at 4' bgs |
|---|---|




| Photo 14: | View of E-SW-02 at 3' bgs |
|---|---|




Photo 15: View of W-SW-03 (left) and E-SW-03 (right) at 3' bgs




Photo 16: View of W-SW-05 at 3' bgs




Photo 17: View of W-SW-07 at 2.5' bgs




Photo 18: View of N-SW-02 (left) and S-SW-04 (right) at 3' bgs




Photo 19: View of FS 34-51 at 3' bgs



Photo 20: View of N-SW-06 at 2' bgs



Photo 21: View of open excavation East of pad 2-4' bgs




Photo 22: View of backfilled excavation




Photo 1: Site info




Photo 2: Listed site specific hazards




Photo 3: South facing view North of lined pad containment




Photo 4: West facing view of lined pad containment




Photo 5: Southwest facing view of lined pad containment




Photo 6: Southeast facing view of lined pad containment




| Photo 7: | West facing view of lined pad containment |
|---|---|

Photo 8:

# APPENDIX D – ANALYTICAL REPORT AND CHAIN OF CUSTODY

eurofins | Environment Testing



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Joseph Guesnier
Terracon Consulting Eng & Scientists
2526 W Pierce Street
Carlsbad, New Mexico 88220

Generated 12/8/2023 3:35:34 PM

## JOB DESCRIPTION

Curly SWD
KH237051

## JOB NUMBER

890-5718-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.



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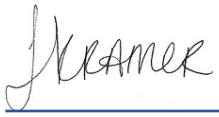
# Eurofins Carlsbad

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



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12/8/2023 3:35:34 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

# Eurofins Carlsbad

## Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD,and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs
· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

Warranties, Terms, and Conditions
· Analyses for Field Parameters are performed by Eurofins Philadelphia field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification # 02015.
VL = field staff performs tests under NJ State certification # 06005.
WG = field staff performs tests under NJ State certification # PA001, PA State certification # 48-01334.
H = field staff performs tests under NJ NELAP certification # PA093, PA NELAP certification # 46-05499.

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

· Reported results related only to the samples as tested. Eurofins Philadelphia is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· Eurofins Philadelphia is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by Eurofins Philadelphia : Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).




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# Table of Contents

Cover Page . . . . . 1
Table of Contents . . . . . 4
Definitions/Glossary . . . . . 5
Case Narrative . . . . . 6
Client Sample Results . . . . . 7
Surrogate Summary . . . . . 21
QC Sample Results . . . . . 23
QC Association Summary . . . . . 27
Lab Chronicle . . . . . 31
Certification Summary . . . . . 37
Method Summary . . . . . 38
Sample Summary . . . . . 39
Chain of Custody . . . . . 40
Receipt Checklists . . . . . 44

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Qualifiers

### GC VOA

| Qualifier | Qualifier Description |
|---|---|
| S1- | Surrogate recovery exceeds control limits, low biased. |
| U | Indicates the analyte was analyzed for but not detected. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| S1+ | Surrogate recovery exceeds control limits, high biased. |
| U | Indicates the analyte was analyzed for but not detected. |

### HPLC/IC

| Qualifier | Qualifier Description |
|---|---|
| U | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Job ID: 890-5718-1

**Laboratory: Eurofins Carlsbad**

**Narrative**

**Job Narrative**
**890-5718-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**
The samples were received on 12/5/2023 9:04 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C

**Receipt Exceptions**
The following samples were received and analyzed from an unpreserved bulk soil jar: S-SW01 (890-5718-1), FS-01 (890-5718-2), W-SW01 (890-5718-3), E-SW01 (890-5718-4), FS-02 (890-5718-5), FS-03 (890-5718-6), FS-04 (890-5718-7), E-SW02 (890-5718-8), FS-05 (890-5718-9), FS-06 (890-5718-10), W-SW02 (890-5718-11), FS-07 (890-5718-12), FS-08 (890-5718-13), FS-09 (890-5718-14), N-SW01 (890-5718-15), E-SW03 (890-5718-16) and W-SW03 (890-5718-17).

**GC VOA**
Method 8021B: Surrogate recovery for the following samples were outside control limits: (MB 880-68465/5-A) and (MB 880-68577/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: E-SW02 (890-5718-8) and W-SW02 (890-5718-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-68529 and analytical batch 880-68448 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: S-SW01 (890-5718-1), FS-01 (890-5718-2), W-SW01 (890-5718-3), E-SW01 (890-5718-4), FS-02 (890-5718-5), FS-03 (890-5718-6), FS-04 (890-5718-7), E-SW02 (890-5718-8), FS-05 (890-5718-9), FS-06 (890-5718-10), W-SW02 (890-5718-11), FS-07 (890-5718-12), FS-08 (890-5718-13), FS-09 (890-5718-14), N-SW01 (890-5718-15), E-SW03 (890-5718-16), W-SW03 (890-5718-17), (890-5720-A-20-B), (890-5720-A-20-C MS) and (890-5720-A-20-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: S-SW01

**Lab Sample ID: 890-5718-1**
**Matrix: Solid**
**Date Collected: 12/04/23 12:11**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-4'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 22:59 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 22:59 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 22:59 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 22:59 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 22:59 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 22:59 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *82* | | *70 - 130* | *12/07/23 09:55* | *12/07/23 22:59* | *1* |
| *1,4-Difluorobenzene (Surr)* | *79* | | *70 - 130* | *12/07/23 09:55* | *12/07/23 22:59* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/07/23 22:59 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/07/23 00:00 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 00:00 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 00:00 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 00:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *159* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 00:00* | *1* |
| *o-Terphenyl* | *132* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 00:00* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **16.5** | | 4.99 | | mg/Kg | | | 12/06/23 13:55 | 1 |

## Client Sample ID: FS-01

**Lab Sample ID: 890-5718-2**
**Matrix: Solid**
**Date Collected: 12/04/23 12:12**
**Date Received: 12/05/23 09:04**
**Sample Depth: 4'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 23:20 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 23:20 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 23:20 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 23:20 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 23:20 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 23:20 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *85* | | *70 - 130* | *12/07/23 09:55* | *12/07/23 23:20* | *1* |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: FS-01

**Lab Sample ID: 890-5718-2**
**Matrix: Solid**
**Date Collected: 12/04/23 12:12**
**Date Received: 12/05/23 09:04**
**Sample Depth: 4'**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *78* | | *70 - 130* | *12/07/23 09:55* | *12/07/23 23:20* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/07/23 23:20 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/07/23 00:21 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 00:21 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 00:21 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 00:21 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *201* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 00:21* | *1* |
| *o-Terphenyl* | *171* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 00:21* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **24.8** | | 4.97 | | mg/Kg | | | 12/06/23 14:12 | 1 |

## Client Sample ID: W-SW01

**Lab Sample ID: 890-5718-3**
**Matrix: Solid**
**Date Collected: 12/04/23 12:50**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-4'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 23:40 | 1 |
| Toluene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 23:40 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 23:40 | 1 |
| m-Xylene & p-Xylene | <0.00403 | U | 0.00403 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 23:40 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 23:40 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 23:40 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *92* | | *70 - 130* | *12/07/23 09:55* | *12/07/23 23:40* | *1* |
| *1,4-Difluorobenzene (Surr)* | *86* | | *70 - 130* | *12/07/23 09:55* | *12/07/23 23:40* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00403 | U | 0.00403 | | mg/Kg | | | 12/07/23 23:40 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/07/23 00:43 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: W-SW01

**Lab Sample ID: 890-5718-3**
**Matrix: Solid**
**Date Collected: 12/04/23 12:50**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-4'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 00:43 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 00:43 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 00:43 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *174* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 00:43* | *1* |
| *o-Terphenyl* | *145* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 00:43* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **12.5** | | 4.95 | | mg/Kg | | | 12/06/23 14:18 | 1 |

## Client Sample ID: E-SW01

**Lab Sample ID: 890-5718-4**
**Matrix: Solid**
**Date Collected: 12/04/23 12:53**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-4'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:01 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:01 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:01 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:01 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:01 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *75* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 00:01* | *1* |
| *1,4-Difluorobenzene (Surr)* | *73* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 00:01* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 00:01 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/07/23 01:03 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 01:03 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 01:03 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 01:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *205* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 01:03* | *1* |
| *o-Terphenyl* | *176* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 01:03* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: E-SW01

**Lab Sample ID: 890-5718-4**
**Matrix: Solid**
**Date Collected: 12/04/23 12:53**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-4'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <4.96 | U | 4.96 | | mg/Kg | | | 12/06/23 14:23 | 1 |

## Client Sample ID: FS-02

**Lab Sample ID: 890-5718-5**
**Matrix: Solid**
**Date Collected: 12/04/23 01:15**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:21 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:21 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:21 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:21 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:21 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:21 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *84* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 00:21* | *1* |
| *1,4-Difluorobenzene (Surr)* | *74* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 00:21* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/08/23 00:21 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.3 | U | 50.3 | | mg/Kg | | | 12/07/23 01:25 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 50.3 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 01:25 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U | 50.3 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 01:25 | 1 |
| OII Range Organics (Over C28-C36) | <50.3 | U | 50.3 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 01:25 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *158* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 01:25* | *1* |
| *o-Terphenyl* | *134* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 01:25* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **19.0** | | 4.96 | | mg/Kg | | | 12/06/23 14:29 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: FS-03

**Date Collected: 12/04/23 01:17**
**Date Received: 12/05/23 09:04**
**Sample Depth: 2'**

**Lab Sample ID: 890-5718-6**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:42 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:42 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:42 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:42 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:42 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 00:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *89* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 00:42* | *1* |
| *1,4-Difluorobenzene (Surr)* | *78* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 00:42* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/08/23 00:42 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.1 | U | 50.1 | | mg/Kg | | | 12/07/23 01:46 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.1 | U | 50.1 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 01:46 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.1 | U | 50.1 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 01:46 | 1 |
| OII Range Organics (Over C28-C36) | <50.1 | U | 50.1 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 01:46 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *194* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 01:46* | *1* |
| *o-Terphenyl* | *165* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 01:46* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **61.1** | | 5.01 | | mg/Kg | | | 12/06/23 14:46 | 1 |

## Client Sample ID: FS-04

**Date Collected: 12/04/23 01:20**
**Date Received: 12/05/23 09:04**
**Sample Depth: 2'**

**Lab Sample ID: 890-5718-7**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:02 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:02 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:02 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:02 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:02 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:02 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *89* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 01:02* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: FS-04

**Lab Sample ID: 890-5718-7**
**Matrix: Solid**

**Date Collected: 12/04/23 01:20**
**Date Received: 12/05/23 09:04**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *77* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 01:02* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/08/23 01:02 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/07/23 02:07 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 02:07 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 02:07 | 1 |
| OII Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 02:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *150* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 02:07* | *1* |
| *o-Terphenyl* | *126* | | *70 - 130* | *12/06/23 14:37* | *12/07/23 02:07* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **8.77** | | 5.04 | | mg/Kg | | | 12/06/23 14:52 | 1 |

## Client Sample ID: E-SW02

**Lab Sample ID: 890-5718-8**
**Matrix: Solid**

**Date Collected: 12/04/23 01:22**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:23 | 1 |
| Toluene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:23 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:23 | 1 |
| m-Xylene & p-Xylene | <0.00404 | U | 0.00404 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:23 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:23 | 1 |
| Xylenes, Total | <0.00404 | U | 0.00404 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:23 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *91* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 01:23* | *1* |
| *1,4-Difluorobenzene (Surr)* | *63* | *S1-* | *70 - 130* | *12/07/23 09:55* | *12/08/23 01:23* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00404 | U | 0.00404 | | mg/Kg | | | 12/08/23 01:23 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/07/23 02:49 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: E-SW02

**Lab Sample ID: 890-5718-8**
**Matrix: Solid**
**Date Collected: 12/04/23 01:22**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-2'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 02:49 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 02:49 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 02:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *157* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 02:49* | *1* |
| *o-Terphenyl* | *133* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 02:49* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <4.97 | U | 4.97 | | mg/Kg | | | 12/06/23 14:57 | 1 |

## Client Sample ID: FS-05

**Lab Sample ID: 890-5718-9**
**Matrix: Solid**
**Date Collected: 12/04/23 02:08**
**Date Received: 12/05/23 09:04**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:43 | 1 |
| Toluene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:43 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:43 | 1 |
| m-Xylene & p-Xylene | <0.00403 | U | 0.00403 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:43 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:43 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 01:43 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *90* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 01:43* | *1* |
| *1,4-Difluorobenzene (Surr)* | *81* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 01:43* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00403 | U | 0.00403 | | mg/Kg | | | 12/08/23 01:43 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/07/23 03:10 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 03:10 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 03:10 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 03:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *189* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 03:10* | *1* |
| *o-Terphenyl* | *159* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 03:10* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: FS-05

**Lab Sample ID: 890-5718-9**
**Matrix: Solid**
**Date Collected: 12/04/23 02:08**
**Date Received: 12/05/23 09:04**
**Sample Depth: 2'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 52.7 | | 5.02 | | mg/Kg | | | 12/06/23 15:03 | 1 |

## Client Sample ID: FS-06

**Lab Sample ID: 890-5718-10**
**Matrix: Solid**
**Date Collected: 12/04/23 02:09**
**Date Received: 12/05/23 09:04**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 02:04 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 02:04 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 02:04 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 02:04 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 02:04 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 02:04 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *91* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 02:04* | *1* |
| *1,4-Difluorobenzene (Surr)* | *79* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 02:04* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/08/23 02:04 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/07/23 03:32 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 03:32 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 03:32 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 03:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *178* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 03:32* | *1* |
| *o-Terphenyl* | *153* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 03:32* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 44.8 | | 5.05 | | mg/Kg | | | 12/06/23 15:09 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: W-SW02

**Date Collected: 12/04/23 02:10**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-2'**

## Lab Sample ID: 890-5718-11

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 03:27 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 03:27 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 03:27 | 1 |
| m-Xylene & p-Xylene | <0.00397 | U | 0.00397 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 03:27 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 03:27 | 1 |
| Xylenes, Total | <0.00397 | U | 0.00397 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 03:27 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *83* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 03:27* | *1* |
| *1,4-Difluorobenzene (Surr)* | *64* | *S1-* | *70 - 130* | *12/07/23 09:55* | *12/08/23 03:27* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00397 | U | 0.00397 | | mg/Kg | | | 12/08/23 03:27 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | | 12/07/23 03:53 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 03:53 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 03:53 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 03:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *196* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 03:53* | *1* |
| *o-Terphenyl* | *162* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 03:53* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **10.9** | | 4.98 | | mg/Kg | | | 12/06/23 15:14 | 1 |

## Client Sample ID: FS-07

**Date Collected: 12/04/23 03:00**
**Date Received: 12/05/23 09:04**
**Sample Depth: 2'**

## Lab Sample ID: 890-5718-12

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 03:47 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 03:47 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 03:47 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 03:47 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 03:47 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 03:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *89* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 03:47* | *1* |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: FS-07

**Date Collected: 12/04/23 03:00**
**Date Received: 12/05/23 09:04**
**Sample Depth: 2'**

## Lab Sample ID: 890-5718-12

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *76* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 03:47* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00400 | U | 0.00400 | | mg/Kg | | | 12/08/23 03:47 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/07/23 04:14 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 04:14 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 04:14 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 04:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *189* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 04:14* | *1* |
| *o-Terphenyl* | *162* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 04:14* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **29.6** | | 5.04 | | mg/Kg | | | 12/06/23 15:33 | 1 |

## Client Sample ID: FS-08

**Date Collected: 12/04/23 03:02**
**Date Received: 12/05/23 09:04**
**Sample Depth: 2'**

## Lab Sample ID: 890-5718-13

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:08 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:08 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:08 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:08 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:08 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *77* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 04:08* | *1* |
| *1,4-Difluorobenzene (Surr)* | *84* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 04:08* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/08/23 04:08 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.2 | U | 50.2 | | mg/Kg | | | 12/07/23 04:35 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: FS-08

**Lab Sample ID: 890-5718-13**
**Matrix: Solid**
**Date Collected: 12/04/23 03:02**
**Date Received: 12/05/23 09:04**
**Sample Depth: 2'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.2 | U | 50.2 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 04:35 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.2 | U | 50.2 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 04:35 | 1 |
| OII Range Organics (Over C28-C36) | <50.2 | U | 50.2 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 04:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *164* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 04:35* | *1* |
| *o-Terphenyl* | *136* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 04:35* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **34.3** | | 5.02 | | mg/Kg | | | 12/06/23 15:39 | 1 |

## Client Sample ID: FS-09

**Lab Sample ID: 890-5718-14**
**Matrix: Solid**
**Date Collected: 12/04/23 03:03**
**Date Received: 12/05/23 09:04**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:28 | 1 |
| Toluene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:28 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:28 | 1 |
| m-Xylene & p-Xylene | <0.00404 | U | 0.00404 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:28 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:28 | 1 |
| Xylenes, Total | <0.00404 | U | 0.00404 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *77* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 04:28* | *1* |
| *1,4-Difluorobenzene (Surr)* | *72* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 04:28* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00404 | U | 0.00404 | | mg/Kg | | | 12/08/23 04:28 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.1 | U | 50.1 | | mg/Kg | | | 12/07/23 04:57 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.1 | U | 50.1 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 04:57 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.1 | U | 50.1 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 04:57 | 1 |
| OII Range Organics (Over C28-C36) | <50.1 | U | 50.1 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 04:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *174* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 04:57* | *1* |
| *o-Terphenyl* | *146* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 04:57* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: FS-09

**Lab Sample ID: 890-5718-14**
**Matrix: Solid**
**Date Collected: 12/04/23 03:03**
**Date Received: 12/05/23 09:04**
**Sample Depth: 2'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 29.2 | | 5.02 | | mg/Kg | | | 12/06/23 15:59 | 1 |

## Client Sample ID: N-SW01

**Lab Sample ID: 890-5718-15**
**Matrix: Solid**
**Date Collected: 12/04/23 03:04**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:49 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:49 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:49 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:49 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:49 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 04:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *92* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 04:49* | *1* |
| *1,4-Difluorobenzene (Surr)* | *80* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 04:49* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 04:49 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/07/23 05:18 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 05:18 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 05:18 | 1 |
| OII Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 05:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *167* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 05:18* | *1* |
| *o-Terphenyl* | *138* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 05:18* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 27.1 | | 5.04 | | mg/Kg | | | 12/06/23 16:05 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: E-SW03

**Lab Sample ID: 890-5718-16**
**Matrix: Solid**
**Date Collected: 12/04/23 03:05**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 05:09 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 05:09 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 05:09 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 05:09 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 05:09 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 05:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *77* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 05:09* | *1* |
| *1,4-Difluorobenzene (Surr)* | *72* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 05:09* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/08/23 05:09 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/07/23 05:40 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 05:40 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 05:40 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 05:40 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *162* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 05:40* | *1* |
| *o-Terphenyl* | *135* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 05:40* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <5.05 | U | 5.05 | | mg/Kg | | | 12/06/23 16:11 | 1 |

## Client Sample ID: W-SW03

**Lab Sample ID: 890-5718-17**
**Matrix: Solid**
**Date Collected: 12/04/23 03:06**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 05:30 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 05:30 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 05:30 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 05:30 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 05:30 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 09:55 | 12/08/23 05:30 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *76* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 05:30* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

**Client Sample ID: W-SW03**
**Date Collected: 12/04/23 03:06**
**Date Received: 12/05/23 09:04**
**Sample Depth: 0-2'**

**Lab Sample ID: 890-5718-17**
**Matrix: Solid**

## Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *75* | | *70 - 130* | *12/07/23 09:55* | *12/08/23 05:30* | *1* |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 05:30 | 1 |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/07/23 06:01 | 1 |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 06:01 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 06:01 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/06/23 14:37 | 12/07/23 06:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *170* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 06:01* | *1* |
| *o-Terphenyl* | *144* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/07/23 06:01* | *1* |

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **15.5** | | 5.03 | | mg/Kg | | | 12/06/23 16:18 | 1 |

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | BFB1 (70-130) | DFBZ1 (70-130) |
| 890-5718-1 | S-SW01 | 82 | 79 |
| 890-5718-1 MS | S-SW01 | 105 | 110 |
| 890-5718-1 MSD | S-SW01 | 106 | 106 |
| 890-5718-2 | FS-01 | 85 | 78 |
| 890-5718-3 | W-SW01 | 92 | 86 |
| 890-5718-4 | E-SW01 | 75 | 73 |
| 890-5718-5 | FS-02 | 84 | 74 |
| 890-5718-6 | FS-03 | 89 | 78 |
| 890-5718-7 | FS-04 | 89 | 77 |
| 890-5718-8 | E-SW02 | 91 | 63 S1- |
| 890-5718-9 | FS-05 | 90 | 81 |
| 890-5718-10 | FS-06 | 91 | 79 |
| 890-5718-11 | W-SW02 | 83 | 64 S1- |
| 890-5718-12 | FS-07 | 89 | 76 |
| 890-5718-13 | FS-08 | 77 | 84 |
| 890-5718-14 | FS-09 | 77 | 72 |
| 890-5718-15 | N-SW01 | 92 | 80 |
| 890-5718-16 | E-SW03 | 77 | 72 |
| 890-5718-17 | W-SW03 | 76 | 75 |
| LCS 880-68577/1-A | Lab Control Sample | 118 | 106 |
| LCSD 880-68577/2-A | Lab Control Sample Dup | 107 | 105 |
| MB 880-68465/5-A | Method Blank | 65 S1- | 91 |
| MB 880-68577/5-A | Method Blank | 66 S1- | 89 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | 1CO1 (70-130) | OTPH1 (70-130) |
| 890-5718-1 | S-SW01 | 159 S1+ | 132 S1+ |
| 890-5718-2 | FS-01 | 201 S1+ | 171 S1+ |
| 890-5718-3 | W-SW01 | 174 S1+ | 145 S1+ |
| 890-5718-4 | E-SW01 | 205 S1+ | 176 S1+ |
| 890-5718-5 | FS-02 | 158 S1+ | 134 S1+ |
| 890-5718-6 | FS-03 | 194 S1+ | 165 S1+ |
| 890-5718-7 | FS-04 | 150 S1+ | 126 |
| 890-5718-8 | E-SW02 | 157 S1+ | 133 S1+ |
| 890-5718-9 | FS-05 | 189 S1+ | 159 S1+ |
| 890-5718-10 | FS-06 | 178 S1+ | 153 S1+ |
| 890-5718-11 | W-SW02 | 196 S1+ | 162 S1+ |
| 890-5718-12 | FS-07 | 189 S1+ | 162 S1+ |
| 890-5718-13 | FS-08 | 164 S1+ | 136 S1+ |
| 890-5718-14 | FS-09 | 174 S1+ | 146 S1+ |
| 890-5718-15 | N-SW01 | 167 S1+ | 138 S1+ |
| 890-5718-16 | E-SW03 | 162 S1+ | 135 S1+ |

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1CO1 | OTPH1 | | | | | | | | |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | | | | | | | | |
| 890-5718-17 | W-SW03 | 170 S1+ | 144 S1+ | | | | | | | | |
| LCS 880-68529/2-A | Lab Control Sample | 105 | 112 | | | | | | | | |
| LCSD 880-68529/3-A | Lab Control Sample Dup | 102 | 91 | | | | | | | | |
| MB 880-68529/1-A | Method Blank | 207 S1+ | 185 S1+ | | | | | | | | |

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC)

**Lab Sample ID: MB 880-68465/5-A**
**Matrix: Solid**
**Analysis Batch: 68563**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68465**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/06/23 10:10 | 12/07/23 12:02 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/06/23 10:10 | 12/07/23 12:02 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/06/23 10:10 | 12/07/23 12:02 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/06/23 10:10 | 12/07/23 12:02 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/06/23 10:10 | 12/07/23 12:02 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/06/23 10:10 | 12/07/23 12:02 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *65* | *S1-* | *70 - 130* | *12/06/23 10:10* | *12/07/23 12:02* | *1* |
| *1,4-Difluorobenzene (Surr)* | *91* | | *70 - 130* | *12/06/23 10:10* | *12/07/23 12:02* | *1* |

**Lab Sample ID: MB 880-68577/5-A**
**Matrix: Solid**
**Analysis Batch: 68563**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68577**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 22:38 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 22:38 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 22:38 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 22:38 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 22:38 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/07/23 09:55 | 12/07/23 22:38 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *66* | *S1-* | *70 - 130* | *12/07/23 09:55* | *12/07/23 22:38* | *1* |
| *1,4-Difluorobenzene (Surr)* | *89* | | *70 - 130* | *12/07/23 09:55* | *12/07/23 22:38* | *1* |

**Lab Sample ID: LCS 880-68577/1-A**
**Matrix: Solid**
**Analysis Batch: 68563**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68577**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Benzene | 0.100 | 0.08762 | | mg/Kg | | 88 | 70 - 130 |
| Toluene | 0.100 | 0.08802 | | mg/Kg | | 88 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.09917 | | mg/Kg | | 99 | 70 - 130 |
| m-Xylene & p-Xylene | 0.200 | 0.2091 | | mg/Kg | | 105 | 70 - 130 |
| o-Xylene | 0.100 | 0.1047 | | mg/Kg | | 105 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *118* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *106* | | *70 - 130* |

**Lab Sample ID: LCSD 880-68577/2-A**
**Matrix: Solid**
**Analysis Batch: 68563**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68577**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.100 | 0.07566 | | mg/Kg | | 76 | 70 - 130 | 15 | 35 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

**Lab Sample ID: LCSD 880-68577/2-A**
**Matrix: Solid**
**Analysis Batch: 68563**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68577**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Toluene | | | 0.100 | 0.07675 | | mg/Kg | | 77 | 70 - 130 | 14 | 35 |
| Ethylbenzene | | | 0.100 | 0.08851 | | mg/Kg | | 89 | 70 - 130 | 11 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1789 | | mg/Kg | | 89 | 70 - 130 | 16 | 35 |
| o-Xylene | | | 0.100 | 0.08817 | | mg/Kg | | 88 | 70 - 130 | 17 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *107* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *105* | | *70 - 130* |

**Lab Sample ID: 890-5718-1 MS**
**Matrix: Solid**
**Analysis Batch: 68563**

**Client Sample ID: S-SW01**
**Prep Type: Total/NA**
**Prep Batch: 68577**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.0990 | 0.07606 | | mg/Kg | | 77 | 70 - 130 |
| Toluene | <0.00198 | U | 0.0990 | 0.07564 | | mg/Kg | | 76 | 70 - 130 |
| Ethylbenzene | <0.00198 | U | 0.0990 | 0.08272 | | mg/Kg | | 84 | 70 - 130 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.198 | 0.1696 | | mg/Kg | | 86 | 70 - 130 |
| o-Xylene | <0.00198 | U | 0.0990 | 0.08282 | | mg/Kg | | 83 | 70 - 130 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *105* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* |

**Lab Sample ID: 890-5718-1 MSD**
**Matrix: Solid**
**Analysis Batch: 68563**

**Client Sample ID: S-SW01**
**Prep Type: Total/NA**
**Prep Batch: 68577**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.100 | 0.08368 | | mg/Kg | | 84 | 70 - 130 | 10 | 35 |
| Toluene | <0.00198 | U | 0.100 | 0.08257 | | mg/Kg | | 82 | 70 - 130 | 9 | 35 |
| Ethylbenzene | <0.00198 | U | 0.100 | 0.09158 | | mg/Kg | | 91 | 70 - 130 | 10 | 35 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.200 | 0.1840 | | mg/Kg | | 92 | 70 - 130 | 8 | 35 |
| o-Xylene | <0.00198 | U | 0.100 | 0.08914 | | mg/Kg | | 89 | 70 - 130 | 7 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *106* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *106* | | *70 - 130* |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 880-68529/1-A**
**Matrix: Solid**
**Analysis Batch: 68448**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68529**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/06/23 14:37 | 12/06/23 21:05 | 1 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: MB 880-68529/1-A**
**Matrix: Solid**
**Analysis Batch: 68448**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68529**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/06/23 14:37 | 12/06/23 21:05 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/06/23 14:37 | 12/06/23 21:05 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *207* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/06/23 21:05* | *1* |
| *o-Terphenyl* | *185* | *S1+* | *70 - 130* | *12/06/23 14:37* | *12/06/23 21:05* | *1* |

**Lab Sample ID: LCS 880-68529/2-A**
**Matrix: Solid**
**Analysis Batch: 68448**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68529**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 916.8 | | mg/Kg | | 92 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 955.3 | | mg/Kg | | 96 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *105* | | *70 - 130* |
| *o-Terphenyl* | *112* | | *70 - 130* |

**Lab Sample ID: LCSD 880-68529/3-A**
**Matrix: Solid**
**Analysis Batch: 68448**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68529**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 906.9 | | mg/Kg | | 91 | 70 - 130 | 1 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 971.3 | | mg/Kg | | 97 | 70 - 130 | 2 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *102* | | *70 - 130* |
| *o-Terphenyl* | *91* | | *70 - 130* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-68461/1-A**
**Matrix: Solid**
**Analysis Batch: 68530**

**Client Sample ID: Method Blank**
**Prep Type: Soluble**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <5.00 | U | 5.00 | | mg/Kg | | | 12/06/23 13:38 | 1 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCS 880-68461/2-A**
**Matrix: Solid**
**Analysis Batch: 68530**

**Client Sample ID: Lab Control Sample**
**Prep Type: Soluble**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 253.1 | | mg/Kg | | 101 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-68461/3-A**
**Matrix: Solid**
**Analysis Batch: 68530**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Soluble**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 252.3 | | mg/Kg | | 101 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 890-5718-1 MS**
**Matrix: Solid**
**Analysis Batch: 68530**

**Client Sample ID: S-SW01**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 16.5 | | 250 | 263.2 | | mg/Kg | | 99 | 90 - 110 | | |

**Lab Sample ID: 890-5718-1 MSD**
**Matrix: Solid**
**Analysis Batch: 68530**

**Client Sample ID: S-SW01**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 16.5 | | 250 | 271.2 | | mg/Kg | | 102 | 90 - 110 | 3 | 20 |

**Lab Sample ID: 890-5718-11 MS**
**Matrix: Solid**
**Analysis Batch: 68530**

**Client Sample ID: W-SW02**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 10.9 | | 249 | 255.1 | | mg/Kg | | 98 | 90 - 110 | | |

**Lab Sample ID: 890-5718-11 MSD**
**Matrix: Solid**
**Analysis Batch: 68530**

**Client Sample ID: W-SW02**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 10.9 | | 249 | 253.9 | | mg/Kg | | 98 | 90 - 110 | 0 | 20 |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## GC VOA

### Prep Batch: 68465

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 880-68465/5-A | Method Blank | Total/NA | Solid | 5035 | |

### Analysis Batch: 68563

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5718-1 | S-SW01 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-2 | FS-01 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-3 | W-SW01 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-4 | E-SW01 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-5 | FS-02 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-6 | FS-03 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-7 | FS-04 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-8 | E-SW02 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-9 | FS-05 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-10 | FS-06 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-11 | W-SW02 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-12 | FS-07 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-13 | FS-08 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-14 | FS-09 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-15 | N-SW01 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-16 | E-SW03 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-17 | W-SW03 | Total/NA | Solid | 8021B | 68577 |
| MB 880-68465/5-A | Method Blank | Total/NA | Solid | 8021B | 68465 |
| MB 880-68577/5-A | Method Blank | Total/NA | Solid | 8021B | 68577 |
| LCS 880-68577/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 68577 |
| LCSD 880-68577/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 68577 |
| 890-5718-1 MS | S-SW01 | Total/NA | Solid | 8021B | 68577 |
| 890-5718-1 MSD | S-SW01 | Total/NA | Solid | 8021B | 68577 |

### Prep Batch: 68577

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5718-1 | S-SW01 | Total/NA | Solid | 5035 | |
| 890-5718-2 | FS-01 | Total/NA | Solid | 5035 | |
| 890-5718-3 | W-SW01 | Total/NA | Solid | 5035 | |
| 890-5718-4 | E-SW01 | Total/NA | Solid | 5035 | |
| 890-5718-5 | FS-02 | Total/NA | Solid | 5035 | |
| 890-5718-6 | FS-03 | Total/NA | Solid | 5035 | |
| 890-5718-7 | FS-04 | Total/NA | Solid | 5035 | |
| 890-5718-8 | E-SW02 | Total/NA | Solid | 5035 | |
| 890-5718-9 | FS-05 | Total/NA | Solid | 5035 | |
| 890-5718-10 | FS-06 | Total/NA | Solid | 5035 | |
| 890-5718-11 | W-SW02 | Total/NA | Solid | 5035 | |
| 890-5718-12 | FS-07 | Total/NA | Solid | 5035 | |
| 890-5718-13 | FS-08 | Total/NA | Solid | 5035 | |
| 890-5718-14 | FS-09 | Total/NA | Solid | 5035 | |
| 890-5718-15 | N-SW01 | Total/NA | Solid | 5035 | |
| 890-5718-16 | E-SW03 | Total/NA | Solid | 5035 | |
| 890-5718-17 | W-SW03 | Total/NA | Solid | 5035 | |
| MB 880-68577/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-68577/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-68577/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 890-5718-1 MS | S-SW01 | Total/NA | Solid | 5035 | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## GC VOA (Continued)

### Prep Batch: 68577 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5718-1 MSD | S-SW01 | Total/NA | Solid | 5035 | |

### Analysis Batch: 68709

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5718-1 | S-SW01 | Total/NA | Solid | Total BTEX | |
| 890-5718-2 | FS-01 | Total/NA | Solid | Total BTEX | |
| 890-5718-3 | W-SW01 | Total/NA | Solid | Total BTEX | |
| 890-5718-4 | E-SW01 | Total/NA | Solid | Total BTEX | |
| 890-5718-5 | FS-02 | Total/NA | Solid | Total BTEX | |
| 890-5718-6 | FS-03 | Total/NA | Solid | Total BTEX | |
| 890-5718-7 | FS-04 | Total/NA | Solid | Total BTEX | |
| 890-5718-8 | E-SW02 | Total/NA | Solid | Total BTEX | |
| 890-5718-9 | FS-05 | Total/NA | Solid | Total BTEX | |
| 890-5718-10 | FS-06 | Total/NA | Solid | Total BTEX | |
| 890-5718-11 | W-SW02 | Total/NA | Solid | Total BTEX | |
| 890-5718-12 | FS-07 | Total/NA | Solid | Total BTEX | |
| 890-5718-13 | FS-08 | Total/NA | Solid | Total BTEX | |
| 890-5718-14 | FS-09 | Total/NA | Solid | Total BTEX | |
| 890-5718-15 | N-SW01 | Total/NA | Solid | Total BTEX | |
| 890-5718-16 | E-SW03 | Total/NA | Solid | Total BTEX | |
| 890-5718-17 | W-SW03 | Total/NA | Solid | Total BTEX | |

## GC Semi VOA

### Analysis Batch: 68448

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5718-1 | S-SW01 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-2 | FS-01 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-3 | W-SW01 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-4 | E-SW01 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-5 | FS-02 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-6 | FS-03 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-7 | FS-04 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-8 | E-SW02 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-9 | FS-05 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-10 | FS-06 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-11 | W-SW02 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-12 | FS-07 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-13 | FS-08 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-14 | FS-09 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-15 | N-SW01 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-16 | E-SW03 | Total/NA | Solid | 8015B NM | 68529 |
| 890-5718-17 | W-SW03 | Total/NA | Solid | 8015B NM | 68529 |
| MB 880-68529/1-A | Method Blank | Total/NA | Solid | 8015B NM | 68529 |
| LCS 880-68529/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 68529 |
| LCSD 880-68529/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 68529 |

### Prep Batch: 68529

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5718-1 | S-SW01 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-2 | FS-01 | Total/NA | Solid | 8015NM Prep | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## GC Semi VOA (Continued)

### Prep Batch: 68529 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5718-3 | W-SW01 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-4 | E-SW01 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-5 | FS-02 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-6 | FS-03 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-7 | FS-04 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-8 | E-SW02 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-9 | FS-05 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-10 | FS-06 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-11 | W-SW02 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-12 | FS-07 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-13 | FS-08 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-14 | FS-09 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-15 | N-SW01 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-16 | E-SW03 | Total/NA | Solid | 8015NM Prep | |
| 890-5718-17 | W-SW03 | Total/NA | Solid | 8015NM Prep | |
| MB 880-68529/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-68529/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-68529/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

### Analysis Batch: 68586

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5718-1 | S-SW01 | Total/NA | Solid | 8015 NM | |
| 890-5718-2 | FS-01 | Total/NA | Solid | 8015 NM | |
| 890-5718-3 | W-SW01 | Total/NA | Solid | 8015 NM | |
| 890-5718-4 | E-SW01 | Total/NA | Solid | 8015 NM | |
| 890-5718-5 | FS-02 | Total/NA | Solid | 8015 NM | |
| 890-5718-6 | FS-03 | Total/NA | Solid | 8015 NM | |
| 890-5718-7 | FS-04 | Total/NA | Solid | 8015 NM | |
| 890-5718-8 | E-SW02 | Total/NA | Solid | 8015 NM | |
| 890-5718-9 | FS-05 | Total/NA | Solid | 8015 NM | |
| 890-5718-10 | FS-06 | Total/NA | Solid | 8015 NM | |
| 890-5718-11 | W-SW02 | Total/NA | Solid | 8015 NM | |
| 890-5718-12 | FS-07 | Total/NA | Solid | 8015 NM | |
| 890-5718-13 | FS-08 | Total/NA | Solid | 8015 NM | |
| 890-5718-14 | FS-09 | Total/NA | Solid | 8015 NM | |
| 890-5718-15 | N-SW01 | Total/NA | Solid | 8015 NM | |
| 890-5718-16 | E-SW03 | Total/NA | Solid | 8015 NM | |
| 890-5718-17 | W-SW03 | Total/NA | Solid | 8015 NM | |

## HPLC/IC

### Leach Batch: 68461

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5718-1 | S-SW01 | Soluble | Solid | DI Leach | |
| 890-5718-2 | FS-01 | Soluble | Solid | DI Leach | |
| 890-5718-3 | W-SW01 | Soluble | Solid | DI Leach | |
| 890-5718-4 | E-SW01 | Soluble | Solid | DI Leach | |
| 890-5718-5 | FS-02 | Soluble | Solid | DI Leach | |
| 890-5718-6 | FS-03 | Soluble | Solid | DI Leach | |
| 890-5718-7 | FS-04 | Soluble | Solid | DI Leach | |
| 890-5718-8 | E-SW02 | Soluble | Solid | DI Leach | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## HPLC/IC (Continued)

### Leach Batch: 68461 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5718-9 | FS-05 | Soluble | Solid | DI Leach | |
| 890-5718-10 | FS-06 | Soluble | Solid | DI Leach | |
| 890-5718-11 | W-SW02 | Soluble | Solid | DI Leach | |
| 890-5718-12 | FS-07 | Soluble | Solid | DI Leach | |
| 890-5718-13 | FS-08 | Soluble | Solid | DI Leach | |
| 890-5718-14 | FS-09 | Soluble | Solid | DI Leach | |
| 890-5718-15 | N-SW01 | Soluble | Solid | DI Leach | |
| 890-5718-16 | E-SW03 | Soluble | Solid | DI Leach | |
| 890-5718-17 | W-SW03 | Soluble | Solid | DI Leach | |
| MB 880-68461/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-68461/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-68461/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-5718-1 MS | S-SW01 | Soluble | Solid | DI Leach | |
| 890-5718-1 MSD | S-SW01 | Soluble | Solid | DI Leach | |
| 890-5718-11 MS | W-SW02 | Soluble | Solid | DI Leach | |
| 890-5718-11 MSD | W-SW02 | Soluble | Solid | DI Leach | |

### Analysis Batch: 68530

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5718-1 | S-SW01 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-2 | FS-01 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-3 | W-SW01 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-4 | E-SW01 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-5 | FS-02 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-6 | FS-03 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-7 | FS-04 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-8 | E-SW02 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-9 | FS-05 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-10 | FS-06 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-11 | W-SW02 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-12 | FS-07 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-13 | FS-08 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-14 | FS-09 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-15 | N-SW01 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-16 | E-SW03 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-17 | W-SW03 | Soluble | Solid | 300.0 | 68461 |
| MB 880-68461/1-A | Method Blank | Soluble | Solid | 300.0 | 68461 |
| LCS 880-68461/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 68461 |
| LCSD 880-68461/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 68461 |
| 890-5718-1 MS | S-SW01 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-1 MSD | S-SW01 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-11 MS | W-SW02 | Soluble | Solid | 300.0 | 68461 |
| 890-5718-11 MSD | W-SW02 | Soluble | Solid | 300.0 | 68461 |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: S-SW01

**Lab Sample ID: 890-5718-1**

**Date Collected: 12/04/23 12:11**
**Matrix: Solid**
**Date Received: 12/05/23 09:04**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/07/23 22:59 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/07/23 22:59 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 00:00 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 00:00 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 13:55 | CH | EET MID |

## Client Sample ID: FS-01

**Lab Sample ID: 890-5718-2**

**Date Collected: 12/04/23 12:12**
**Matrix: Solid**
**Date Received: 12/05/23 09:04**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.98 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/07/23 23:20 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/07/23 23:20 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 00:21 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.07 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 00:21 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 14:12 | CH | EET MID |

## Client Sample ID: W-SW01

**Lab Sample ID: 890-5718-3**

**Date Collected: 12/04/23 12:50**
**Matrix: Solid**
**Date Received: 12/05/23 09:04**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.96 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/07/23 23:40 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/07/23 23:40 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 00:43 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 00:43 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 14:18 | CH | EET MID |

## Client Sample ID: E-SW01

**Lab Sample ID: 890-5718-4**

**Date Collected: 12/04/23 12:53**
**Matrix: Solid**
**Date Received: 12/05/23 09:04**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 00:01 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 00:01 | SM | EET MID |

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# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: E-SW01

**Lab Sample ID: 890-5718-4**
**Matrix: Solid**
**Date Collected: 12/04/23 12:53**
**Date Received: 12/05/23 09:04**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 01:03 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 01:03 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 14:23 | CH | EET MID |

## Client Sample ID: FS-02

**Lab Sample ID: 890-5718-5**
**Matrix: Solid**
**Date Collected: 12/04/23 01:15**
**Date Received: 12/05/23 09:04**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 00:21 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 00:21 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 01:25 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.94 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 01:25 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 14:29 | CH | EET MID |

## Client Sample ID: FS-03

**Lab Sample ID: 890-5718-6**
**Matrix: Solid**
**Date Collected: 12/04/23 01:17**
**Date Received: 12/05/23 09:04**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 00:42 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 00:42 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 01:46 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.98 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 01:46 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 14:46 | CH | EET MID |

## Client Sample ID: FS-04

**Lab Sample ID: 890-5718-7**
**Matrix: Solid**
**Date Collected: 12/04/23 01:20**
**Date Received: 12/05/23 09:04**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.98 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 01:02 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 01:02 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 02:07 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.92 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 02:07 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: FS-04

**Date Collected: 12/04/23 01:20**
**Date Received: 12/05/23 09:04**

## Lab Sample ID: 890-5718-7

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 14:52 | CH | EET MID |

## Client Sample ID: E-SW02

**Date Collected: 12/04/23 01:22**
**Date Received: 12/05/23 09:04**

## Lab Sample ID: 890-5718-8

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.95 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 01:23 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 01:23 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 02:49 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 02:49 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 14:57 | CH | EET MID |

## Client Sample ID: FS-05

**Date Collected: 12/04/23 02:08**
**Date Received: 12/05/23 09:04**

## Lab Sample ID: 890-5718-9

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.96 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 01:43 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 01:43 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 03:10 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 03:10 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 15:03 | CH | EET MID |

## Client Sample ID: FS-06

**Date Collected: 12/04/23 02:09**
**Date Received: 12/05/23 09:04**

## Lab Sample ID: 890-5718-10

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 02:04 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 02:04 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 03:32 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.09 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 03:32 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 15:09 | CH | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: W-SW02
**Date Collected: 12/04/23 02:10**
**Date Received: 12/05/23 09:04**

## Lab Sample ID: 890-5718-11
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.04 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 03:27 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 03:27 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 03:53 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 03:53 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 15:14 | CH | EET MID |

## Client Sample ID: FS-07
**Date Collected: 12/04/23 03:00**
**Date Received: 12/05/23 09:04**

## Lab Sample ID: 890-5718-12
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.00 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 03:47 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 03:47 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 04:14 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 04:14 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 15:33 | CH | EET MID |

## Client Sample ID: FS-08
**Date Collected: 12/04/23 03:02**
**Date Received: 12/05/23 09:04**

## Lab Sample ID: 890-5718-13
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 04:08 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 04:08 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 04:35 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.96 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 04:35 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 15:39 | CH | EET MID |

## Client Sample ID: FS-09
**Date Collected: 12/04/23 03:03**
**Date Received: 12/05/23 09:04**

## Lab Sample ID: 890-5718-14
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.95 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 04:28 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 04:28 | SM | EET MID |

Eurofins Carlsbad

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Client Sample ID: FS-09

**Lab Sample ID: 890-5718-14**
**Matrix: Solid**
**Date Collected: 12/04/23 03:03**
**Date Received: 12/05/23 09:04**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 04:57 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.98 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 04:57 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 15:59 | CH | EET MID |

## Client Sample ID: N-SW01

**Lab Sample ID: 890-5718-15**
**Matrix: Solid**
**Date Collected: 12/04/23 03:04**
**Date Received: 12/05/23 09:04**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 04:49 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 04:49 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 05:18 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.92 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 05:18 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 16:05 | CH | EET MID |

## Client Sample ID: E-SW03

**Lab Sample ID: 890-5718-16**
**Matrix: Solid**
**Date Collected: 12/04/23 03:05**
**Date Received: 12/05/23 09:04**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.98 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 05:09 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 05:09 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 05:40 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 05:40 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 16:11 | CH | EET MID |

## Client Sample ID: W-SW03

**Lab Sample ID: 890-5718-17**
**Matrix: Solid**
**Date Collected: 12/04/23 03:06**
**Date Received: 12/05/23 09:04**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68577 | 12/07/23 09:55 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68563 | 12/08/23 05:30 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68709 | 12/08/23 05:30 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68586 | 12/07/23 06:01 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 68529 | 12/06/23 14:37 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68448 | 12/07/23 06:01 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

**Client Sample ID: W-SW03**
**Date Collected: 12/04/23 03:06**
**Date Received: 12/05/23 09:04**

**Lab Sample ID: 890-5718-17**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 68461 | 12/06/23 11:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68530 | 12/06/23 16:18 | CH | EET MID |

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

## Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Texas | NELAP | T104704400-23-26 | 06-30-24 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 8015 NM | | Solid | Total TPH |
| Total BTEX | | Solid | Total BTEX |

# Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (GC) | SW846 | EET MID |
| Total BTEX | Total BTEX Calculation | TAL SOP | EET MID |
| 8015 NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 8015B NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 300.0 | Anions, Ion Chromatography | EPA | EET MID |
| 5035 | Closed System Purge and Trap | SW846 | EET MID |
| 8015NM Prep | Microextraction | SW846 | EET MID |
| DI Leach | Deionized Water Leaching Procedure | ASTM | EET MID |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5718-1
SDG: KH237051

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Depth |
|---|---|---|---|---|---|
| 890-5718-1 | S-SW01 | Solid | 12/04/23 12:11 | 12/05/23 09:04 | 0-4' |
| 890-5718-2 | FS-01 | Solid | 12/04/23 12:12 | 12/05/23 09:04 | 4' |
| 890-5718-3 | W-SW01 | Solid | 12/04/23 12:50 | 12/05/23 09:04 | 0-4' |
| 890-5718-4 | E-SW01 | Solid | 12/04/23 12:53 | 12/05/23 09:04 | 0-4' |
| 890-5718-5 | FS-02 | Solid | 12/04/23 01:15 | 12/05/23 09:04 | 0-2' |
| 890-5718-6 | FS-03 | Solid | 12/04/23 01:17 | 12/05/23 09:04 | 2' |
| 890-5718-7 | FS-04 | Solid | 12/04/23 01:20 | 12/05/23 09:04 | 2' |
| 890-5718-8 | E-SW02 | Solid | 12/04/23 01:22 | 12/05/23 09:04 | 0-2' |
| 890-5718-9 | FS-05 | Solid | 12/04/23 02:08 | 12/05/23 09:04 | 2' |
| 890-5718-10 | FS-06 | Solid | 12/04/23 02:09 | 12/05/23 09:04 | 2' |
| 890-5718-11 | W-SW02 | Solid | 12/04/23 02:10 | 12/05/23 09:04 | 0-2' |
| 890-5718-12 | FS-07 | Solid | 12/04/23 03:00 | 12/05/23 09:04 | 2' |
| 890-5718-13 | FS-08 | Solid | 12/04/23 03:02 | 12/05/23 09:04 | 2' |
| 890-5718-14 | FS-09 | Solid | 12/04/23 03:03 | 12/05/23 09:04 | 2' |
| 890-5718-15 | N-SW01 | Solid | 12/04/23 03:04 | 12/05/23 09:04 | 0-2' |
| 890-5718-16 | E-SW03 | Solid | 12/04/23 03:05 | 12/05/23 09:04 | 0-2' |
| 890-5718-17 | W-SW03 | Solid | 12/04/23 03:06 | 12/05/23 09:04 | 0-2' |

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

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# Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 2

| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (if different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 Email: | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com; becky.sue.miller@terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☒ Rush |
| Project Number: | KH237051 | Due Date: | 48 hr |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | (Yes) No | Wet Ice: | (Yes) No |
| Samples Received Intact: | (Yes) No | Thermometer ID: | TMM67 |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes No (N/A) | Temperature Reading: | 4.8 |
| Total Containers: | | Corrected Temperature: | 4.6 |

**ANALYSIS REQUEST**

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) |
|---|---|---|---|---|---|---|---|---|---|
| S-SW01 | Soil | 11/4 | 12:11 | 0-4' | C | 1 | X | X | X |
| FS-01 | Soil | | 12:12 | 4' | C | 1 | X | X | X |
| W-SW01 | Soil | | 12:50 | 0-4' | C | 1 | X | X | X |
| E-SW01 | Soil | | 12:53 | 0-4' | C | 1 | X | X | X |
| FS-02 | Soil | | 1:15 | @2' | C | 1 | X | X | X |
| FS-03 | Soil | | 1:17 | 2' | C | 1 | X | X | X |
| FS-04 | Soil | | 1:20 | 2' | C | 1 | X | X | X |
| E-SW02 | Soil | | 1:22 | 0-2' | C | 1 | X | X | X |
| FS-05 | Soil | | 2:08 | 2' | C | 1 | X | X | X |
| FS-06 | Soil | | 2:09 | 2' | C | 1 | X | X | X |

890-5718 Chain of Custody

**Preservative Codes**

None: NO DI Water: $H_2O$
Cool: Cool MeOH: Me
HCL: HC $HNO_3$: HN
$H_2SO_4$: $H_2$ NaOH: Na
$H_3PO_4$: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

**Sample Comments**

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 B Miller | | 9:04 12/5 | 4 | | |
| 3 | | | 6 | | |
| 5 | | | | | |

Revised Date: 08/25/2020 Rev. 2020.2

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

eurofins | Environment Testing Xenco

# Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 2 of 2

| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (If different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☒ Rush |
| Project Number: | KH237051 | Due Date: | 48 hr |
| Project Location: | | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | Temp Blank: | Yes No | Wet Ice: | Yes No |
|---|---|---|---|---|
| Samples Received Intact: | Yes No | Thermometer ID: | | |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | | |
| Sample Custody Seals: | Yes No N/A | Temperature Reading: | | |
| Total Containers: | | Corrected Temperature: | | |

**Preservative Codes**

None: NO DI Water: $H_2O$
Cool: Cool MeOH: Me
HCL: HC $HNO_3$: HN
$H_2SO_4$: $H_2$ NaOH: Na
$H_3PO_4$: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Pres. Code | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| W-SW02 | Soil | 11/4 | 2:10 | 0-2' | C | 1 | | X | X | X | |
| FS-07 | Soil | | 3:00 | 2' | C | 1 | | X | X | X | |
| FS-08 | Soil | | 3:02 | 2' | C | 1 | | X | X | X | |
| FS-09 | Soil | | 3:03 | 2 | C | 1 | | X | X | X | |
| N-SW01 | Soil | | 3:04 | 0-2' | C | 1 | | X | X | X | |
| E-SW03 | Soil | | 3:05 | 0-2' | C | 1 | | X | X | X | |
| W-SW03 | Soil | ↓ | 3:06 | 0-2' | C | 1 | | X | X | X | |
| | Soil | | | | | | | X | X | X | |
| | Soil | | | | | | | X | X | X | |
| | Soil | | | | | | | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 B M | | 9:04 12/5 | 2 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

**Eurofins Carlsbad**
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

# Chain of Custody Record

eurofins | Environment Testing

| | | | | |
|---|---|---|---|---|
| **Client Information (Sub Contract Lab)** | Sampler: | Lab PM: Kramer Jessica | Carrier Tracking No(s): | COC No: 890-1892 1 |
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Jessica Kramer@et.eurofinsus.com | State of Origin: New Mexico | Page: Page 1 of 2 |
| Company: Eurofins Environment Testing South Centr | | Accreditations Required (See note): NELAP - Texas | | Job #: 890-5718-1 |
| Address: 1211 W Florida Ave | Due Date Requested: 12/7/2023 | | | |
| City: Midland | TAT Requested (days): | | | |
| State, Zip: TX, 79701 | | | | |
| Phone: 432-704-5440(Tel) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: curly swd | Project #: 89000113 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes**

A HCL, B - NaOH, C Zn Acetate, D - Nitric Acid, E NaHSO4, F - MeOH, G Amchlor, H - Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8021B/5035FP_Calc (MOD) BTEX | Total_BTEX_GCV | 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH | 8015MOD_Calc | 300_ORGFM_28D/DI_LEACH Chloride | Total Number of containers | Special Instructions/Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | | |
| S-SW01 (890-5718-1) | 12/4/23 | 12 11 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS-01 (890-5718-2) | 12/4/23 | 12 12 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| W-SW01 (890-5718-3) | 12/4/23 | 12 50 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| E-SW01 (890-5718-4) | 12/4/23 | 12 53 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS-02 (890-5718-5) | 12/4/23 | 01 15 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS-03 (890-5718-6) | 12/4/23 | 01 17 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS-04 (890-5718-7) | 12/4/23 | 01 20 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| E-SW02 (890-5718-8) | 12/4/23 | 01 22 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS-05 (890-5718-9) | 12/4/23 | 02 08 Mountain | | Solid | | | X | X | X | X | X | 1 | |

Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC

| | |
|---|---|
| ***Possible Hazard Identification*** *Unconfirmed* | ***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months* |
| Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2 | Special Instructions/QC Requirements |
| Empty Kit Relinquished by: | Date: Time: Method of Shipment: |

| | | | | | | |
|---|---|---|---|---|---|---|
| Relinquished by: | Date/Time: | Company: | Received by: Kramer | Date/Time: 12/6/23 1100 | Company: | |
| Relinquished by: | Date/Time: | Company: | Received by: | Date/Time: | Company: | |
| Relinquished by: | Date/Time: | Company: | Received by: | Date/Time: | Company: | |

| | | |
|---|---|---|
| Custody Seals Intact. Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks: 3.6/3.8 |

Ver: 06/08/2021

Page 113 of 408
Received by OCD: 2/26/2024 10:02:59 AM
12/8/2023
Page 42 of 45
Released to Imaging: 5/3/2024 11:19:07 AM

**Eurofins Carlsbad**
1089 N Canal St.
Carlsbad NM 88220
Phone: 575-988-3199 Fax 575-988-3199

# Chain of Custody Record

eurofins | Environment Testing

| Client Information (Sub Contract Lab) | Sampler | Lab PM: Kramer Jessica | Carrier Tracking No(s) | COC No: 890-1892 2 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone | E-Mail: Jessica.Kramer@et.eurofinsus com | State of Origin: New Mexico | Page: Page 2 of 2 |
| Company: Eurofins Environment Testing South Centr | | Accreditations Required (See note): NELAP - Texas | | Job #: 890-5718-1 |
| Address: 1211 W Florida Ave, , | Due Date Requested: 12/7/2023 | | | |
| City: Midland | TAT Requested (days): | | | |
| State Zip: TX, 79701 | | | | |
| Phone: 432-704-5440(Tel) | PO #: | | | |
| Email | WO #: | | | |
| Project Name: curly swd | Project #: 89000113 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes**

A - HCL, B NaOH, C - Zn Acetate, D Nitric Acid, E NaHSO4, F - MeOH, G - Amchlor, H Ascorbic Acid, I - Ice, J DI Water, K EDTA, L EDA, M - Hexane, N None, O AsNaO2, P - Na2O4S, Q - Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8021B/5035FP_Calc (MOD) BTEX | Total_BTEX_GCV | 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH | 8015MOD_Calc | 300_ORGFM_28D/DI_LEACH Chloride | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | | |
| FS-06 (890-5718-10) | 12/4/23 | 02 09 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| W-SW02 (890-5718-11) | 12/4/23 | 02 10 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS-07 (890-5718-12) | 12/4/23 | 03 00 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS-08 (890-5718-13) | 12/4/23 | 03 02 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS-09 (890-5718-14) | 12/4/23 | 03 03 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| N-SW01 (890-5718-15) | 12/4/23 | 03 04 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| E-SW03 (890-5718-16) | 12/4/23 | 03 05 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| W-SW03 (890-5718-17) | 12/4/23 | 03 06 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| | | | | | | | | | | | | | |

Note: Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC.

| Possible Hazard Identification | Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) |
|---|---|
| Unconfirmed | ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements |

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time | Company | Received by: | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | Relinquished by: | Date/Time | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time | Company | Received by: | Date/Time | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks. |
|---|---|---|

Ver: 06/08/2021

Page 114 of 408
Received by OCD: 2/26/2024 10:02:59 AM
12/8/2023
Page 43 of 45
Released to Imaging: 5/3/2024 11:19:07 AM

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 890-5718-1
SDG Number: KH237051

**Login Number: 5718**
**List Number: 1**
**Creator: Lopez, Abraham**

**List Source: Eurofins Carlsbad**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | N/A | Refer to Job Narrative for details. |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 890-5718-1
SDG Number: KH237051

**Login Number: 5718**
**List Number: 2**
**Creator: Kramer, Jessica**

**List Source: Eurofins Midland**
**List Creation: 12/06/23 02:18 PM**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |

eurofins | Environment Testing



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Joseph Guesnier
Terracon Consulting Eng & Scientists
2526 W Pierce Street
Carlsbad, New Mexico 88220

Generated 12/12/2023 3:40:25 PM

## JOB DESCRIPTION

CURLY SWD
KH237051

## JOB NUMBER

890-5758-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.



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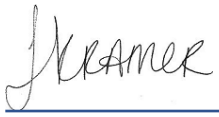
# Eurofins Carlsbad

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



Generated
12/12/2023 3:40:25 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

# Eurofins Carlsbad

## Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD,and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs
· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

Warranties, Terms, and Conditions
· Analyses for Field Parameters are performed by Eurofins Philadelphia field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification # 02015.
VL = field staff performs tests under NJ State certification # 06005.
WG = field staff performs tests under NJ State certification # PA001, PA State certification # 48-01334.
H = field staff performs tests under NJ NELAP certification # PA093, PA NELAP certification # 46-05499.

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

· Reported results related only to the samples as tested. Eurofins Philadelphia is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· Eurofins Philadelphia is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by Eurofins Philadelphia : Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).




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Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Laboratory Job ID: 890-5758-1
SDG: KH237051

# Table of Contents

Cover Page . . . . . 1
Table of Contents . . . . . 4
Definitions/Glossary . . . . . 5
Case Narrative . . . . . 6
Client Sample Results . . . . . 8
Surrogate Summary . . . . . 32
QC Sample Results . . . . . 34
QC Association Summary . . . . . 42
Lab Chronicle . . . . . 49
Certification Summary . . . . . 59
Method Summary . . . . . 60
Sample Summary . . . . . 61
Chain of Custody . . . . . 62
Receipt Checklists . . . . . 67

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Qualifiers

### GC VOA

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |
| S1- | Surrogate recovery exceeds control limits, low biased. |
| S1+ | Surrogate recovery exceeds control limits, high biased. |
| U | Indicates the analyte was analyzed for but not detected. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |
| F2 | MS/MSD RPD exceeds control limits |
| S1+ | Surrogate recovery exceeds control limits, high biased. |
| U | Indicates the analyte was analyzed for but not detected. |

### HPLC/IC

| Qualifier | Qualifier Description |
|---|---|
| U | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Job ID: 890-5758-1

**Laboratory: Eurofins Carlsbad**

**Narrative**

**Job Narrative**
**890-5758-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**
The samples were received on 12/8/2023 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.2°C

**Receipt Exceptions**
The following samples were received and analyzed from an unpreserved bulk soil jar: FS - 32 (890-5758-1), FS - 33 (890-5758-2), FS - 34 (890-5758-3), FS - 35 (890-5758-4), FS - 36 (890-5758-5), FS - 37 (890-5758-6), FS - 38 (890-5758-7), FS - 39 (890-5758-8), FS - 40 (890-5758-9), FS - 41 (890-5758-10), FS - 42 (890-5758-11), FS - 43 (890-5758-12), FS - 44 (890-5758-13), FS - 45 (890-5758-14), W - HA 02 (890-5758-15), W - HA 01 (890-5758-16), V 3.2 (890-5758-17), V 5.2 (890-5758-18), V 4.2 (890-5758-19), V 6.2 (890-5758-20), E - HA 01 (890-5758-21), E - HA 02 (890-5758-22), S - HA 01 (890-5758-23), S - HA 02 (890-5758-24), DS - LO - 01 (890-5758-25), DS - LO - 02 (890-5758-26), DS - LO - 06 (890-5758-27), DS - LO - 03 (890-5758-28), DS - LO - 04 (890-5758-29) and DS - LO - 05 (890-5758-30).

**GC VOA**
Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-5758-A-21-E MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-68791/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-68791 and analytical batch 880-68757 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (CCV 880-68756/2), (LCS 880-68778/1-A) and (LCSD 880-68778/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS - 32 (890-5758-1), FS - 33 (890-5758-2), FS - 35 (890-5758-4), FS - 36 (890-5758-5), FS - 37 (890-5758-6), FS - 38 (890-5758-7), (890-5758-A-1-F MS) and (890-5758-A-1-G MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS - 41 (890-5758-10), FS - 42 (890-5758-11), FS - 43 (890-5758-12), FS - 44 (890-5758-13), FS - 45 (890-5758-14), W - HA 02 (890-5758-15), W - HA 01 (890-5758-16), V 3.2 (890-5758-17), V 5.2 (890-5758-18), V 4.2 (890-5758-19) and V 6.2 (890-5758-20). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-68761 and analytical batch 880-68745 was outside the upper control limits.

# Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Job ID: 890-5758-1 (Continued)

### Laboratory: Eurofins Carlsbad (Continued)

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-68762 and analytical batch 880-68747 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: DS - LO - 05 (890-5758-30) and (890-5758-A-21-C MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-68747/20) and (CCV 880-68747/5). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS - 32 (890-5758-1), FS - 33 (890-5758-2), FS - 34 (890-5758-3), FS - 35 (890-5758-4), FS - 36 (890-5758-5), FS - 37 (890-5758-6), FS - 38 (890-5758-7), FS - 39 (890-5758-8), FS - 40 (890-5758-9), FS - 41 (890-5758-10), FS - 42 (890-5758-11), FS - 43 (890-5758-12), FS - 44 (890-5758-13), FS - 45 (890-5758-14), W - HA 02 (890-5758-15), W - HA 01 (890-5758-16), V 3.2 (890-5758-17), V 5.2 (890-5758-18), V 4.2 (890-5758-19), V 6.2 (890-5758-20), (890-5758-A-1-D MS) and (890-5758-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-68761 and analytical batch 880-68745 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 32

**Lab Sample ID: 890-5758-1**
**Matrix: Solid**
**Date Collected: 12/06/23 01:17**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 12:18 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 12:18 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 12:18 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 12:18 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 12:18 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 12:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *107* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 12:18* | *1* |
| *1,4-Difluorobenzene (Surr)* | *60* | *S1-* | *70 - 130* | *12/11/23 10:04* | *12/11/23 12:18* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/11/23 12:18 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.3 | U | 50.3 | | mg/Kg | | | 12/11/23 11:52 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U F2 | 50.3 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 11:52 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U F1 | 50.3 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 11:52 | 1 |
| OII Range Organics (Over C28-C36) | <50.3 | U | 50.3 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 11:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *159* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 11:52* | *1* |
| *o-Terphenyl* | *145* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 11:52* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **25.3** | | 4.95 | | mg/Kg | | | 12/11/23 13:10 | 1 |

## Client Sample ID: FS - 33

**Lab Sample ID: 890-5758-2**
**Matrix: Solid**
**Date Collected: 12/06/23 01:20**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 12:44 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 12:44 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 12:44 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 12:44 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 12:44 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 12:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *135* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 12:44* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 33

**Date Collected: 12/06/23 01:20**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

## Lab Sample ID: 890-5758-2

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *83* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 12:44* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/11/23 12:44 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | | 12/11/23 12:58 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 12:58 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 12:58 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 12:58 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *158* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 12:58* | *1* |
| *o-Terphenyl* | *146* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 12:58* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **23.3** | | 4.98 | | mg/Kg | | | 12/11/23 13:18 | 1 |

## Client Sample ID: FS - 34

**Date Collected: 12/06/23 01:23**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

## Lab Sample ID: 890-5758-3

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 13:10 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 13:10 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 13:10 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 13:10 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 13:10 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 13:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *114* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 13:10* | *1* |
| *1,4-Difluorobenzene (Surr)* | *84* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 13:10* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/11/23 13:10 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/11/23 13:20 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 34

**Lab Sample ID: 890-5758-3**
**Matrix: Solid**
**Date Collected: 12/06/23 01:23**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 13:20 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 13:20 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 13:20 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *167* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 13:20* | *1* |
| *o-Terphenyl* | *153* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 13:20* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **67.3** | | 5.02 | | mg/Kg | | | 12/11/23 13:25 | 1 |

## Client Sample ID: FS - 35

**Lab Sample ID: 890-5758-4**
**Matrix: Solid**
**Date Collected: 12/06/23 01:25**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 13:37 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 13:37 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 13:37 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 13:37 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 13:37 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 13:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *66* | *S1-* | *70 - 130* | *12/11/23 10:04* | *12/11/23 13:37* | *1* |
| *1,4-Difluorobenzene (Surr)* | *77* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 13:37* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/11/23 13:37 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/11/23 13:42 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 13:42 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 13:42 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 13:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *148* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 13:42* | *1* |
| *o-Terphenyl* | *137* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 13:42* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 35

**Lab Sample ID: 890-5758-4**
**Matrix: Solid**
**Date Collected: 12/06/23 01:25**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 16.0 | | 4.96 | | mg/Kg | | | 12/11/23 13:33 | 1 |

## Client Sample ID: FS - 36

**Lab Sample ID: 890-5758-5**
**Matrix: Solid**
**Date Collected: 12/06/23 01:27**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:03 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:03 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:03 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:03 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:03 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *148* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 14:03* | *1* |
| *1,4-Difluorobenzene (Surr)* | *92* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 14:03* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/11/23 14:03 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/11/23 14:04 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 14:04 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 14:04 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 14:04 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *153* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 14:04* | *1* |
| *o-Terphenyl* | *143* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 14:04* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 16.2 | | 5.01 | | mg/Kg | | | 12/11/23 13:41 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 37

**Date Collected: 12/06/23 04:21**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

**Lab Sample ID: 890-5758-6**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:29 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:29 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:29 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:29 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:29 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *135* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 14:29* | *1* |
| *1,4-Difluorobenzene (Surr)* | *103* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 14:29* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/11/23 14:29 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.3 | U | 50.3 | | mg/Kg | | | 12/11/23 14:26 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 50.3 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 14:26 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U | 50.3 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 14:26 | 1 |
| OII Range Organics (Over C28-C36) | <50.3 | U | 50.3 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 14:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *158* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 14:26* | *1* |
| *o-Terphenyl* | *146* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 14:26* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **37.8** | | 5.00 | | mg/Kg | | | 12/11/23 13:49 | 1 |

## Client Sample ID: FS - 38

**Date Collected: 12/06/23 04:23**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

**Lab Sample ID: 890-5758-7**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:56 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:56 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:56 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:56 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:56 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 14:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *135* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 14:56* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 38

**Date Collected: 12/06/23 04:23**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

**Lab Sample ID: 890-5758-7**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *132* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 14:56* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/11/23 14:56 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/11/23 14:48 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 14:48 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 14:48 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 14:48 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *150* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 14:48* | *1* |
| *o-Terphenyl* | *140* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 14:48* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **9.21** | | 4.98 | | mg/Kg | | | 12/11/23 13:57 | 1 |

## Client Sample ID: FS - 39

**Date Collected: 12/06/23 04:25**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

**Lab Sample ID: 890-5758-8**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 15:22 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 15:22 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 15:22 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 15:22 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 15:22 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 15:22 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *124* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 15:22* | *1* |
| *1,4-Difluorobenzene (Surr)* | *101* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 15:22* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/11/23 15:22 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | | 12/11/23 15:10 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 39

**Date Collected: 12/06/23 04:25**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

**Lab Sample ID: 890-5758-8**
**Matrix: Solid**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 15:10 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 15:10 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 15:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *156* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 15:10* | *1* |
| *o-Terphenyl* | *140* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 15:10* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **26.3** | | 5.01 | | mg/Kg | | | 12/11/23 10:40 | 1 |

## Client Sample ID: FS - 40

**Date Collected: 12/06/23 04:28**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

**Lab Sample ID: 890-5758-9**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 15:48 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 15:48 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 15:48 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 15:48 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 15:48 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 15:48 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 15:48* | *1* |
| *1,4-Difluorobenzene (Surr)* | *72* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 15:48* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/11/23 15:48 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | | 12/11/23 15:32 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 15:32 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 15:32 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 15:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *159* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 15:32* | *1* |
| *o-Terphenyl* | *152* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 15:32* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 40

**Lab Sample ID: 890-5758-9**
**Matrix: Solid**
**Date Collected: 12/06/23 04:28**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 37.4 | | 5.01 | | mg/Kg | | | 12/11/23 10:57 | 1 |

## Client Sample ID: FS - 41

**Lab Sample ID: 890-5758-10**
**Matrix: Solid**
**Date Collected: 12/06/23 04:31**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 16:14 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 16:14 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 16:14 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 16:14 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 16:14 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 16:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *141* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 16:14* | *1* |
| *1,4-Difluorobenzene (Surr)* | *101* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 16:14* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/11/23 16:14 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/11/23 15:54 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 15:54 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 15:54 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 15:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *158* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 15:54* | *1* |
| *o-Terphenyl* | *145* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 15:54* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 22.1 | | 4.96 | | mg/Kg | | | 12/11/23 11:02 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 42

**Date Collected: 12/06/23 04:34**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

**Lab Sample ID: 890-5758-11**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 17:58 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 17:58 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 17:58 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 17:58 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 17:58 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 17:58 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *131* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 17:58* | *1* |
| *1,4-Difluorobenzene (Surr)* | *65* | *S1-* | *70 - 130* | *12/11/23 10:04* | *12/11/23 17:58* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/11/23 17:58 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/11/23 16:38 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 16:38 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 16:38 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 16:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *164* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 16:38* | *1* |
| *o-Terphenyl* | *148* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 16:38* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **9.99** | | 4.96 | | mg/Kg | | | 12/11/23 11:08 | 1 |

## Client Sample ID: FS - 43

**Date Collected: 12/06/23 04:37**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

**Lab Sample ID: 890-5758-12**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 18:24 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 18:24 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 18:24 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 18:24 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 18:24 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 18:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *143* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 18:24* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 43

**Date Collected: 12/06/23 04:37**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

**Lab Sample ID: 890-5758-12**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *96* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 18:24* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/11/23 18:24 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.1 | U | 50.1 | | mg/Kg | | | 12/11/23 17:00 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.1 | U | 50.1 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 17:00 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.1 | U | 50.1 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 17:00 | 1 |
| OII Range Organics (Over C28-C36) | <50.1 | U | 50.1 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 17:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *157* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 17:00* | *1* |
| *o-Terphenyl* | *143* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 17:00* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **38.3** | | 4.97 | | mg/Kg | | | 12/11/23 11:14 | 1 |

## Client Sample ID: FS - 44

**Date Collected: 12/06/23 04:39**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

**Lab Sample ID: 890-5758-13**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 18:50 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 18:50 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 18:50 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 18:50 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 18:50 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 18:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *167* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 18:50* | *1* |
| *1,4-Difluorobenzene (Surr)* | *123* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 18:50* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/11/23 18:50 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/11/23 17:22 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 44

**Lab Sample ID: 890-5758-13**
**Matrix: Solid**
**Date Collected: 12/06/23 04:39**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 17:22 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 17:22 | 1 |
| OII Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 17:22 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *171* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 17:22* | *1* |
| *o-Terphenyl* | *157* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 17:22* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **32.4** | | 4.96 | | mg/Kg | | | 12/11/23 11:31 | 1 |

## Client Sample ID: FS - 45

**Lab Sample ID: 890-5758-14**
**Matrix: Solid**
**Date Collected: 12/06/23 04:41**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 19:17 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 19:17 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 19:17 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 19:17 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 19:17 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 19:17 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *159* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 19:17* | *1* |
| *1,4-Difluorobenzene (Surr)* | *100* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 19:17* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/11/23 19:17 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/11/23 17:43 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 17:43 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 17:43 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 17:43 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *169* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 17:43* | *1* |
| *o-Terphenyl* | *154* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 17:43* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 45

**Lab Sample ID: 890-5758-14**
**Matrix: Solid**
**Date Collected: 12/06/23 04:41**
**Date Received: 12/08/23 09:30**
**Sample Depth: 3'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 24.2 | | 4.98 | | mg/Kg | | | 12/11/23 11:36 | 1 |

## Client Sample ID: W - HA 02

**Lab Sample ID: 890-5758-15**
**Matrix: Solid**
**Date Collected: 12/06/23 08:59**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 19:43 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 19:43 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 19:43 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 19:43 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 19:43 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 19:43 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *159* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 19:43* | *1* |
| *1,4-Difluorobenzene (Surr)* | *96* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 19:43* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/11/23 19:43 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/11/23 18:05 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 18:05 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 18:05 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 18:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *155* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 18:05* | *1* |
| *o-Terphenyl* | *146* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 18:05* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 480 | | 5.03 | | mg/Kg | | | 12/11/23 11:42 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: W - HA 01

**Lab Sample ID: 890-5758-16**
**Matrix: Solid**
**Date Collected: 12/06/23 09:08**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 20:09 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 20:09 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 20:09 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 20:09 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 20:09 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 20:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *170* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 20:09* | *1* |
| *1,4-Difluorobenzene (Surr)* | *76* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 20:09* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/11/23 20:09 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/11/23 18:27 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 18:27 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 18:27 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 18:27 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *165* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 18:27* | *1* |
| *o-Terphenyl* | *151* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 18:27* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **34.3** | | 5.04 | | mg/Kg | | | 12/11/23 11:48 | 1 |

## Client Sample ID: V 3.2

**Lab Sample ID: 890-5758-17**
**Matrix: Solid**
**Date Collected: 12/06/23 09:25**
**Date Received: 12/08/23 09:30**
**Sample Depth: 4'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 20:35 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 20:35 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 20:35 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 20:35 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 20:35 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 20:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *186* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 20:35* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: V 3.2

**Date Collected: 12/06/23 09:25**
**Date Received: 12/08/23 09:30**
**Sample Depth: 4'**

**Lab Sample ID: 890-5758-17**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *109* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 20:35* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/11/23 20:35 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/11/23 18:48 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 18:48 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 18:48 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 18:48 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *174* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 18:48* | *1* |
| *o-Terphenyl* | *160* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 18:48* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **33.3** | | 5.00 | | mg/Kg | | | 12/11/23 11:53 | 1 |

## Client Sample ID: V 5.2

**Date Collected: 12/06/23 10:58**
**Date Received: 12/08/23 09:30**
**Sample Depth: 4'**

**Lab Sample ID: 890-5758-18**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:01 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:01 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:01 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:01 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:01 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *154* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 21:01* | *1* |
| *1,4-Difluorobenzene (Surr)* | *89* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 21:01* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/11/23 21:01 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | | 12/11/23 19:10 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: V 5.2

**Lab Sample ID: 890-5758-18**
**Matrix: Solid**
**Date Collected: 12/06/23 10:58**
**Date Received: 12/08/23 09:30**
**Sample Depth: 4'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 19:10 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 19:10 | 1 |
| OII Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 19:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *185* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 19:10* | *1* |
| *o-Terphenyl* | *168* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 19:10* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **19.8** | | 4.98 | | mg/Kg | | | 12/11/23 11:59 | 1 |

## Client Sample ID: V 4.2

**Lab Sample ID: 890-5758-19**
**Matrix: Solid**
**Date Collected: 12/06/23 11:30**
**Date Received: 12/08/23 09:30**
**Sample Depth: 4'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:27 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:27 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:27 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:27 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:27 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:27 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *181* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 21:27* | *1* |
| *1,4-Difluorobenzene (Surr)* | *101* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 21:27* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/11/23 21:27 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.3 | U | 50.3 | | mg/Kg | | | 12/11/23 19:32 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 50.3 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 19:32 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U | 50.3 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 19:32 | 1 |
| OII Range Organics (Over C28-C36) | <50.3 | U | 50.3 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 19:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *163* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 19:32* | *1* |
| *o-Terphenyl* | *146* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 19:32* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: V 4.2

**Lab Sample ID: 890-5758-19**
**Matrix: Solid**
**Date Collected: 12/06/23 11:30**
**Date Received: 12/08/23 09:30**
**Sample Depth: 4'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 19.6 | | 5.02 | | mg/Kg | | | 12/11/23 12:16 | 1 |

## Client Sample ID: V 6.2

**Lab Sample ID: 890-5758-20**
**Matrix: Solid**
**Date Collected: 12/06/23 11:10**
**Date Received: 12/08/23 09:30**
**Sample Depth: 4'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:53 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:53 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:53 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:53 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:53 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 21:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *173* | *S1+* | *70 - 130* | *12/11/23 10:04* | *12/11/23 21:53* | *1* |
| *1,4-Difluorobenzene (Surr)* | *97* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 21:53* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/11/23 21:53 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/11/23 19:54 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 19:54 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 19:54 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/11/23 09:42 | 12/11/23 19:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *171* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 19:54* | *1* |
| *o-Terphenyl* | *158* | *S1+* | *70 - 130* | *12/11/23 09:42* | *12/11/23 19:54* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 50.1 | | 5.01 | | mg/Kg | | | 12/11/23 12:21 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: E - HA 01

**Lab Sample ID: 890-5758-21**
**Matrix: Solid**
**Date Collected: 12/06/23 10:09**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:57 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:57 | 1 |
| Ethylbenzene | <0.00199 | U F1 | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:57 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U F1 | 0.00398 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:57 | 1 |
| o-Xylene | <0.00199 | U F1 | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:57 | 1 |
| Xylenes, Total | <0.00398 | U F1 | 0.00398 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *75* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 14:57* | *1* |
| *1,4-Difluorobenzene (Surr)* | *84* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 14:57* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/11/23 14:57 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | | 12/11/23 11:52 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 11:52 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 11:52 | 1 |
| OII Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 11:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *115* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 11:52* | *1* |
| *o-Terphenyl* | *125* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 11:52* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **169** | | 4.98 | | mg/Kg | | | 12/11/23 12:38 | 1 |

## Client Sample ID: E - HA 02

**Lab Sample ID: 890-5758-22**
**Matrix: Solid**
**Date Collected: 12/06/23 10:27**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:13 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:13 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:13 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:13 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:13 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:13 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *82* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 12:13* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: E - HA 02

**Date Collected: 12/06/23 10:27**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

**Lab Sample ID: 890-5758-22**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *85* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 12:13* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/11/23 12:13 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/11/23 12:58 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 12:58 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 12:58 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 12:58 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *113* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 12:58* | *1* |
| *o-Terphenyl* | *125* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 12:58* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **112** | | 4.99 | | mg/Kg | | | 12/11/23 12:44 | 1 |

## Client Sample ID: S - HA 01

**Date Collected: 12/06/23 11:40**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

**Lab Sample ID: 890-5758-23**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:34 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:34 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:34 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:34 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:34 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *79* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 12:34* | *1* |
| *1,4-Difluorobenzene (Surr)* | *75* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 12:34* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/11/23 12:34 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | | 12/11/23 13:20 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: S - HA 01

**Lab Sample ID: 890-5758-23**
**Matrix: Solid**
**Date Collected: 12/06/23 11:40**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 13:20 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 13:20 | 1 |
| OII Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 13:20 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *110* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 13:20* | *1* |
| *o-Terphenyl* | *127* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 13:20* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **121** | | 5.03 | | mg/Kg | | | 12/11/23 12:50 | 1 |

## Client Sample ID: S - HA 02

**Lab Sample ID: 890-5758-24**
**Matrix: Solid**
**Date Collected: 12/06/23 11:46**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:54 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:54 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:54 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:54 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:54 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 12:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *77* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 12:54* | *1* |
| *1,4-Difluorobenzene (Surr)* | *75* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 12:54* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/11/23 12:54 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | | 12/11/23 13:42 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 13:42 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 13:42 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 13:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *101* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 13:42* | *1* |
| *o-Terphenyl* | *115* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 13:42* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: S - HA 02

**Lab Sample ID: 890-5758-24**
**Matrix: Solid**
**Date Collected: 12/06/23 11:46**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 33.0 | | 5.04 | | mg/Kg | | | 12/11/23 12:55 | 1 |

## Client Sample ID: DS - LO - 01

**Lab Sample ID: 890-5758-25**
**Matrix: Solid**
**Date Collected: 12/06/23 12:41**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:15 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:15 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:15 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:15 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:15 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *71* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 13:15* | *1* |
| *1,4-Difluorobenzene (Surr)* | *92* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 13:15* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/11/23 13:15 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.2 | U | 50.2 | | mg/Kg | | | 12/11/23 14:04 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.2 | U | 50.2 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 14:04 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.2 | U | 50.2 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 14:04 | 1 |
| OII Range Organics (Over C28-C36) | <50.2 | U | 50.2 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 14:04 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *92* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 14:04* | *1* |
| *o-Terphenyl* | *115* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 14:04* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 626 | | 5.00 | | mg/Kg | | | 12/11/23 13:01 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: DS - LO - 02

**Lab Sample ID: 890-5758-26**
**Matrix: Solid**
**Date Collected: 12/06/23 12:44**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:35 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:35 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:35 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:35 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:35 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *83* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 13:35* | *1* |
| *1,4-Difluorobenzene (Surr)* | *86* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 13:35* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/11/23 13:35 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/11/23 14:26 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 14:26 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 14:26 | 1 |
| OII Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 14:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *113* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 14:26* | *1* |
| *o-Terphenyl* | *122* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 14:26* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **1500** | | 5.00 | | mg/Kg | | | 12/11/23 13:07 | 1 |

## Client Sample ID: DS - LO - 06

**Lab Sample ID: 890-5758-27**
**Matrix: Solid**
**Date Collected: 12/06/23 12:46**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:56 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:56 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:56 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:56 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:56 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 13:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *85* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 13:56* | *1* |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: DS - LO - 06

**Lab Sample ID: 890-5758-27**
**Matrix: Solid**

**Date Collected: 12/06/23 12:46**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *81* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 13:56* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/11/23 13:56 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total TPH** | **58.5** | | 50.5 | | mg/Kg | | | 12/11/23 14:48 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 14:48 | 1 |
| **Diesel Range Organics (Over C10-C28)** | **58.5** | | 50.5 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 14:48 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 14:48 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *112* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 14:48* | *1* |
| *o-Terphenyl* | *122* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 14:48* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **715** | | 5.03 | | mg/Kg | | | 12/11/23 13:12 | 1 |

## Client Sample ID: DS - LO - 03

**Lab Sample ID: 890-5758-28**
**Matrix: Solid**

**Date Collected: 12/06/23 12:46**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:16 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:16 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:16 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:16 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:16 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:16 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *84* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 14:16* | *1* |
| *1,4-Difluorobenzene (Surr)* | *74* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 14:16* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/11/23 14:16 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | | 12/11/23 15:10 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: DS - LO - 03

**Lab Sample ID: 890-5758-28**
**Matrix: Solid**
**Date Collected: 12/06/23 12:46**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 15:10 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 15:10 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 15:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *108* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 15:10* | *1* |
| *o-Terphenyl* | *121* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 15:10* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **33.6** | | 5.05 | | mg/Kg | | | 12/11/23 11:19 | 1 |

## Client Sample ID: DS - LO - 04

**Lab Sample ID: 890-5758-29**
**Matrix: Solid**
**Date Collected: 12/06/23 12:48**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:37 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:37 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:37 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:37 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:37 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 14:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *74* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 14:37* | *1* |
| *1,4-Difluorobenzene (Surr)* | *88* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 14:37* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/11/23 14:37 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/11/23 15:32 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 15:32 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 15:32 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 15:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *116* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 15:32* | *1* |
| *o-Terphenyl* | *128* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 15:32* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: DS - LO - 04

**Lab Sample ID: 890-5758-29**
**Matrix: Solid**
**Date Collected: 12/06/23 12:48**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 49.8 | | 5.05 | | mg/Kg | | | 12/11/23 11:38 | 1 |

## Client Sample ID: DS - LO - 05

**Lab Sample ID: 890-5758-30**
**Matrix: Solid**
**Date Collected: 12/06/23 12:50**
**Date Received: 12/08/23 09:30**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 16:21 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 16:21 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 16:21 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 16:21 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 16:21 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 16:21 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *72* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 16:21* | *1* |
| *1,4-Difluorobenzene (Surr)* | *78* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 16:21* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/11/23 16:21 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/11/23 15:54 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 15:54 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 15:54 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/11/23 09:44 | 12/11/23 15:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *120* | | *70 - 130* | *12/11/23 09:44* | *12/11/23 15:54* | *1* |
| *o-Terphenyl* | *131* | *S1+* | *70 - 130* | *12/11/23 09:44* | *12/11/23 15:54* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 40.4 | | 5.05 | | mg/Kg | | | 12/11/23 11:45 | 1 |

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BFB1 | DFBZ1 | | | | | | | | | | |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | | | | | | | | | | |
| 890-5758-1 | FS - 32 | 107 | 60 S1- | | | | | | | | | | |
| 890-5758-1 MS | FS - 32 | 148 S1+ | 89 | | | | | | | | | | |
| 890-5758-1 MSD | FS - 32 | 132 S1+ | 74 | | | | | | | | | | |
| 890-5758-2 | FS - 33 | 135 S1+ | 83 | | | | | | | | | | |
| 890-5758-3 | FS - 34 | 114 | 84 | | | | | | | | | | |
| 890-5758-4 | FS - 35 | 66 S1- | 77 | | | | | | | | | | |
| 890-5758-5 | FS - 36 | 148 S1+ | 92 | | | | | | | | | | |
| 890-5758-6 | FS - 37 | 135 S1+ | 103 | | | | | | | | | | |
| 890-5758-7 | FS - 38 | 135 S1+ | 132 S1+ | | | | | | | | | | |
| 890-5758-8 | FS - 39 | 124 | 101 | | | | | | | | | | |
| 890-5758-9 | FS - 40 | 98 | 72 | | | | | | | | | | |
| 890-5758-10 | FS - 41 | 141 S1+ | 101 | | | | | | | | | | |
| 890-5758-11 | FS - 42 | 131 S1+ | 65 S1- | | | | | | | | | | |
| 890-5758-12 | FS - 43 | 143 S1+ | 96 | | | | | | | | | | |
| 890-5758-13 | FS - 44 | 167 S1+ | 123 | | | | | | | | | | |
| 890-5758-14 | FS - 45 | 159 S1+ | 100 | | | | | | | | | | |
| 890-5758-15 | W - HA 02 | 159 S1+ | 96 | | | | | | | | | | |
| 890-5758-16 | W - HA 01 | 170 S1+ | 76 | | | | | | | | | | |
| 890-5758-17 | V 3.2 | 186 S1+ | 109 | | | | | | | | | | |
| 890-5758-18 | V 5.2 | 154 S1+ | 89 | | | | | | | | | | |
| 890-5758-19 | V 4.2 | 181 S1+ | 101 | | | | | | | | | | |
| 890-5758-20 | V 6.2 | 173 S1+ | 97 | | | | | | | | | | |
| 890-5758-21 | E - HA 01 | 75 | 84 | | | | | | | | | | |
| 890-5758-21 MS | E - HA 01 | 66 S1- | 110 | | | | | | | | | | |
| 890-5758-21 MSD | E - HA 01 | 102 | 111 | | | | | | | | | | |
| 890-5758-22 | E - HA 02 | 82 | 85 | | | | | | | | | | |
| 890-5758-23 | S - HA 01 | 79 | 75 | | | | | | | | | | |
| 890-5758-24 | S - HA 02 | 77 | 75 | | | | | | | | | | |
| 890-5758-25 | DS - LO - 01 | 71 | 92 | | | | | | | | | | |
| 890-5758-26 | DS - LO - 02 | 83 | 86 | | | | | | | | | | |
| 890-5758-27 | DS - LO - 06 | 85 | 81 | | | | | | | | | | |
| 890-5758-28 | DS - LO - 03 | 84 | 74 | | | | | | | | | | |
| 890-5758-29 | DS - LO - 04 | 74 | 88 | | | | | | | | | | |
| 890-5758-30 | DS - LO - 05 | 72 | 78 | | | | | | | | | | |
| LCS 880-68778/1-A | Lab Control Sample | 134 S1+ | 78 | | | | | | | | | | |
| LCS 880-68791/1-A | Lab Control Sample | 92 | 105 | | | | | | | | | | |
| LCSD 880-68778/2-A | Lab Control Sample Dup | 134 S1+ | 70 | | | | | | | | | | |
| LCSD 880-68791/2-A | Lab Control Sample Dup | 96 | 109 | | | | | | | | | | |
| MB 880-68778/5-A | Method Blank | 73 | 75 | | | | | | | | | | |
| MB 880-68791/5-A | Method Blank | 65 S1- | 95 | | | | | | | | | | |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | 1CO1 (70-130) | OTPH1 (70-130) |
| 890-5758-1 | FS - 32 | 159 S1+ | 145 S1+ |
| 890-5758-1 MS | FS - 32 | 201 S1+ | 154 S1+ |
| 890-5758-1 MSD | FS - 32 | 181 S1+ | 134 S1+ |
| 890-5758-2 | FS - 33 | 158 S1+ | 146 S1+ |
| 890-5758-3 | FS - 34 | 167 S1+ | 153 S1+ |
| 890-5758-4 | FS - 35 | 148 S1+ | 137 S1+ |
| 890-5758-5 | FS - 36 | 153 S1+ | 143 S1+ |
| 890-5758-6 | FS - 37 | 158 S1+ | 146 S1+ |
| 890-5758-7 | FS - 38 | 150 S1+ | 140 S1+ |
| 890-5758-8 | FS - 39 | 156 S1+ | 140 S1+ |
| 890-5758-9 | FS - 40 | 159 S1+ | 152 S1+ |
| 890-5758-10 | FS - 41 | 158 S1+ | 145 S1+ |
| 890-5758-11 | FS - 42 | 164 S1+ | 148 S1+ |
| 890-5758-12 | FS - 43 | 157 S1+ | 143 S1+ |
| 890-5758-13 | FS - 44 | 171 S1+ | 157 S1+ |
| 890-5758-14 | FS - 45 | 169 S1+ | 154 S1+ |
| 890-5758-15 | W - HA 02 | 155 S1+ | 146 S1+ |
| 890-5758-16 | W - HA 01 | 165 S1+ | 151 S1+ |
| 890-5758-17 | V 3.2 | 174 S1+ | 160 S1+ |
| 890-5758-18 | V 5.2 | 185 S1+ | 168 S1+ |
| 890-5758-19 | V 4.2 | 163 S1+ | 146 S1+ |
| 890-5758-20 | V 6.2 | 171 S1+ | 158 S1+ |
| 890-5758-21 | E - HA 01 | 115 | 125 |
| 890-5758-21 MS | E - HA 01 | 132 S1+ | 129 |
| 890-5758-21 MSD | E - HA 01 | 120 | 120 |
| 890-5758-22 | E - HA 02 | 113 | 125 |
| 890-5758-23 | S - HA 01 | 110 | 127 |
| 890-5758-24 | S - HA 02 | 101 | 115 |
| 890-5758-25 | DS - LO - 01 | 92 | 115 |
| 890-5758-26 | DS - LO - 02 | 113 | 122 |
| 890-5758-27 | DS - LO - 06 | 112 | 122 |
| 890-5758-28 | DS - LO - 03 | 108 | 121 |
| 890-5758-29 | DS - LO - 04 | 116 | 128 |
| 890-5758-30 | DS - LO - 05 | 120 | 131 S1+ |
| LCS 880-68761/2-A | Lab Control Sample | 108 | 120 |
| LCS 880-68762/2-A | Lab Control Sample | 95 | 109 |
| LCSD 880-68761/3-A | Lab Control Sample Dup | 97 | 95 |
| LCSD 880-68762/3-A | Lab Control Sample Dup | 105 | 122 |
| MB 880-68761/1-A | Method Blank | 218 S1+ | 215 S1+ |
| MB 880-68762/1-A | Method Blank | 164 S1+ | 196 S1+ |

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC)

**Lab Sample ID: MB 880-68778/5-A**
**Matrix: Solid**
**Analysis Batch: 68756**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68778**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 11:51 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 11:51 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 11:51 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 11:51 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 11:51 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/11/23 10:04 | 12/11/23 11:51 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *73* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 11:51* | *1* |
| *1,4-Difluorobenzene (Surr)* | *75* | | *70 - 130* | *12/11/23 10:04* | *12/11/23 11:51* | *1* |

**Lab Sample ID: LCS 880-68778/1-A**
**Matrix: Solid**
**Analysis Batch: 68756**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68778**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Benzene | 0.100 | 0.09375 | | mg/Kg | | 94 | 70 - 130 |
| Toluene | 0.100 | 0.1059 | | mg/Kg | | 106 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.1112 | | mg/Kg | | 111 | 70 - 130 |
| m-Xylene & p-Xylene | 0.200 | 0.2140 | | mg/Kg | | 107 | 70 - 130 |
| o-Xylene | 0.100 | 0.1041 | | mg/Kg | | 104 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *134* | *S1+* | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *78* | | *70 - 130* |

**Lab Sample ID: LCSD 880-68778/2-A**
**Matrix: Solid**
**Analysis Batch: 68756**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68778**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.100 | 0.08867 | | mg/Kg | | 89 | 70 - 130 | 6 | 35 |
| Toluene | 0.100 | 0.1055 | | mg/Kg | | 106 | 70 - 130 | 0 | 35 |
| Ethylbenzene | 0.100 | 0.1045 | | mg/Kg | | 104 | 70 - 130 | 6 | 35 |
| m-Xylene & p-Xylene | 0.200 | 0.2047 | | mg/Kg | | 102 | 70 - 130 | 4 | 35 |
| o-Xylene | 0.100 | 0.1028 | | mg/Kg | | 103 | 70 - 130 | 1 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *134* | *S1+* | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *70* | | *70 - 130* |

**Lab Sample ID: 890-5758-1 MS**
**Matrix: Solid**
**Analysis Batch: 68756**

**Client Sample ID: FS - 32**
**Prep Type: Total/NA**
**Prep Batch: 68778**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.0998 | 0.09321 | | mg/Kg | | 93 | 70 - 130 |
| Toluene | <0.00200 | U | 0.0998 | 0.1041 | | mg/Kg | | 104 | 70 - 130 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

**Lab Sample ID: 890-5758-1 MS**
**Matrix: Solid**
**Analysis Batch: 68756**

**Client Sample ID: FS - 32**
**Prep Type: Total/NA**
**Prep Batch: 68778**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | <0.00200 | U | 0.0998 | 0.1024 | | mg/Kg | | 103 | 70 - 130 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.200 | 0.2148 | | mg/Kg | | 108 | 70 - 130 |
| o-Xylene | <0.00200 | U | 0.0998 | 0.1021 | | mg/Kg | | 102 | 70 - 130 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *148* | *S1+* | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *89* | | *70 - 130* |

**Lab Sample ID: 890-5758-1 MSD**
**Matrix: Solid**
**Analysis Batch: 68756**

**Client Sample ID: FS - 32**
**Prep Type: Total/NA**
**Prep Batch: 68778**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.0990 | 0.07824 | | mg/Kg | | 79 | 70 - 130 | 17 | 35 |
| Toluene | <0.00200 | U | 0.0990 | 0.08818 | | mg/Kg | | 89 | 70 - 130 | 17 | 35 |
| Ethylbenzene | <0.00200 | U | 0.0990 | 0.08189 | | mg/Kg | | 83 | 70 - 130 | 22 | 35 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.198 | 0.1606 | | mg/Kg | | 81 | 70 - 130 | 29 | 35 |
| o-Xylene | <0.00200 | U | 0.0990 | 0.08649 | | mg/Kg | | 87 | 70 - 130 | 17 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *132* | *S1+* | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *74* | | *70 - 130* |

**Lab Sample ID: MB 880-68791/5-A**
**Matrix: Solid**
**Analysis Batch: 68757**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68791**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 11:31 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 11:31 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 11:31 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 11:31 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 11:31 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/11/23 10:05 | 12/11/23 11:31 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *65* | *S1-* | *70 - 130* | *12/11/23 10:05* | *12/11/23 11:31* | *1* |
| *1,4-Difluorobenzene (Surr)* | *95* | | *70 - 130* | *12/11/23 10:05* | *12/11/23 11:31* | *1* |

**Lab Sample ID: LCS 880-68791/1-A**
**Matrix: Solid**
**Analysis Batch: 68757**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68791**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Benzene | 0.100 | 0.08454 | | mg/Kg | | 85 | 70 - 130 |
| Toluene | 0.100 | 0.07955 | | mg/Kg | | 80 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.08426 | | mg/Kg | | 84 | 70 - 130 |
| m-Xylene & p-Xylene | 0.200 | 0.1722 | | mg/Kg | | 86 | 70 - 130 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

**Lab Sample ID: LCS 880-68791/1-A**
**Matrix: Solid**
**Analysis Batch: 68757**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68791**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| o-Xylene | | | 0.100 | 0.08085 | | mg/Kg | | 81 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *92* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *105* | | *70 - 130* |

**Lab Sample ID: LCSD 880-68791/2-A**
**Matrix: Solid**
**Analysis Batch: 68757**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68791**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.08183 | | mg/Kg | | 82 | 70 - 130 | 3 | 35 |
| Toluene | | | 0.100 | 0.07551 | | mg/Kg | | 76 | 70 - 130 | 5 | 35 |
| Ethylbenzene | | | 0.100 | 0.08096 | | mg/Kg | | 81 | 70 - 130 | 4 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1664 | | mg/Kg | | 83 | 70 - 130 | 3 | 35 |
| o-Xylene | | | 0.100 | 0.07847 | | mg/Kg | | 78 | 70 - 130 | 3 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *109* | | *70 - 130* |

**Lab Sample ID: 890-5758-21 MS**
**Matrix: Solid**
**Analysis Batch: 68757**

**Client Sample ID: E - HA 01**
**Prep Type: Total/NA**
**Prep Batch: 68791**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.0998 | 0.08297 | | mg/Kg | | 83 | 70 - 130 | | |
| Toluene | <0.00199 | U | 0.0998 | 0.07320 | | mg/Kg | | 73 | 70 - 130 | | |
| Ethylbenzene | <0.00199 | U F1 | 0.0998 | 0.06819 | F1 | mg/Kg | | 68 | 70 - 130 | | |
| m-Xylene & p-Xylene | <0.00398 | U F1 | 0.200 | 0.1297 | F1 | mg/Kg | | 65 | 70 - 130 | | |
| o-Xylene | <0.00199 | U F1 | 0.0998 | 0.05938 | F1 | mg/Kg | | 60 | 70 - 130 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *66* | *S1-* | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* |

**Lab Sample ID: 890-5758-21 MSD**
**Matrix: Solid**
**Analysis Batch: 68757**

**Client Sample ID: E - HA 01**
**Prep Type: Total/NA**
**Prep Batch: 68791**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.0990 | 0.07061 | | mg/Kg | | 71 | 70 - 130 | 16 | 35 |
| Toluene | <0.00199 | U | 0.0990 | 0.06891 | | mg/Kg | | 70 | 70 - 130 | 6 | 35 |
| Ethylbenzene | <0.00199 | U F1 | 0.0990 | 0.07962 | | mg/Kg | | 80 | 70 - 130 | 15 | 35 |
| m-Xylene & p-Xylene | <0.00398 | U F1 | 0.198 | 0.1605 | | mg/Kg | | 81 | 70 - 130 | 21 | 35 |
| o-Xylene | <0.00199 | U F1 | 0.0990 | 0.07563 | | mg/Kg | | 76 | 70 - 130 | 24 | 35 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

**Lab Sample ID: 890-5758-21 MSD**
**Matrix: Solid**
**Analysis Batch: 68757**

**Client Sample ID: E - HA 01**
**Prep Type: Total/NA**
**Prep Batch: 68791**

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 102 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 111 | | 70 - 130 |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 880-68761/1-A**
**Matrix: Solid**
**Analysis Batch: 68745**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68761**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 07:42 | 12/11/23 08:12 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 07:42 | 12/11/23 08:12 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 07:42 | 12/11/23 08:12 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1-Chlorooctane | 218 | S1+ | 70 - 130 | 12/11/23 07:42 | 12/11/23 08:12 | 1 |
| o-Terphenyl | 215 | S1+ | 70 - 130 | 12/11/23 07:42 | 12/11/23 08:12 | 1 |

**Lab Sample ID: LCS 880-68761/2-A**
**Matrix: Solid**
**Analysis Batch: 68745**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68761**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1150 | | mg/Kg | | 115 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1054 | | mg/Kg | | 105 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 108 | | 70 - 130 |
| o-Terphenyl | 120 | | 70 - 130 |

**Lab Sample ID: LCSD 880-68761/3-A**
**Matrix: Solid**
**Analysis Batch: 68745**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68761**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 944.1 | | mg/Kg | | 94 | 70 - 130 | 20 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 942.0 | | mg/Kg | | 94 | 70 - 130 | 11 | 20 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 97 | | 70 - 130 |
| o-Terphenyl | 95 | | 70 - 130 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: 890-5758-1 MS**
**Matrix: Solid**
**Analysis Batch: 68745**

**Client Sample ID: FS - 32**
**Prep Type: Total/NA**
**Prep Batch: 68761**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U F2 | 1010 | 1222 | | mg/Kg | | 119 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U F1 | 1010 | 1806 | F1 | mg/Kg | | 176 | 70 - 130 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *201* | *S1+* | *70 - 130* |
| *o-Terphenyl* | *154* | *S1+* | *70 - 130* |

**Lab Sample ID: 890-5758-1 MSD**
**Matrix: Solid**
**Analysis Batch: 68745**

**Client Sample ID: FS - 32**
**Prep Type: Total/NA**
**Prep Batch: 68761**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U F2 | 1010 | 989.1 | F2 | mg/Kg | | 96 | 70 - 130 | 21 | 20 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U F1 | 1010 | 1584 | F1 | mg/Kg | | 154 | 70 - 130 | 13 | 20 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *181* | *S1+* | *70 - 130* |
| *o-Terphenyl* | *134* | *S1+* | *70 - 130* |

**Lab Sample ID: MB 880-68762/1-A**
**Matrix: Solid**
**Analysis Batch: 68747**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68762**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 07:44 | 12/11/23 08:12 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 07:44 | 12/11/23 08:12 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/11/23 07:44 | 12/11/23 08:12 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *164* | *S1+* | *70 - 130* | *12/11/23 07:44* | *12/11/23 08:12* | *1* |
| *o-Terphenyl* | *196* | *S1+* | *70 - 130* | *12/11/23 07:44* | *12/11/23 08:12* | *1* |

**Lab Sample ID: LCS 880-68762/2-A**
**Matrix: Solid**
**Analysis Batch: 68747**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68762**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1044 | | mg/Kg | | 104 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 922.7 | | mg/Kg | | 92 | 70 - 130 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: LCS 880-68762/2-A**
**Matrix: Solid**
**Analysis Batch: 68747**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68762**

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 95 | | 70 - 130 |
| o-Terphenyl | 109 | | 70 - 130 |

**Lab Sample ID: LCSD 880-68762/3-A**
**Matrix: Solid**
**Analysis Batch: 68747**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68762**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 1047 | | mg/Kg | | 105 | 70 - 130 | 0 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 931.6 | | mg/Kg | | 93 | 70 - 130 | 1 | 20 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 105 | | 70 - 130 |
| o-Terphenyl | 122 | | 70 - 130 |

**Lab Sample ID: 890-5758-21 MS**
**Matrix: Solid**
**Analysis Batch: 68747**

**Client Sample ID: E - HA 01**
**Prep Type: Total/NA**
**Prep Batch: 68762**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 1000 | 968.7 | | mg/Kg | | 94 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 1000 | 1057 | | mg/Kg | | 101 | 70 - 130 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 132 | S1+ | 70 - 130 |
| o-Terphenyl | 129 | | 70 - 130 |

**Lab Sample ID: 890-5758-21 MSD**
**Matrix: Solid**
**Analysis Batch: 68747**

**Client Sample ID: E - HA 01**
**Prep Type: Total/NA**
**Prep Batch: 68762**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 1000 | 876.3 | | mg/Kg | | 85 | 70 - 130 | 10 | 20 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 1000 | 979.0 | | mg/Kg | | 93 | 70 - 130 | 8 | 20 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 120 | | 70 - 130 |
| o-Terphenyl | 120 | | 70 - 130 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-68753/1-A**
**Matrix: Solid**
**Analysis Batch: 68777**

**Client Sample ID: Method Blank**
**Prep Type: Soluble**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <5.00 | U | 5.00 | | mg/Kg | | | 12/11/23 09:53 | 1 |

**Lab Sample ID: LCS 880-68753/2-A**
**Matrix: Solid**
**Analysis Batch: 68777**

**Client Sample ID: Lab Control Sample**
**Prep Type: Soluble**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 253.3 | | mg/Kg | | 101 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-68753/3-A**
**Matrix: Solid**
**Analysis Batch: 68777**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Soluble**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 252.9 | | mg/Kg | | 101 | 90 - 110 | 0 | 20 |

**Lab Sample ID: MB 880-68754/1-A**
**Matrix: Solid**
**Analysis Batch: 68793**

**Client Sample ID: Method Blank**
**Prep Type: Soluble**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <5.00 | U | 5.00 | | mg/Kg | | | 12/11/23 10:23 | 1 |

**Lab Sample ID: LCS 880-68754/2-A**
**Matrix: Solid**
**Analysis Batch: 68793**

**Client Sample ID: Lab Control Sample**
**Prep Type: Soluble**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 260.8 | | mg/Kg | | 104 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-68754/3-A**
**Matrix: Solid**
**Analysis Batch: 68793**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Soluble**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 264.4 | | mg/Kg | | 106 | 90 - 110 | 1 | 20 |

**Lab Sample ID: 890-5758-8 MS**
**Matrix: Solid**
**Analysis Batch: 68793**

**Client Sample ID: FS - 39**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 26.3 | | 251 | 284.3 | | mg/Kg | | 103 | 90 - 110 | | |

**Lab Sample ID: 890-5758-8 MSD**
**Matrix: Solid**
**Analysis Batch: 68793**

**Client Sample ID: FS - 39**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 26.3 | | 251 | 288.5 | | mg/Kg | | 105 | 90 - 110 | 1 | 20 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: 890-5758-18 MS**
**Matrix: Solid**
**Analysis Batch: 68793**

**Client Sample ID: V 5.2**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 19.8 | | 249 | 290.9 | | mg/Kg | | 109 | 90 - 110 |

**Lab Sample ID: 890-5758-18 MSD**
**Matrix: Solid**
**Analysis Batch: 68793**

**Client Sample ID: V 5.2**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 19.8 | | 249 | 281.2 | | mg/Kg | | 105 | 90 - 110 | 3 | 20 |

**Lab Sample ID: MB 880-68755/1-A**
**Matrix: Solid**
**Analysis Batch: 68795**

**Client Sample ID: Method Blank**
**Prep Type: Soluble**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <5.00 | U | 5.00 | | mg/Kg | | | 12/11/23 10:59 | 1 |

**Lab Sample ID: LCS 880-68755/2-A**
**Matrix: Solid**
**Analysis Batch: 68795**

**Client Sample ID: Lab Control Sample**
**Prep Type: Soluble**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Chloride | 250 | 253.9 | | mg/Kg | | 102 | 90 - 110 |

**Lab Sample ID: LCSD 880-68755/3-A**
**Matrix: Solid**
**Analysis Batch: 68795**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Soluble**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 250 | 253.5 | | mg/Kg | | 101 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 890-5758-28 MS**
**Matrix: Solid**
**Analysis Batch: 68795**

**Client Sample ID: DS - LO - 03**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 33.6 | | 253 | 293.2 | | mg/Kg | | 103 | 90 - 110 |

**Lab Sample ID: 890-5758-28 MSD**
**Matrix: Solid**
**Analysis Batch: 68795**

**Client Sample ID: DS - LO - 03**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 33.6 | | 253 | 291.8 | | mg/Kg | | 102 | 90 - 110 | 0 | 20 |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## GC VOA

### Analysis Batch: 68756

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-1 | FS - 32 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-2 | FS - 33 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-3 | FS - 34 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-4 | FS - 35 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-5 | FS - 36 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-6 | FS - 37 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-7 | FS - 38 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-8 | FS - 39 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-9 | FS - 40 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-10 | FS - 41 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-11 | FS - 42 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-12 | FS - 43 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-13 | FS - 44 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-14 | FS - 45 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-15 | W - HA 02 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-16 | W - HA 01 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-17 | V 3.2 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-18 | V 5.2 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-19 | V 4.2 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-20 | V 6.2 | Total/NA | Solid | 8021B | 68778 |
| MB 880-68778/5-A | Method Blank | Total/NA | Solid | 8021B | 68778 |
| LCS 880-68778/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 68778 |
| LCSD 880-68778/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 68778 |
| 890-5758-1 MS | FS - 32 | Total/NA | Solid | 8021B | 68778 |
| 890-5758-1 MSD | FS - 32 | Total/NA | Solid | 8021B | 68778 |

### Analysis Batch: 68757

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-21 | E - HA 01 | Total/NA | Solid | 8021B | 68791 |
| 890-5758-22 | E - HA 02 | Total/NA | Solid | 8021B | 68791 |
| 890-5758-23 | S - HA 01 | Total/NA | Solid | 8021B | 68791 |
| 890-5758-24 | S - HA 02 | Total/NA | Solid | 8021B | 68791 |
| 890-5758-25 | DS - LO - 01 | Total/NA | Solid | 8021B | 68791 |
| 890-5758-26 | DS - LO - 02 | Total/NA | Solid | 8021B | 68791 |
| 890-5758-27 | DS - LO - 06 | Total/NA | Solid | 8021B | 68791 |
| 890-5758-28 | DS - LO - 03 | Total/NA | Solid | 8021B | 68791 |
| 890-5758-29 | DS - LO - 04 | Total/NA | Solid | 8021B | 68791 |
| 890-5758-30 | DS - LO - 05 | Total/NA | Solid | 8021B | 68791 |
| MB 880-68791/5-A | Method Blank | Total/NA | Solid | 8021B | 68791 |
| LCS 880-68791/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 68791 |
| LCSD 880-68791/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 68791 |
| 890-5758-21 MS | E - HA 01 | Total/NA | Solid | 8021B | 68791 |
| 890-5758-21 MSD | E - HA 01 | Total/NA | Solid | 8021B | 68791 |

### Prep Batch: 68778

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-1 | FS - 32 | Total/NA | Solid | 5035 | |
| 890-5758-2 | FS - 33 | Total/NA | Solid | 5035 | |
| 890-5758-3 | FS - 34 | Total/NA | Solid | 5035 | |
| 890-5758-4 | FS - 35 | Total/NA | Solid | 5035 | |
| 890-5758-5 | FS - 36 | Total/NA | Solid | 5035 | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## GC VOA (Continued)

### Prep Batch: 68778 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-6 | FS - 37 | Total/NA | Solid | 5035 | |
| 890-5758-7 | FS - 38 | Total/NA | Solid | 5035 | |
| 890-5758-8 | FS - 39 | Total/NA | Solid | 5035 | |
| 890-5758-9 | FS - 40 | Total/NA | Solid | 5035 | |
| 890-5758-10 | FS - 41 | Total/NA | Solid | 5035 | |
| 890-5758-11 | FS - 42 | Total/NA | Solid | 5035 | |
| 890-5758-12 | FS - 43 | Total/NA | Solid | 5035 | |
| 890-5758-13 | FS - 44 | Total/NA | Solid | 5035 | |
| 890-5758-14 | FS - 45 | Total/NA | Solid | 5035 | |
| 890-5758-15 | W - HA 02 | Total/NA | Solid | 5035 | |
| 890-5758-16 | W - HA 01 | Total/NA | Solid | 5035 | |
| 890-5758-17 | V 3.2 | Total/NA | Solid | 5035 | |
| 890-5758-18 | V 5.2 | Total/NA | Solid | 5035 | |
| 890-5758-19 | V 4.2 | Total/NA | Solid | 5035 | |
| 890-5758-20 | V 6.2 | Total/NA | Solid | 5035 | |
| MB 880-68778/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-68778/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-68778/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 890-5758-1 MS | FS - 32 | Total/NA | Solid | 5035 | |
| 890-5758-1 MSD | FS - 32 | Total/NA | Solid | 5035 | |

### Prep Batch: 68791

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-21 | E - HA 01 | Total/NA | Solid | 5035 | |
| 890-5758-22 | E - HA 02 | Total/NA | Solid | 5035 | |
| 890-5758-23 | S - HA 01 | Total/NA | Solid | 5035 | |
| 890-5758-24 | S - HA 02 | Total/NA | Solid | 5035 | |
| 890-5758-25 | DS - LO - 01 | Total/NA | Solid | 5035 | |
| 890-5758-26 | DS - LO - 02 | Total/NA | Solid | 5035 | |
| 890-5758-27 | DS - LO - 06 | Total/NA | Solid | 5035 | |
| 890-5758-28 | DS - LO - 03 | Total/NA | Solid | 5035 | |
| 890-5758-29 | DS - LO - 04 | Total/NA | Solid | 5035 | |
| 890-5758-30 | DS - LO - 05 | Total/NA | Solid | 5035 | |
| MB 880-68791/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-68791/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-68791/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 890-5758-21 MS | E - HA 01 | Total/NA | Solid | 5035 | |
| 890-5758-21 MSD | E - HA 01 | Total/NA | Solid | 5035 | |

### Analysis Batch: 68931

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-1 | FS - 32 | Total/NA | Solid | Total BTEX | |
| 890-5758-2 | FS - 33 | Total/NA | Solid | Total BTEX | |
| 890-5758-3 | FS - 34 | Total/NA | Solid | Total BTEX | |
| 890-5758-4 | FS - 35 | Total/NA | Solid | Total BTEX | |
| 890-5758-5 | FS - 36 | Total/NA | Solid | Total BTEX | |
| 890-5758-6 | FS - 37 | Total/NA | Solid | Total BTEX | |
| 890-5758-7 | FS - 38 | Total/NA | Solid | Total BTEX | |
| 890-5758-8 | FS - 39 | Total/NA | Solid | Total BTEX | |
| 890-5758-9 | FS - 40 | Total/NA | Solid | Total BTEX | |
| 890-5758-10 | FS - 41 | Total/NA | Solid | Total BTEX | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## GC VOA (Continued)

### Analysis Batch: 68931 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-11 | FS - 42 | Total/NA | Solid | Total BTEX | |
| 890-5758-12 | FS - 43 | Total/NA | Solid | Total BTEX | |
| 890-5758-13 | FS - 44 | Total/NA | Solid | Total BTEX | |
| 890-5758-14 | FS - 45 | Total/NA | Solid | Total BTEX | |
| 890-5758-15 | W - HA 02 | Total/NA | Solid | Total BTEX | |
| 890-5758-16 | W - HA 01 | Total/NA | Solid | Total BTEX | |
| 890-5758-17 | V 3.2 | Total/NA | Solid | Total BTEX | |
| 890-5758-18 | V 5.2 | Total/NA | Solid | Total BTEX | |
| 890-5758-19 | V 4.2 | Total/NA | Solid | Total BTEX | |
| 890-5758-20 | V 6.2 | Total/NA | Solid | Total BTEX | |
| 890-5758-21 | E - HA 01 | Total/NA | Solid | Total BTEX | |
| 890-5758-22 | E - HA 02 | Total/NA | Solid | Total BTEX | |
| 890-5758-23 | S - HA 01 | Total/NA | Solid | Total BTEX | |
| 890-5758-24 | S - HA 02 | Total/NA | Solid | Total BTEX | |
| 890-5758-25 | DS - LO - 01 | Total/NA | Solid | Total BTEX | |
| 890-5758-26 | DS - LO - 02 | Total/NA | Solid | Total BTEX | |
| 890-5758-27 | DS - LO - 06 | Total/NA | Solid | Total BTEX | |
| 890-5758-28 | DS - LO - 03 | Total/NA | Solid | Total BTEX | |
| 890-5758-29 | DS - LO - 04 | Total/NA | Solid | Total BTEX | |
| 890-5758-30 | DS - LO - 05 | Total/NA | Solid | Total BTEX | |

## GC Semi VOA

### Analysis Batch: 68745

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-1 | FS - 32 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-2 | FS - 33 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-3 | FS - 34 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-4 | FS - 35 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-5 | FS - 36 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-6 | FS - 37 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-7 | FS - 38 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-8 | FS - 39 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-9 | FS - 40 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-10 | FS - 41 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-11 | FS - 42 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-12 | FS - 43 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-13 | FS - 44 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-14 | FS - 45 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-15 | W - HA 02 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-16 | W - HA 01 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-17 | V 3.2 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-18 | V 5.2 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-19 | V 4.2 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-20 | V 6.2 | Total/NA | Solid | 8015B NM | 68761 |
| MB 880-68761/1-A | Method Blank | Total/NA | Solid | 8015B NM | 68761 |
| LCS 880-68761/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 68761 |
| LCSD 880-68761/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-1 MS | FS - 32 | Total/NA | Solid | 8015B NM | 68761 |
| 890-5758-1 MSD | FS - 32 | Total/NA | Solid | 8015B NM | 68761 |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## GC Semi VOA

### Analysis Batch: 68747

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-21 | E - HA 01 | Total/NA | Solid | 8015B NM | 68762 |
| 890-5758-22 | E - HA 02 | Total/NA | Solid | 8015B NM | 68762 |
| 890-5758-23 | S - HA 01 | Total/NA | Solid | 8015B NM | 68762 |
| 890-5758-24 | S - HA 02 | Total/NA | Solid | 8015B NM | 68762 |
| 890-5758-25 | DS - LO - 01 | Total/NA | Solid | 8015B NM | 68762 |
| 890-5758-26 | DS - LO - 02 | Total/NA | Solid | 8015B NM | 68762 |
| 890-5758-27 | DS - LO - 06 | Total/NA | Solid | 8015B NM | 68762 |
| 890-5758-28 | DS - LO - 03 | Total/NA | Solid | 8015B NM | 68762 |
| 890-5758-29 | DS - LO - 04 | Total/NA | Solid | 8015B NM | 68762 |
| 890-5758-30 | DS - LO - 05 | Total/NA | Solid | 8015B NM | 68762 |
| MB 880-68762/1-A | Method Blank | Total/NA | Solid | 8015B NM | 68762 |
| LCS 880-68762/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 68762 |
| LCSD 880-68762/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 68762 |
| 890-5758-21 MS | E - HA 01 | Total/NA | Solid | 8015B NM | 68762 |
| 890-5758-21 MSD | E - HA 01 | Total/NA | Solid | 8015B NM | 68762 |

### Prep Batch: 68761

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-1 | FS - 32 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-2 | FS - 33 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-3 | FS - 34 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-4 | FS - 35 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-5 | FS - 36 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-6 | FS - 37 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-7 | FS - 38 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-8 | FS - 39 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-9 | FS - 40 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-10 | FS - 41 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-11 | FS - 42 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-12 | FS - 43 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-13 | FS - 44 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-14 | FS - 45 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-15 | W - HA 02 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-16 | W - HA 01 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-17 | V 3.2 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-18 | V 5.2 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-19 | V 4.2 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-20 | V 6.2 | Total/NA | Solid | 8015NM Prep | |
| MB 880-68761/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-68761/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-68761/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 890-5758-1 MS | FS - 32 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-1 MSD | FS - 32 | Total/NA | Solid | 8015NM Prep | |

### Prep Batch: 68762

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-21 | E - HA 01 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-22 | E - HA 02 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-23 | S - HA 01 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-24 | S - HA 02 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-25 | DS - LO - 01 | Total/NA | Solid | 8015NM Prep | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## GC Semi VOA (Continued)

### Prep Batch: 68762 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-26 | DS - LO - 02 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-27 | DS - LO - 06 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-28 | DS - LO - 03 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-29 | DS - LO - 04 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-30 | DS - LO - 05 | Total/NA | Solid | 8015NM Prep | |
| MB 880-68762/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-68762/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-68762/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 890-5758-21 MS | E - HA 01 | Total/NA | Solid | 8015NM Prep | |
| 890-5758-21 MSD | E - HA 01 | Total/NA | Solid | 8015NM Prep | |

### Analysis Batch: 68924

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-1 | FS - 32 | Total/NA | Solid | 8015 NM | |
| 890-5758-2 | FS - 33 | Total/NA | Solid | 8015 NM | |
| 890-5758-3 | FS - 34 | Total/NA | Solid | 8015 NM | |
| 890-5758-4 | FS - 35 | Total/NA | Solid | 8015 NM | |
| 890-5758-5 | FS - 36 | Total/NA | Solid | 8015 NM | |
| 890-5758-6 | FS - 37 | Total/NA | Solid | 8015 NM | |
| 890-5758-7 | FS - 38 | Total/NA | Solid | 8015 NM | |
| 890-5758-8 | FS - 39 | Total/NA | Solid | 8015 NM | |
| 890-5758-9 | FS - 40 | Total/NA | Solid | 8015 NM | |
| 890-5758-10 | FS - 41 | Total/NA | Solid | 8015 NM | |
| 890-5758-11 | FS - 42 | Total/NA | Solid | 8015 NM | |
| 890-5758-12 | FS - 43 | Total/NA | Solid | 8015 NM | |
| 890-5758-13 | FS - 44 | Total/NA | Solid | 8015 NM | |
| 890-5758-14 | FS - 45 | Total/NA | Solid | 8015 NM | |
| 890-5758-15 | W - HA 02 | Total/NA | Solid | 8015 NM | |
| 890-5758-16 | W - HA 01 | Total/NA | Solid | 8015 NM | |
| 890-5758-17 | V 3.2 | Total/NA | Solid | 8015 NM | |
| 890-5758-18 | V 5.2 | Total/NA | Solid | 8015 NM | |
| 890-5758-19 | V 4.2 | Total/NA | Solid | 8015 NM | |
| 890-5758-20 | V 6.2 | Total/NA | Solid | 8015 NM | |
| 890-5758-21 | E - HA 01 | Total/NA | Solid | 8015 NM | |
| 890-5758-22 | E - HA 02 | Total/NA | Solid | 8015 NM | |
| 890-5758-23 | S - HA 01 | Total/NA | Solid | 8015 NM | |
| 890-5758-24 | S - HA 02 | Total/NA | Solid | 8015 NM | |
| 890-5758-25 | DS - LO - 01 | Total/NA | Solid | 8015 NM | |
| 890-5758-26 | DS - LO - 02 | Total/NA | Solid | 8015 NM | |
| 890-5758-27 | DS - LO - 06 | Total/NA | Solid | 8015 NM | |
| 890-5758-28 | DS - LO - 03 | Total/NA | Solid | 8015 NM | |
| 890-5758-29 | DS - LO - 04 | Total/NA | Solid | 8015 NM | |
| 890-5758-30 | DS - LO - 05 | Total/NA | Solid | 8015 NM | |

## HPLC/IC

### Leach Batch: 68753

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-1 | FS - 32 | Soluble | Solid | DI Leach | |
| 890-5758-2 | FS - 33 | Soluble | Solid | DI Leach | |
| 890-5758-3 | FS - 34 | Soluble | Solid | DI Leach | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## HPLC/IC (Continued)

### Leach Batch: 68753 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-4 | FS - 35 | Soluble | Solid | DI Leach | |
| 890-5758-5 | FS - 36 | Soluble | Solid | DI Leach | |
| 890-5758-6 | FS - 37 | Soluble | Solid | DI Leach | |
| 890-5758-7 | FS - 38 | Soluble | Solid | DI Leach | |
| MB 880-68753/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-68753/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-68753/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |

### Leach Batch: 68754

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-8 | FS - 39 | Soluble | Solid | DI Leach | |
| 890-5758-9 | FS - 40 | Soluble | Solid | DI Leach | |
| 890-5758-10 | FS - 41 | Soluble | Solid | DI Leach | |
| 890-5758-11 | FS - 42 | Soluble | Solid | DI Leach | |
| 890-5758-12 | FS - 43 | Soluble | Solid | DI Leach | |
| 890-5758-13 | FS - 44 | Soluble | Solid | DI Leach | |
| 890-5758-14 | FS - 45 | Soluble | Solid | DI Leach | |
| 890-5758-15 | W - HA 02 | Soluble | Solid | DI Leach | |
| 890-5758-16 | W - HA 01 | Soluble | Solid | DI Leach | |
| 890-5758-17 | V 3.2 | Soluble | Solid | DI Leach | |
| 890-5758-18 | V 5.2 | Soluble | Solid | DI Leach | |
| 890-5758-19 | V 4.2 | Soluble | Solid | DI Leach | |
| 890-5758-20 | V 6.2 | Soluble | Solid | DI Leach | |
| 890-5758-21 | E - HA 01 | Soluble | Solid | DI Leach | |
| 890-5758-22 | E - HA 02 | Soluble | Solid | DI Leach | |
| 890-5758-23 | S - HA 01 | Soluble | Solid | DI Leach | |
| 890-5758-24 | S - HA 02 | Soluble | Solid | DI Leach | |
| 890-5758-25 | DS - LO - 01 | Soluble | Solid | DI Leach | |
| 890-5758-26 | DS - LO - 02 | Soluble | Solid | DI Leach | |
| 890-5758-27 | DS - LO - 06 | Soluble | Solid | DI Leach | |
| MB 880-68754/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-68754/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-68754/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-5758-8 MS | FS - 39 | Soluble | Solid | DI Leach | |
| 890-5758-8 MSD | FS - 39 | Soluble | Solid | DI Leach | |
| 890-5758-18 MS | V 5.2 | Soluble | Solid | DI Leach | |
| 890-5758-18 MSD | V 5.2 | Soluble | Solid | DI Leach | |

### Leach Batch: 68755

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-28 | DS - LO - 03 | Soluble | Solid | DI Leach | |
| 890-5758-29 | DS - LO - 04 | Soluble | Solid | DI Leach | |
| 890-5758-30 | DS - LO - 05 | Soluble | Solid | DI Leach | |
| MB 880-68755/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-68755/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-68755/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-5758-28 MS | DS - LO - 03 | Soluble | Solid | DI Leach | |
| 890-5758-28 MSD | DS - LO - 03 | Soluble | Solid | DI Leach | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## HPLC/IC

### Analysis Batch: 68777

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-1 | FS - 32 | Soluble | Solid | 300.0 | 68753 |
| 890-5758-2 | FS - 33 | Soluble | Solid | 300.0 | 68753 |
| 890-5758-3 | FS - 34 | Soluble | Solid | 300.0 | 68753 |
| 890-5758-4 | FS - 35 | Soluble | Solid | 300.0 | 68753 |
| 890-5758-5 | FS - 36 | Soluble | Solid | 300.0 | 68753 |
| 890-5758-6 | FS - 37 | Soluble | Solid | 300.0 | 68753 |
| 890-5758-7 | FS - 38 | Soluble | Solid | 300.0 | 68753 |
| MB 880-68753/1-A | Method Blank | Soluble | Solid | 300.0 | 68753 |
| LCS 880-68753/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 68753 |
| LCSD 880-68753/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 68753 |

### Analysis Batch: 68793

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-8 | FS - 39 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-9 | FS - 40 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-10 | FS - 41 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-11 | FS - 42 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-12 | FS - 43 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-13 | FS - 44 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-14 | FS - 45 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-15 | W - HA 02 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-16 | W - HA 01 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-17 | V 3.2 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-18 | V 5.2 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-19 | V 4.2 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-20 | V 6.2 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-21 | E - HA 01 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-22 | E - HA 02 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-23 | S - HA 01 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-24 | S - HA 02 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-25 | DS - LO - 01 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-26 | DS - LO - 02 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-27 | DS - LO - 06 | Soluble | Solid | 300.0 | 68754 |
| MB 880-68754/1-A | Method Blank | Soluble | Solid | 300.0 | 68754 |
| LCS 880-68754/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 68754 |
| LCSD 880-68754/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 68754 |
| 890-5758-8 MS | FS - 39 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-8 MSD | FS - 39 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-18 MS | V 5.2 | Soluble | Solid | 300.0 | 68754 |
| 890-5758-18 MSD | V 5.2 | Soluble | Solid | 300.0 | 68754 |

### Analysis Batch: 68795

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5758-28 | DS - LO - 03 | Soluble | Solid | 300.0 | 68755 |
| 890-5758-29 | DS - LO - 04 | Soluble | Solid | 300.0 | 68755 |
| 890-5758-30 | DS - LO - 05 | Soluble | Solid | 300.0 | 68755 |
| MB 880-68755/1-A | Method Blank | Soluble | Solid | 300.0 | 68755 |
| LCS 880-68755/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 68755 |
| LCSD 880-68755/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 68755 |
| 890-5758-28 MS | DS - LO - 03 | Soluble | Solid | 300.0 | 68755 |
| 890-5758-28 MSD | DS - LO - 03 | Soluble | Solid | 300.0 | 68755 |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 32
**Date Collected: 12/06/23 01:17**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-1
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 12:18 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 12:18 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 11:52 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.95 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 11:52 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 68753 | 12/11/23 08:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68777 | 12/11/23 13:10 | CH | EET MID |

## Client Sample ID: FS - 33
**Date Collected: 12/06/23 01:20**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-2
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 12:44 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 12:44 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 12:58 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 12:58 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 68753 | 12/11/23 08:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68777 | 12/11/23 13:18 | CH | EET MID |

## Client Sample ID: FS - 34
**Date Collected: 12/06/23 01:23**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-3
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 13:10 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 13:10 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 13:20 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 13:20 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 68753 | 12/11/23 08:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68777 | 12/11/23 13:25 | CH | EET MID |

## Client Sample ID: FS - 35
**Date Collected: 12/06/23 01:25**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-4
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 13:37 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 13:37 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 35

**Date Collected: 12/06/23 01:25**
**Date Received: 12/08/23 09:30**

**Lab Sample ID: 890-5758-4**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 13:42 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.09 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 13:42 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 68753 | 12/11/23 08:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68777 | 12/11/23 13:33 | CH | EET MID |

## Client Sample ID: FS - 36

**Date Collected: 12/06/23 01:27**
**Date Received: 12/08/23 09:30**

**Lab Sample ID: 890-5758-5**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 14:03 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 14:03 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 14:04 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 14:04 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 68753 | 12/11/23 08:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68777 | 12/11/23 13:41 | CH | EET MID |

## Client Sample ID: FS - 37

**Date Collected: 12/06/23 04:21**
**Date Received: 12/08/23 09:30**

**Lab Sample ID: 890-5758-6**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 14:29 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 14:29 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 14:26 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.94 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 14:26 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5 g | 50 mL | 68753 | 12/11/23 08:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68777 | 12/11/23 13:49 | CH | EET MID |

## Client Sample ID: FS - 38

**Date Collected: 12/06/23 04:23**
**Date Received: 12/08/23 09:30**

**Lab Sample ID: 890-5758-7**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 14:56 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 14:56 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 14:48 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.91 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 14:48 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 38
**Date Collected: 12/06/23 04:23**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-7
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 68753 | 12/11/23 08:00 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68777 | 12/11/23 13:57 | CH | EET MID |

## Client Sample ID: FS - 39
**Date Collected: 12/06/23 04:25**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-8
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 15:22 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 15:22 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 15:10 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 15:10 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 10:40 | CH | EET MID |

## Client Sample ID: FS - 40
**Date Collected: 12/06/23 04:28**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-9
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 15:48 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 15:48 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 15:32 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 15:32 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 10:57 | CH | EET MID |

## Client Sample ID: FS - 41
**Date Collected: 12/06/23 04:31**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-10
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 16:14 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 16:14 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 15:54 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 15:54 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 11:02 | CH | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 42

**Date Collected: 12/06/23 04:34**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-11

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 17:58 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 17:58 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 16:38 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 16:38 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 11:08 | CH | EET MID |

## Client Sample ID: FS - 43

**Date Collected: 12/06/23 04:37**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-12

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 18:24 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 18:24 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 17:00 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.98 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 17:00 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 11:14 | CH | EET MID |

## Client Sample ID: FS - 44

**Date Collected: 12/06/23 04:39**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-13

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.97 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 18:50 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 18:50 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 17:22 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.92 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 17:22 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 11:31 | CH | EET MID |

## Client Sample ID: FS - 45

**Date Collected: 12/06/23 04:41**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-14

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 19:17 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 19:17 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: FS - 45

**Date Collected: 12/06/23 04:41**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-14

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 17:43 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 17:43 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 11:36 | CH | EET MID |

## Client Sample ID: W - HA 02

**Date Collected: 12/06/23 08:59**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-15

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 19:43 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 19:43 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 18:05 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.07 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 18:05 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 11:42 | CH | EET MID |

## Client Sample ID: W - HA 01

**Date Collected: 12/06/23 09:08**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-16

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 20:09 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 20:09 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 18:27 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.08 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 18:27 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 11:48 | CH | EET MID |

## Client Sample ID: V 3.2

**Date Collected: 12/06/23 09:25**
**Date Received: 12/08/23 09:30**

## Lab Sample ID: 890-5758-17

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 20:35 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 20:35 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 18:48 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 18:48 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: V 3.2

**Date Collected: 12/06/23 09:25**
**Date Received: 12/08/23 09:30**

**Lab Sample ID: 890-5758-17**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 11:53 | CH | EET MID |

## Client Sample ID: V 5.2

**Date Collected: 12/06/23 10:58**
**Date Received: 12/08/23 09:30**

**Lab Sample ID: 890-5758-18**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 21:01 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 21:01 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 19:10 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 19:10 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 11:59 | CH | EET MID |

## Client Sample ID: V 4.2

**Date Collected: 12/06/23 11:30**
**Date Received: 12/08/23 09:30**

**Lab Sample ID: 890-5758-19**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 21:27 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 21:27 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 19:32 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.95 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 19:32 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 12:16 | CH | EET MID |

## Client Sample ID: V 6.2

**Date Collected: 12/06/23 11:10**
**Date Received: 12/08/23 09:30**

**Lab Sample ID: 890-5758-20**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68778 | 12/11/23 10:04 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68756 | 12/11/23 21:53 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 21:53 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 19:54 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 68761 | 12/11/23 09:42 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68745 | 12/11/23 19:54 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 12:21 | CH | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: E - HA 01

**Lab Sample ID: 890-5758-21**

**Date Collected: 12/06/23 10:09**
**Matrix: Solid**
**Date Received: 12/08/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68791 | 12/11/23 10:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68757 | 12/11/23 14:57 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 14:57 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 11:52 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 68762 | 12/11/23 09:44 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68747 | 12/11/23 11:52 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 12:38 | CH | EET MID |

## Client Sample ID: E - HA 02

**Lab Sample ID: 890-5758-22**

**Date Collected: 12/06/23 10:27**
**Matrix: Solid**
**Date Received: 12/08/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 68791 | 12/11/23 10:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68757 | 12/11/23 12:13 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 12:13 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 12:58 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 68762 | 12/11/23 09:44 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68747 | 12/11/23 12:58 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 12:44 | CH | EET MID |

## Client Sample ID: S - HA 01

**Lab Sample ID: 890-5758-23**

**Date Collected: 12/06/23 11:40**
**Matrix: Solid**
**Date Received: 12/08/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68791 | 12/11/23 10:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68757 | 12/11/23 12:34 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 12:34 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 13:20 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.05 g | 10 mL | 68762 | 12/11/23 09:44 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68747 | 12/11/23 13:20 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 12:50 | CH | EET MID |

## Client Sample ID: S - HA 02

**Lab Sample ID: 890-5758-24**

**Date Collected: 12/06/23 11:46**
**Matrix: Solid**
**Date Received: 12/08/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 68791 | 12/11/23 10:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68757 | 12/11/23 12:54 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 12:54 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: S - HA 02

**Lab Sample ID: 890-5758-24**
**Matrix: Solid**
**Date Collected: 12/06/23 11:46**
**Date Received: 12/08/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 13:42 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 68762 | 12/11/23 09:44 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68747 | 12/11/23 13:42 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 12:55 | CH | EET MID |

## Client Sample ID: DS - LO - 01

**Lab Sample ID: 890-5758-25**
**Matrix: Solid**
**Date Collected: 12/06/23 12:41**
**Date Received: 12/08/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 68791 | 12/11/23 10:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68757 | 12/11/23 13:15 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 13:15 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 14:04 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.97 g | 10 mL | 68762 | 12/11/23 09:44 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68747 | 12/11/23 14:04 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 13:01 | CH | EET MID |

## Client Sample ID: DS - LO - 02

**Lab Sample ID: 890-5758-26**
**Matrix: Solid**
**Date Collected: 12/06/23 12:44**
**Date Received: 12/08/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68791 | 12/11/23 10:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68757 | 12/11/23 13:35 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 13:35 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 14:26 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.92 g | 10 mL | 68762 | 12/11/23 09:44 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68747 | 12/11/23 14:26 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 13:07 | CH | EET MID |

## Client Sample ID: DS - LO - 06

**Lab Sample ID: 890-5758-27**
**Matrix: Solid**
**Date Collected: 12/06/23 12:46**
**Date Received: 12/08/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68791 | 12/11/23 10:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68757 | 12/11/23 13:56 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 13:56 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 14:48 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 68762 | 12/11/23 09:44 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68747 | 12/11/23 14:48 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Client Sample ID: DS - LO - 06

**Date Collected: 12/06/23 12:46**
**Date Received: 12/08/23 09:30**

**Lab Sample ID: 890-5758-27**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 68754 | 12/11/23 08:06 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68793 | 12/11/23 13:12 | CH | EET MID |

## Client Sample ID: DS - LO - 03

**Date Collected: 12/06/23 12:46**
**Date Received: 12/08/23 09:30**

**Lab Sample ID: 890-5758-28**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 68791 | 12/11/23 10:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68757 | 12/11/23 14:16 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 14:16 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 15:10 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 68762 | 12/11/23 09:44 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68747 | 12/11/23 15:10 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 68755 | 12/11/23 08:10 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68795 | 12/11/23 11:19 | CH | EET MID |

## Client Sample ID: DS - LO - 04

**Date Collected: 12/06/23 12:48**
**Date Received: 12/08/23 09:30**

**Lab Sample ID: 890-5758-29**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 68791 | 12/11/23 10:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68757 | 12/11/23 14:37 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 14:37 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 15:32 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 68762 | 12/11/23 09:44 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68747 | 12/11/23 15:32 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 68755 | 12/11/23 08:10 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68795 | 12/11/23 11:38 | CH | EET MID |

## Client Sample ID: DS - LO - 05

**Date Collected: 12/06/23 12:50**
**Date Received: 12/08/23 09:30**

**Lab Sample ID: 890-5758-30**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.98 g | 5 mL | 68791 | 12/11/23 10:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68757 | 12/11/23 16:21 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68931 | 12/11/23 16:21 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68924 | 12/11/23 15:54 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 68762 | 12/11/23 09:44 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68747 | 12/11/23 15:54 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 68755 | 12/11/23 08:10 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | 50 mL | 50 mL | 68795 | 12/11/23 11:45 | CH | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

## Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Texas | NELAP | T104704400-23-26 | 06-30-24 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 8015 NM | | Solid | Total TPH |
| Total BTEX | | Solid | Total BTEX |

# Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (GC) | SW846 | EET MID |
| Total BTEX | Total BTEX Calculation | TAL SOP | EET MID |
| 8015 NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 8015B NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 300.0 | Anions, Ion Chromatography | EPA | EET MID |
| 5035 | Closed System Purge and Trap | SW846 | EET MID |
| 8015NM Prep | Microextraction | SW846 | EET MID |
| DI Leach | Deionized Water Leaching Procedure | ASTM | EET MID |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5758-1
SDG: KH237051

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Depth |
|---|---|---|---|---|---|
| 890-5758-1 | FS - 32 | Solid | 12/06/23 01:17 | 12/08/23 09:30 | 3' |
| 890-5758-2 | FS - 33 | Solid | 12/06/23 01:20 | 12/08/23 09:30 | 3' |
| 890-5758-3 | FS - 34 | Solid | 12/06/23 01:23 | 12/08/23 09:30 | 3' |
| 890-5758-4 | FS - 35 | Solid | 12/06/23 01:25 | 12/08/23 09:30 | 3' |
| 890-5758-5 | FS - 36 | Solid | 12/06/23 01:27 | 12/08/23 09:30 | 3' |
| 890-5758-6 | FS - 37 | Solid | 12/06/23 04:21 | 12/08/23 09:30 | 3' |
| 890-5758-7 | FS - 38 | Solid | 12/06/23 04:23 | 12/08/23 09:30 | 3' |
| 890-5758-8 | FS - 39 | Solid | 12/06/23 04:25 | 12/08/23 09:30 | 3' |
| 890-5758-9 | FS - 40 | Solid | 12/06/23 04:28 | 12/08/23 09:30 | 3' |
| 890-5758-10 | FS - 41 | Solid | 12/06/23 04:31 | 12/08/23 09:30 | 3' |
| 890-5758-11 | FS - 42 | Solid | 12/06/23 04:34 | 12/08/23 09:30 | 3' |
| 890-5758-12 | FS - 43 | Solid | 12/06/23 04:37 | 12/08/23 09:30 | 3' |
| 890-5758-13 | FS - 44 | Solid | 12/06/23 04:39 | 12/08/23 09:30 | 3' |
| 890-5758-14 | FS - 45 | Solid | 12/06/23 04:41 | 12/08/23 09:30 | 3' |
| 890-5758-15 | W - HA 02 | Solid | 12/06/23 08:59 | 12/08/23 09:30 | 1' |
| 890-5758-16 | W - HA 01 | Solid | 12/06/23 09:08 | 12/08/23 09:30 | 1' |
| 890-5758-17 | V 3.2 | Solid | 12/06/23 09:25 | 12/08/23 09:30 | 4' |
| 890-5758-18 | V 5.2 | Solid | 12/06/23 10:58 | 12/08/23 09:30 | 4' |
| 890-5758-19 | V 4.2 | Solid | 12/06/23 11:30 | 12/08/23 09:30 | 4' |
| 890-5758-20 | V 6.2 | Solid | 12/06/23 11:10 | 12/08/23 09:30 | 4' |
| 890-5758-21 | E - HA 01 | Solid | 12/06/23 10:09 | 12/08/23 09:30 | 1' |
| 890-5758-22 | E - HA 02 | Solid | 12/06/23 10:27 | 12/08/23 09:30 | 1' |
| 890-5758-23 | S - HA 01 | Solid | 12/06/23 11:40 | 12/08/23 09:30 | 1' |
| 890-5758-24 | S - HA 02 | Solid | 12/06/23 11:46 | 12/08/23 09:30 | 1' |
| 890-5758-25 | DS - LO - 01 | Solid | 12/06/23 12:41 | 12/08/23 09:30 | 1' |
| 890-5758-26 | DS - LO - 02 | Solid | 12/06/23 12:44 | 12/08/23 09:30 | 1' |
| 890-5758-27 | DS - LO - 06 | Solid | 12/06/23 12:46 | 12/08/23 09:30 | 1' |
| 890-5758-28 | DS - LO - 03 | Solid | 12/06/23 12:46 | 12/08/23 09:30 | 1' |
| 890-5758-29 | DS - LO - 04 | Solid | 12/06/23 12:48 | 12/08/23 09:30 | 1' |
| 890-5758-30 | DS - LO - 05 | Solid | 12/06/23 12:50 | 12/08/23 09:30 | 1' |

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

eurofins | Environment Testing Xenco

# Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

890-5758 Chain of Custody

Page 1 of

| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (if different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☑ Rush |
| Project Number: | KH237051 | Due Date: | 48hour |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | Yes No |
| Samples Received Intact: | (Yes) No | Thermometer ID: | TNM001 |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes No (N/A) | Temperature Reading: | 1.4 |
| Total Containers: | | Corrected Temperature: | 1.2 |

**Preservative Codes**

None: NO; DI Water: $H_2O$; Cool: Cool; MeOH: Me; HCL: HC; $HNO_3$: HN; $H_2SO_4$: $H_2$; NaOH: Na; $H_3PO_4$: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| FS-32 | Soil | 12-06-23 | 1:17 | 3 | Comp | 1 | X | X | X | |
| FS-33 | Soil | | 1:20 | 3 | | 1 | X | X | X | |
| FS-34 | Soil | | 1:23 | 3 | | 1 | X | X | X | |
| FS-35 | Soil | | 1:25 | 3 | | 1 | X | X | X | |
| FS-36 | Soil | | 1:27 | 3 | | 1 | X | X | X | |
| FS-37 | Soil | | 4:21 | 3 | | 1 | X | X | X | |
| FS-38 | Soil | | 4:23 | 3 | | 1 | X | X | X | |
| FS-39 | Soil | | 4:25 | 3 | | 1 | X | X | X | |
| FS-40 | Soil | | 4:28 | 3 | | 1 | X | X | X | |
| FS-41 | Soil | | 4:31 | 3 | | | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| | | 12/18 930a | 4 | | |
| | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

12/12/2023

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Received by OCD: 2/26/2024 10:02:59 AM

# Chain of Custody

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EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 2 of _____

| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (If different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☑ Rush |
| Project Number: | KH237051 | Due Date: | 48 hour |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | | |
|---|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No | |
| Samples Received Intact: | Yes No | Thermometer ID: | | |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | -0.2 | |
| Sample Custody Seals: | Yes No N/A | Temperature Reading: | | |
| Total Containers: | | Corrected Temperature: | | |

**Preservative Codes**

None: NO | DI Water: $H_2O$
Cool: Cool | MeOH: Me
HCL: HC | $HNO_3$: HN
$H_2SO_4$: $H_2$ | NaOH: Na
$H_3PO_4$: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| FS-42 | Soil | 12-06-23 | 4:34 | 3 | Comp | 1 | X | X | X | |
| FS-43 | Soil | " | 4:37 | 3 | " | 1 | X | X | X | |
| FS-44 | Soil | " | 4:39 | 3 | " | 1 | X | X | X | |
| FS-45 | Soil | " | 4:41 | 3 | " | 1 | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | 1 | 12/8 9:30 | 2 | | |
| | | | 4 | | |
| | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

12/12/2023

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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (if different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☒ Rush |
| Project Number: | KH237051 | Due Date: | 48 hr |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Samples Received Intact: | Yes No | Thermometer ID: | |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes No N/A | Temperature Reading: | 1.4 |
| Total Containers: | | Corrected Temperature: | 1.2 |

**Preservative Codes**

None: NO; DI Water: $H_2O$; Cool: Cool; MeOH: Me; HCL: HC; $HNO_3$: HN; $H_2SO_4$: $H_2$; NaOH: Na; $H_3PO_4$: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Pres. Code | Parameters: Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| W-HA 02 | Soil | 12/6 | 8:59 | 1' | G | 1 | | X | X | X | |
| W-HA 01 | Soil | | 9:08 | 1' | G | 1 | | X | X | X | |
| V @ 3.2 | Soil | | 9:25 | 4' | G | 1 | | X | X | X | |
| V 5.2 | Soil | | 10:58 | 4' | G | 1 | | X | X | X | |
| V @ 4.2 | Soil | | 11:30 | 4' | G | 1 | | X | X | X | |
| V 6.2 | Soil | | 11:10 | 4' | G | 1 | | X | X | X | |
| E-HA 01 | Soil | | 10:09 | 1' | G | 1 | | X | X | X | |
| E-HA 02 | Soil | | 10:27 | 1' | G | 1 | | X | X | X | |
| S-HA 01 | Soil | | 11:40 | 1' | G | 1 | | X | X | X | |
| S-HA 02 | Soil | | 11:46 | 1' | G | 1 | | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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| | Relinquished by: (Signature) | Received by: (Signature) | Date/Time | | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|---|---|
| 1 | [signature] | [signature] | 12-06-23 - 12:31 | 2 | [signature] | 1218 9BC | |
| | | | | 4 | | | |
| | | | | 6 | | | |

Revised Date: 08/25/2020 Rev. 2020.2

Page 64 of 68
12/12/2023
Page 180 of 408

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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 4 of _____

| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (if different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☑ Rush |
| Project Number: | KH237051 | Due Date: | 48 hour |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Samples Received Intact: | ~~Yes~~ No | Thermometer ID: | |
| Cooler Custody Seals: | Yes No ~~N/A~~ | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes No ~~N/A~~ | Temperature Reading: | 1.4 |
| Total Containers: | | Corrected Temperature: | 1.2 |

**Preservative Codes**

None: NO | DI Water: $H_2O$
Cool: Cool | MeOH: Me
HCL: HC | $HNO_3$: HN
$H_2SO_4$: $H_2$ | NaOH: Na
$H_3PO_4$: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| DS-Lo-01 | Soil | 12-6-23 | ~~12-6-23~~ 12:41 | 1 | G | 1 | X | X | X | Time: 12:41 |
| DS-Lo-02 | Soil | " | 12:44 | 1 | G | 1 | X | X | X | |
| DS-Lo-06 | Soil | " | 12:46 | 1 | G | 1 | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | | | 2 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

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Work Order No: _____

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| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (if different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 Email: | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☑ Rush |
| Project Number: | KH237051 | Due Date: | 48 hour |
| Project Location: | | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Samples Received Intact: | Yes No | Thermometer ID: | |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes No N/A | Temperature Reading: | 1.4 |
| Total Containers: | | Corrected Temperature: | 1.2 |

**Preservative Codes**

None: NO; DI Water: $H_2O$
Cool: Cool; MeOH: Me
HCL: HC; $HNO_3$: HN
$H_2SO_4$: $H_2$; NaOH: Na
$H_3PO_4$: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Hold | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~DS-Lo-01~~ | Soil | 12-6-23 | | | | | | | | X | |
| ~~DS-Lo-02~~ | Soil | " | | | | | | | | X | |
| ~~DS-Lo-06~~ | Soil | " | | | | | | | | X | |
| | Soil | | | | | | | | | X | |
| DS-Lo-03 | Soil | 12-6-23 | 12:46 | 1' | G | 1 | | | | X | |
| DS-Lo-04 | Soil | " | 12:48 | 1' | G | 1 | | | | X | |
| DS-Lo-05 | Soil | " | 12:50 | 1' | G | 1 | | | | X | |
| | Soil | | | | | | | | | X | |
| | Soil | | | | | | | | | X | |
| | Soil | | | | | | | | | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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| | Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|---|
| 1 | | | 12/8 9:34 | | | |
| 3 | | | | 4 | | |
| 5 | | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 890-5758-1
SDG Number: KH237051

**Login Number: 5758**
**List Number: 1**
**Creator: Bruns, Shannon**

**List Source: Eurofins Carlsbad**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | N/A | Refer to Job Narrative for details. |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 890-5758-1
SDG Number: KH237051

**Login Number: 5758**
**List Number: 2**
**Creator: Rodriguez, Leticia**

**List Source: Eurofins Midland**
**List Creation: 12/11/23 08:54 AM**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Joseph Guesnier
Terracon Consulting Eng & Scientists
2526 W Pierce Street
Carlsbad, New Mexico 88220

Generated 12/13/2023 7:03:38 AM

## JOB DESCRIPTION

CURLY SWD
KH 237051

## JOB NUMBER

890-5732-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.



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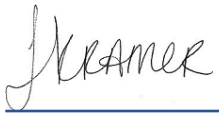
# Eurofins Carlsbad

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



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Authorized for release by
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# Eurofins Carlsbad

## Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD,and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs
· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

Warranties, Terms, and Conditions
· Analyses for Field Parameters are performed by Eurofins Philadelphia field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification # 02015.
VL = field staff performs tests under NJ State certification # 06005.
WG = field staff performs tests under NJ State certification # PA001, PA State certification # 48-01334.
H = field staff performs tests under NJ NELAP certification # PA093, PA NELAP certification # 46-05499.

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

· Reported results related only to the samples as tested. Eurofins Philadelphia is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· Eurofins Philadelphia is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by Eurofins Philadelphia : Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).




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# Table of Contents

Cover Page . . . . . 1
Table of Contents . . . . . 4
Definitions/Glossary . . . . . 5
Case Narrative . . . . . 6
Client Sample Results . . . . . 8
Surrogate Summary . . . . . 35
QC Sample Results . . . . . 37
QC Association Summary . . . . . 46
Lab Chronicle . . . . . 54
Certification Summary . . . . . 64
Method Summary . . . . . 65
Sample Summary . . . . . 66
Chain of Custody . . . . . 67
Receipt Checklists . . . . . 71



Released to Imaging: 5/3/2024 11:19:07 AM

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Qualifiers

### GC VOA

| Qualifier | Qualifier Description |
|---|---|
| S1- | Surrogate recovery exceeds control limits, low biased. |
| S1+ | Surrogate recovery exceeds control limits, high biased. |
| U | Indicates the analyte was analyzed for but not detected. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |
| S1+ | Surrogate recovery exceeds control limits, high biased. |
| U | Indicates the analyte was analyzed for but not detected. |

### HPLC/IC

| Qualifier | Qualifier Description |
|---|---|
| U | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Job ID: 890-5732-1

**Laboratory: Eurofins Carlsbad**

**Narrative**

**Job Narrative**
**890-5732-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**
The samples were received on 12/6/2023 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -0.4°C

**Receipt Exceptions**
The following samples were received and analyzed from an unpreserved bulk soil jar: FS - 10 (890-5732-1), FS - 11 (890-5732-2), FS - 12 (890-5732-3), FS - 13 (890-5732-4), FS - 14 (890-5732-5), FS - 15 (890-5732-6), FS - 16 (890-5732-7), FS - 17 (890-5732-8), FS - 18 (890-5732-9), FS - 22 (890-5732-10), E - SW - 05 (890-5732-11), W - SW - 05 (890-5732-12), FS - 19 (890-5732-13), FS - 20 (890-5732-14), FS - 21 (890-5732-15), FS - 23 (890-5732-16), FS - 24 (890-5732-17), S - SW - 03 (890-5732-18), FS - 25 (890-5732-19), FS - 26 (890-5732-20), FS - 27 (890-5732-21), FS - 28 (890-5732-22), E - SW - 04 (890-5732-23), E - SW - 06 (890-5732-24), W - SW - 04 (890-5732-25), W - SW - 06 (890-5732-26), FS - 29 (890-5732-27), FS - 30 (890-5732-28), FS - 31 (890-5732-29), N - SW - 02 (890-5732-30), N - SW - 03 (890-5732-31), S - SW - 04 (890-5732-32) and S - SW - 05 (890-5732-33).

**GC VOA**
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-68615 and analytical batch 880-68654 was outside the upper control limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-68391 and 880-68687 and analytical batch 880-68741 was outside the control limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-68741 recovered under the lower control limit for Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

Method 8021B: Surrogate recovery for the following sample was outside control limits: S - SW - 04 (890-5732-32). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-68612 and analytical batch 880-68556 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS - 10 (890-5732-1), FS - 14 (890-5732-5), FS - 16 (890-5732-7), FS - 17 (890-5732-8), FS - 18 (890-5732-9), FS - 22 (890-5732-10), E - SW - 05 (890-5732-11), FS - 19 (890-5732-13), FS - 21 (890-5732-15), FS - 23 (890-5732-16), FS - 24 (890-5732-17), FS - 26 (890-5732-20), (890-5732-A-1-E MS) and (890-5732-A-1-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-68612 and analytical

# Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Job ID: 890-5732-1 (Continued)

### Laboratory: Eurofins Carlsbad (Continued)

batch 880-68556 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-68613 and analytical batch 880-68555 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-68555/58). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 10

**Date Collected: 12/05/23 08:20**
**Date Received: 12/06/23 10:00**
**Sample Depth: 2'**

**Lab Sample ID: 890-5732-1**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:14 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:14 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:14 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:14 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:14 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *80* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 13:14* | *1* |
| *1,4-Difluorobenzene (Surr)* | *111* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 13:14* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/08/23 13:14 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.5 | U | 49.5 | | mg/Kg | | | 12/07/23 20:05 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.5 | U | 49.5 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 20:05 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.5 | U F1 | 49.5 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 20:05 | 1 |
| OII Range Organics (Over C28-C36) | <49.5 | U | 49.5 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 20:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *142* | *S1+* | *70 - 130* | *12/07/23 14:13* | *12/07/23 20:05* | *1* |
| *o-Terphenyl* | *118* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 20:05* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **47.3** | | 5.05 | | mg/Kg | | | 12/08/23 12:15 | 1 |

## Client Sample ID: FS - 11

**Date Collected: 12/05/23 08:22**
**Date Received: 12/06/23 10:00**
**Sample Depth: 2'**

**Lab Sample ID: 890-5732-2**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:34 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:34 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:34 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:34 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:34 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *89* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 13:34* | *1* |

Eurofins Carlsbad

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 11

**Date Collected: 12/05/23 08:22**
**Date Received: 12/06/23 10:00**
**Sample Depth: 2'**

## Lab Sample ID: 890-5732-2

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *114* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 13:34* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/08/23 13:34 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.3 | U | 50.3 | | mg/Kg | | | 12/07/23 21:10 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 50.3 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 21:10 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U | 50.3 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 21:10 | 1 |
| OII Range Organics (Over C28-C36) | <50.3 | U | 50.3 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 21:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *123* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 21:10* | *1* |
| *o-Terphenyl* | *103* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 21:10* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **21.2** | | 5.05 | | mg/Kg | | | 12/08/23 12:35 | 1 |

## Client Sample ID: FS - 12

**Date Collected: 12/05/23 08:24**
**Date Received: 12/06/23 10:00**
**Sample Depth: 2'**

## Lab Sample ID: 890-5732-3

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:55 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:55 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:55 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:55 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:55 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 13:55 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *103* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 13:55* | *1* |
| *1,4-Difluorobenzene (Surr)* | *109* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 13:55* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 13:55 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/07/23 21:31 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 12

**Lab Sample ID: 890-5732-3**
**Matrix: Solid**
**Date Collected: 12/05/23 08:24**
**Date Received: 12/06/23 10:00**
**Sample Depth: 2'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 21:31 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 21:31 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 21:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *126* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 21:31* | *1* |
| *o-Terphenyl* | *107* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 21:31* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **140** | | 5.05 | | mg/Kg | | | 12/08/23 12:42 | 1 |

## Client Sample ID: FS - 13

**Lab Sample ID: 890-5732-4**
**Matrix: Solid**
**Date Collected: 12/05/23 08:26**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3' - '**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:15 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:15 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:15 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:15 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:15 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *101* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 14:15* | *1* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 14:15* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/08/23 14:15 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/07/23 21:53 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 21:53 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 21:53 | 1 |
| OII Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 21:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *130* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 21:53* | *1* |
| *o-Terphenyl* | *109* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 21:53* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 13

**Lab Sample ID: 890-5732-4**
**Matrix: Solid**
**Date Collected: 12/05/23 08:26**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3' - '**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 70.0 | | 5.05 | | mg/Kg | | | 12/08/23 12:48 | 1 |

## Client Sample ID: FS - 14

**Lab Sample ID: 890-5732-5**
**Matrix: Solid**
**Date Collected: 12/05/23 08:27**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:36 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:36 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:36 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:36 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:36 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:36 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 14:36* | *1* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 14:36* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/08/23 14:36 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.1 | U | 50.1 | | mg/Kg | | | 12/07/23 22:15 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.1 | U | 50.1 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 22:15 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.1 | U | 50.1 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 22:15 | 1 |
| OII Range Organics (Over C28-C36) | <50.1 | U | 50.1 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 22:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *137* | *S1+* | *70 - 130* | *12/07/23 14:13* | *12/07/23 22:15* | *1* |
| *o-Terphenyl* | *115* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 22:15* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 70.8 | | 5.02 | | mg/Kg | | | 12/08/23 12:55 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 15

**Date Collected: 12/05/23 08:28**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

**Lab Sample ID: 890-5732-6**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:56 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:56 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:56 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:56 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:56 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 14:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 14:56* | *1* |
| *1,4-Difluorobenzene (Surr)* | *113* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 14:56* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/08/23 14:56 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/07/23 22:37 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 22:37 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 22:37 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 22:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *125* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 22:37* | *1* |
| *o-Terphenyl* | *104* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 22:37* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **64.3** | | 5.01 | | mg/Kg | | | 12/08/23 13:14 | 1 |

## Client Sample ID: FS - 16

**Date Collected: 12/05/23 10:07**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

**Lab Sample ID: 890-5732-7**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:17 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:17 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:17 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:17 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:17 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:17 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 15:17* | *1* |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 16

**Date Collected: 12/05/23 10:07**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

**Lab Sample ID: 890-5732-7**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 15:17* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 15:17 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/07/23 22:58 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 22:58 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 22:58 | 1 |
| OII Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 22:58 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *150* | *S1+* | *70 - 130* | *12/07/23 14:13* | *12/07/23 22:58* | *1* |
| *o-Terphenyl* | *124* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 22:58* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **85.2** | | 5.02 | | mg/Kg | | | 12/08/23 13:21 | 1 |

## Client Sample ID: FS - 17

**Date Collected: 12/05/23 10:09**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

**Lab Sample ID: 890-5732-8**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:37 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:37 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:37 | 1 |
| m-Xylene & p-Xylene | <0.00397 | U | 0.00397 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:37 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:37 | 1 |
| Xylenes, Total | <0.00397 | U | 0.00397 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 15:37* | *1* |
| *1,4-Difluorobenzene (Surr)* | *114* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 15:37* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00397 | U | 0.00397 | | mg/Kg | | | 12/08/23 15:37 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | | 12/07/23 23:20 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 17

**Lab Sample ID: 890-5732-8**
**Matrix: Solid**
**Date Collected: 12/05/23 10:09**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 23:20 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 23:20 | 1 |
| OII Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 23:20 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *131* | *S1+* | *70 - 130* | *12/07/23 14:13* | *12/07/23 23:20* | *1* |
| *o-Terphenyl* | *111* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 23:20* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **5.82** | | 4.99 | | mg/Kg | | | 12/08/23 13:27 | 1 |

## Client Sample ID: FS - 18

**Lab Sample ID: 890-5732-9**
**Matrix: Solid**
**Date Collected: 12/05/23 10:11**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:58 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:58 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:58 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:58 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:58 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 15:58 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 15:58* | *1* |
| *1,4-Difluorobenzene (Surr)* | *114* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 15:58* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/08/23 15:58 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/07/23 23:41 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 23:41 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 23:41 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:13 | 12/07/23 23:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *138* | *S1+* | *70 - 130* | *12/07/23 14:13* | *12/07/23 23:41* | *1* |
| *o-Terphenyl* | *113* | | *70 - 130* | *12/07/23 14:13* | *12/07/23 23:41* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 18

**Lab Sample ID: 890-5732-9**
**Matrix: Solid**

**Date Collected: 12/05/23 10:11**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 45.4 | | 4.95 | | mg/Kg | | | 12/08/23 13:34 | 1 |

## Client Sample ID: FS - 22

**Lab Sample ID: 890-5732-10**
**Matrix: Solid**

**Date Collected: 12/05/23 10:41**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 16:18 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 16:18 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 16:18 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 16:18 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 16:18 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 16:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *92* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 16:18* | *1* |
| *1,4-Difluorobenzene (Surr)* | *111* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 16:18* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 16:18 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.2 | U | 50.2 | | mg/Kg | | | 12/08/23 00:03 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.2 | U | 50.2 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 00:03 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.2 | U | 50.2 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 00:03 | 1 |
| OII Range Organics (Over C28-C36) | <50.2 | U | 50.2 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 00:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *148* | *S1+* | *70 - 130* | *12/07/23 14:13* | *12/08/23 00:03* | *1* |
| *o-Terphenyl* | *122* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 00:03* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 49.7 | | 5.04 | | mg/Kg | | | 12/08/23 13:40 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: E - SW - 05

**Lab Sample ID: 890-5732-11**
**Matrix: Solid**
**Date Collected: 12/05/23 10:47**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:09 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:09 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:09 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:09 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:09 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *79* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 18:09* | *1* |
| *1,4-Difluorobenzene (Surr)* | *102* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 18:09* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/08/23 18:09 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/08/23 00:45 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 00:45 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 00:45 | 1 |
| OII Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 00:45 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *145* | *S1+* | *70 - 130* | *12/07/23 14:13* | *12/08/23 00:45* | *1* |
| *o-Terphenyl* | *125* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 00:45* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **36.2** | | 5.02 | | mg/Kg | | | 12/08/23 13:47 | 1 |

## Client Sample ID: W - SW - 05

**Lab Sample ID: 890-5732-12**
**Matrix: Solid**
**Date Collected: 12/05/23 10:52**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:30 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:30 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:30 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:30 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:30 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:30 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *92* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 18:30* | *1* |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: W - SW - 05

**Lab Sample ID: 890-5732-12**
**Matrix: Solid**

**Date Collected: 12/05/23 10:52**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *112* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 18:30* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/08/23 18:30 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/08/23 01:07 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 01:07 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 01:07 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 01:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *129* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 01:07* | *1* |
| *o-Terphenyl* | *109* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 01:07* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **17.5** | | 4.97 | | mg/Kg | | | 12/08/23 14:07 | 1 |

## Client Sample ID: FS - 19

**Lab Sample ID: 890-5732-13**
**Matrix: Solid**

**Date Collected: 12/05/23 10:13**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:50 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:50 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:50 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:50 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:50 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 18:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *90* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 18:50* | *1* |
| *1,4-Difluorobenzene (Surr)* | *116* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 18:50* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/08/23 18:50 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/08/23 01:28 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 19

**Date Collected: 12/05/23 10:13**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

**Lab Sample ID: 890-5732-13**
**Matrix: Solid**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 01:28 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 01:28 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 01:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *131* | *S1+* | *70 - 130* | *12/07/23 14:13* | *12/08/23 01:28* | *1* |
| *o-Terphenyl* | *110* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 01:28* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **89.2** | | 4.99 | | mg/Kg | | | 12/08/23 14:13 | 1 |

## Client Sample ID: FS - 20

**Date Collected: 12/05/23 11:04**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

**Lab Sample ID: 890-5732-14**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:11 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:11 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:11 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:11 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:11 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:11 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 19:11* | *1* |
| *1,4-Difluorobenzene (Surr)* | *108* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 19:11* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 19:11 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/08/23 01:50 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 01:50 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 01:50 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 01:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *124* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 01:50* | *1* |
| *o-Terphenyl* | *107* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 01:50* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 20

**Lab Sample ID: 890-5732-14**
**Matrix: Solid**
**Date Collected: 12/05/23 11:04**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 157 | | 5.00 | | mg/Kg | | | 12/08/23 14:33 | 1 |

## Client Sample ID: FS - 21

**Lab Sample ID: 890-5732-15**
**Matrix: Solid**
**Date Collected: 12/05/23 11:06**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:32 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:32 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:32 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:32 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:32 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *94* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 19:32* | *1* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 19:32* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/08/23 19:32 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.1 | U | 50.1 | | mg/Kg | | | 12/08/23 02:11 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.1 | U | 50.1 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 02:11 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.1 | U | 50.1 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 02:11 | 1 |
| OII Range Organics (Over C28-C36) | <50.1 | U | 50.1 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 02:11 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *137* | *S1+* | *70 - 130* | *12/07/23 14:13* | *12/08/23 02:11* | *1* |
| *o-Terphenyl* | *114* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 02:11* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 37.5 | | 4.97 | | mg/Kg | | | 12/08/23 14:39 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 23

**Date Collected: 12/05/23 12:08**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

**Lab Sample ID: 890-5732-16**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:52 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:52 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:52 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:52 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:52 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 19:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *97* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 19:52* | *1* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 19:52* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/08/23 19:52 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.2 | U | 50.2 | | mg/Kg | | | 12/08/23 02:32 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.2 | U | 50.2 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 02:32 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.2 | U | 50.2 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 02:32 | 1 |
| OII Range Organics (Over C28-C36) | <50.2 | U | 50.2 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 02:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *131* | *S1+* | *70 - 130* | *12/07/23 14:13* | *12/08/23 02:32* | *1* |
| *o-Terphenyl* | *111* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 02:32* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **33.9** | | 5.04 | | mg/Kg | | | 12/08/23 14:47 | 1 |

## Client Sample ID: FS - 24

**Date Collected: 12/05/23 12:10**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

**Lab Sample ID: 890-5732-17**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:13 | 1 |
| Toluene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:13 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:13 | 1 |
| m-Xylene & p-Xylene | <0.00404 | U | 0.00404 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:13 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:13 | 1 |
| Xylenes, Total | <0.00404 | U | 0.00404 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:13 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 20:13* | *1* |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 24

**Lab Sample ID: 890-5732-17**
**Matrix: Solid**
**Date Collected: 12/05/23 12:10**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *114* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 20:13* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00404 | U | 0.00404 | | mg/Kg | | | 12/08/23 20:13 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/08/23 02:54 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 02:54 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 02:54 | 1 |
| OII Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 02:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *140* | *S1+* | *70 - 130* | *12/07/23 14:13* | *12/08/23 02:54* | *1* |
| *o-Terphenyl* | *119* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 02:54* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **31.3** | | 4.99 | | mg/Kg | | | 12/08/23 14:54 | 1 |

## Client Sample ID: S - SW - 03

**Lab Sample ID: 890-5732-18**
**Matrix: Solid**
**Date Collected: 12/05/23 12:20**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:33 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:33 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:33 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:33 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:33 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:33 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *123* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 20:33* | *1* |
| *1,4-Difluorobenzene (Surr)* | *157* | *S1+* | *70 - 130* | *12/07/23 15:02* | *12/08/23 20:33* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 20:33 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/08/23 03:16 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: S - SW - 03

**Lab Sample ID: 890-5732-18**
**Matrix: Solid**
**Date Collected: 12/05/23 12:20**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 03:16 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 03:16 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 03:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *123* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 03:16* | *1* |
| *o-Terphenyl* | *105* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 03:16* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **48.6** | | 5.03 | | mg/Kg | | | 12/08/23 15:00 | 1 |

## Client Sample ID: FS - 25

**Lab Sample ID: 890-5732-19**
**Matrix: Solid**
**Date Collected: 12/05/23 01:16**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:54 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:54 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:54 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:54 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:54 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 20:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 20:54* | *1* |
| *1,4-Difluorobenzene (Surr)* | *118* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 20:54* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 20:54 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | | 12/08/23 03:38 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 03:38 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 03:38 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 03:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *127* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 03:38* | *1* |
| *o-Terphenyl* | *109* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 03:38* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 25

**Lab Sample ID: 890-5732-19**
**Matrix: Solid**
**Date Collected: 12/05/23 01:16**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 46.3 | | 5.03 | | mg/Kg | | | 12/08/23 15:07 | 1 |

## Client Sample ID: FS - 26

**Lab Sample ID: 890-5732-20**
**Matrix: Solid**
**Date Collected: 12/05/23 01:18**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 21:14 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 21:14 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 21:14 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 21:14 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 21:14 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 21:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *93* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 21:14* | *1* |
| *1,4-Difluorobenzene (Surr)* | *109* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 21:14* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/08/23 21:14 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/08/23 04:00 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 04:00 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 04:00 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/07/23 14:13 | 12/08/23 04:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *134* | *S1+* | *70 - 130* | *12/07/23 14:13* | *12/08/23 04:00* | *1* |
| *o-Terphenyl* | *113* | | *70 - 130* | *12/07/23 14:13* | *12/08/23 04:00* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 46.7 | | 5.01 | | mg/Kg | | | 12/08/23 15:13 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 27

**Date Collected: 12/05/23 01:20**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

**Lab Sample ID: 890-5732-21**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:45 | 1 |
| Toluene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:45 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:45 | 1 |
| m-Xylene & p-Xylene | <0.00403 | U | 0.00403 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:45 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:45 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:45 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *84* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 14:45* | *1* |
| *1,4-Difluorobenzene (Surr)* | *77* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 14:45* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00403 | U | 0.00403 | | mg/Kg | | | 12/08/23 14:45 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.3 | U | 50.3 | | mg/Kg | | | 12/07/23 20:05 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 50.3 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 20:05 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U | 50.3 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 20:05 | 1 |
| OII Range Organics (Over C28-C36) | <50.3 | U | 50.3 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 20:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *113* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 20:05* | *1* |
| *o-Terphenyl* | *122* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 20:05* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **75.1** | | 5.02 | | mg/Kg | | | 12/07/23 19:57 | 1 |

## Client Sample ID: FS - 28

**Date Collected: 12/05/23 02:09**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

**Lab Sample ID: 890-5732-22**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 12:21 | 1 |
| **Toluene** | **0.00202** | | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 12:21 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 12:21 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 12:21 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 12:21 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 12:21 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *76* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 12:21* | *1* |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 28

**Date Collected: 12/05/23 02:09**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

## Lab Sample ID: 890-5732-22

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *91* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 12:21* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/08/23 12:21 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/07/23 21:10 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 21:10 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 21:10 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 21:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *111* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 21:10* | *1* |
| *o-Terphenyl* | *122* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 21:10* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **48.9** | | 5.05 | | mg/Kg | | | 12/07/23 20:03 | 1 |

## Client Sample ID: E - SW - 04

**Date Collected: 12/05/23 02:11**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

## Lab Sample ID: 890-5732-23

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 12:42 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 12:42 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 12:42 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 12:42 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 12:42 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 12:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *74* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 12:42* | *1* |
| *1,4-Difluorobenzene (Surr)* | *92* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 12:42* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 12:42 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/07/23 21:31 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: E - SW - 04

**Lab Sample ID: 890-5732-23**
**Matrix: Solid**
**Date Collected: 12/05/23 02:11**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 21:31 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 21:31 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 21:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *97* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 21:31* | *1* |
| *o-Terphenyl* | *102* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 21:31* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **64.7** | | 5.04 | | mg/Kg | | | 12/07/23 20:08 | 1 |

## Client Sample ID: E - SW - 06

**Lab Sample ID: 890-5732-24**
**Matrix: Solid**
**Date Collected: 12/05/23 02:13**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:02 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:02 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:02 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:02 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:02 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:02 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *83* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 13:02* | *1* |
| *1,4-Difluorobenzene (Surr)* | *71* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 13:02* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/08/23 13:02 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/07/23 21:53 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 21:53 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 21:53 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 21:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *89* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 21:53* | *1* |
| *o-Terphenyl* | *95* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 21:53* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: E - SW - 06

**Lab Sample ID: 890-5732-24**
**Matrix: Solid**
**Date Collected: 12/05/23 02:13**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 49.0 | | 4.95 | | mg/Kg | | | 12/07/23 20:14 | 1 |

## Client Sample ID: W - SW - 04

**Lab Sample ID: 890-5732-25**
**Matrix: Solid**
**Date Collected: 12/05/23 02:15**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:23 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:23 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:23 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:23 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:23 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:23 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *70* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 13:23* | *1* |
| *1,4-Difluorobenzene (Surr)* | *86* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 13:23* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 13:23 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.3 | U | 50.3 | | mg/Kg | | | 12/07/23 22:15 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 50.3 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 22:15 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U | 50.3 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 22:15 | 1 |
| OII Range Organics (Over C28-C36) | <50.3 | U | 50.3 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 22:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *93* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 22:15* | *1* |
| *o-Terphenyl* | *99* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 22:15* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 4.97 | | 4.96 | | mg/Kg | | | 12/08/23 08:01 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: W - SW - 06

**Lab Sample ID: 890-5732-26**
**Matrix: Solid**
**Date Collected: 12/05/23 02:20**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:43 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:43 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:43 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:43 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:43 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 13:43 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *76* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 13:43* | *1* |
| *1,4-Difluorobenzene (Surr)* | *93* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 13:43* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/08/23 13:43 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.1 | U | 50.1 | | mg/Kg | | | 12/07/23 22:37 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.1 | U | 50.1 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 22:37 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.1 | U | 50.1 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 22:37 | 1 |
| OII Range Organics (Over C28-C36) | <50.1 | U | 50.1 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 22:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *91* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 22:37* | *1* |
| *o-Terphenyl* | *98* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 22:37* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **42.1** | | 4.95 | | mg/Kg | | | 12/08/23 08:07 | 1 |

## Client Sample ID: FS - 29

**Lab Sample ID: 890-5732-27**
**Matrix: Solid**
**Date Collected: 12/05/23 03:42**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:04 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:04 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:04 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:04 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:04 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:04 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *76* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 14:04* | *1* |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 29

**Lab Sample ID: 890-5732-27**
**Matrix: Solid**
**Date Collected: 12/05/23 03:42**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *79* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 14:04* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/08/23 14:04 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/07/23 22:58 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 22:58 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 22:58 | 1 |
| OII Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 22:58 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *99* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 22:58* | *1* |
| *o-Terphenyl* | *116* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 22:58* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **8.43** | | 5.02 | | mg/Kg | | | 12/08/23 08:24 | 1 |

## Client Sample ID: FS - 30

**Lab Sample ID: 890-5732-28**
**Matrix: Solid**
**Date Collected: 12/05/23 03:44**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:24 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:24 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:24 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:24 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:24 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 14:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *79* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 14:24* | *1* |
| *1,4-Difluorobenzene (Surr)* | *89* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 14:24* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/08/23 14:24 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total TPH** | **55.2** | | 50.5 | | mg/Kg | | | 12/07/23 23:20 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 30

**Lab Sample ID: 890-5732-28**
**Matrix: Solid**
**Date Collected: 12/05/23 03:44**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 23:20 | 1 |
| **Diesel Range Organics (Over C10-C28)** | **55.2** | | 50.5 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 23:20 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 23:20 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *106* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 23:20* | *1* |
| *o-Terphenyl* | *120* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 23:20* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **16.1** | | 4.99 | | mg/Kg | | | 12/08/23 08:29 | 1 |

## Client Sample ID: FS - 31

**Lab Sample ID: 890-5732-29**
**Matrix: Solid**
**Date Collected: 12/05/23 03:45**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/08/23 14:45 | 12/10/23 08:18 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/08/23 14:45 | 12/10/23 08:18 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/08/23 14:45 | 12/10/23 08:18 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/08/23 14:45 | 12/10/23 08:18 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/08/23 14:45 | 12/10/23 08:18 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/08/23 14:45 | 12/10/23 08:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *82* | | *70 - 130* | *12/08/23 14:45* | *12/10/23 08:18* | *1* |
| *1,4-Difluorobenzene (Surr)* | *83* | | *70 - 130* | *12/08/23 14:45* | *12/10/23 08:18* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00400 | U | 0.00400 | | mg/Kg | | | 12/10/23 08:18 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | | 12/07/23 23:41 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 23:41 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 23:41 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 23:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *92* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 23:41* | *1* |
| *o-Terphenyl* | *107* | | *70 - 130* | *12/07/23 14:17* | *12/07/23 23:41* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 31

**Lab Sample ID: 890-5732-29**
**Matrix: Solid**
**Date Collected: 12/05/23 03:45**
**Date Received: 12/06/23 10:00**
**Sample Depth: 3'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 9.62 | | 5.03 | | mg/Kg | | | 12/08/23 08:35 | 1 |

## Client Sample ID: N - SW - 02

**Lab Sample ID: 890-5732-30**
**Matrix: Solid**
**Date Collected: 12/05/23 03:51**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 16:29 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 16:29 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 16:29 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 16:29 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 16:29 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 16:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *77* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 16:29* | *1* |
| *1,4-Difluorobenzene (Surr)* | *74* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 16:29* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 16:29 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/08/23 00:03 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/07/23 14:17 | 12/08/23 00:03 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/07/23 14:17 | 12/08/23 00:03 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/07/23 14:17 | 12/08/23 00:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *102* | | *70 - 130* | *12/07/23 14:17* | *12/08/23 00:03* | *1* |
| *o-Terphenyl* | *112* | | *70 - 130* | *12/07/23 14:17* | *12/08/23 00:03* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 30.1 | | 5.01 | | mg/Kg | | | 12/08/23 08:41 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: N - SW - 03

**Lab Sample ID: 890-5732-31**
**Matrix: Solid**
**Date Collected: 12/05/23 03:53**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 16:49 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 16:49 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 16:49 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 16:49 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 16:49 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 16:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *85* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 16:49* | *1* |
| *1,4-Difluorobenzene (Surr)* | *84* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 16:49* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/08/23 16:49 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/08/23 00:45 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:17 | 12/08/23 00:45 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:17 | 12/08/23 00:45 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/07/23 14:17 | 12/08/23 00:45 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *93* | | *70 - 130* | *12/07/23 14:17* | *12/08/23 00:45* | *1* |
| *o-Terphenyl* | *108* | | *70 - 130* | *12/07/23 14:17* | *12/08/23 00:45* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **6.90** | | 5.00 | | mg/Kg | | | 12/08/23 08:46 | 1 |

## Client Sample ID: S - SW - 04

**Lab Sample ID: 890-5732-32**
**Matrix: Solid**
**Date Collected: 12/05/23 03:57**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 17:10 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 17:10 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 17:10 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 17:10 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 17:10 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 17:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *87* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 17:10* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: S - SW - 04

**Lab Sample ID: 890-5732-32**
**Matrix: Solid**
**Date Collected: 12/05/23 03:57**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *65* | *S1-* | *70 - 130* | *12/07/23 15:05* | *12/08/23 17:10* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/08/23 17:10 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.2 | U | 50.2 | | mg/Kg | | | 12/08/23 01:07 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.2 | U | 50.2 | | mg/Kg | | 12/07/23 14:17 | 12/08/23 01:07 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.2 | U | 50.2 | | mg/Kg | | 12/07/23 14:17 | 12/08/23 01:07 | 1 |
| OII Range Organics (Over C28-C36) | <50.2 | U | 50.2 | | mg/Kg | | 12/07/23 14:17 | 12/08/23 01:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *95* | | *70 - 130* | *12/07/23 14:17* | *12/08/23 01:07* | *1* |
| *o-Terphenyl* | *109* | | *70 - 130* | *12/07/23 14:17* | *12/08/23 01:07* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **64.1** | | 4.98 | | mg/Kg | | | 12/08/23 08:52 | 1 |

## Client Sample ID: S - SW - 05

**Lab Sample ID: 890-5732-33**
**Matrix: Solid**
**Date Collected: 12/05/23 03:59**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 17:31 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 17:31 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 17:31 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 17:31 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 17:31 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 17:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *83* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 17:31* | *1* |
| *1,4-Difluorobenzene (Surr)* | *82* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 17:31* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/08/23 17:31 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/08/23 01:28 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

**Client Sample ID: S - SW - 05**
**Date Collected: 12/05/23 03:59**
**Date Received: 12/06/23 10:00**
**Sample Depth: 0-3'**

**Lab Sample ID: 890-5732-33**
**Matrix: Solid**

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:17 | 12/08/23 01:28 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:17 | 12/08/23 01:28 | 1 |
| Oil Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/07/23 14:17 | 12/08/23 01:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *110* | | *70 - 130* | *12/07/23 14:17* | *12/08/23 01:28* | *1* |
| *o-Terphenyl* | *123* | | *70 - 130* | *12/07/23 14:17* | *12/08/23 01:28* | *1* |

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **9.72** | | 4.95 | | mg/Kg | | | 12/08/23 08:57 | 1 |

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | BFB1 (70-130) | DFBZ1 (70-130) | | | | | | | | | | |
| 890-5732-1 | FS - 10 | 80 | 111 | | | | | | | | | | |
| 890-5732-1 MS | FS - 10 | 103 | 110 | | | | | | | | | | |
| 890-5732-1 MSD | FS - 10 | 100 | 107 | | | | | | | | | | |
| 890-5732-2 | FS - 11 | 89 | 114 | | | | | | | | | | |
| 890-5732-3 | FS - 12 | 103 | 109 | | | | | | | | | | |
| 890-5732-4 | FS - 13 | 101 | 110 | | | | | | | | | | |
| 890-5732-5 | FS - 14 | 96 | 110 | | | | | | | | | | |
| 890-5732-6 | FS - 15 | 99 | 113 | | | | | | | | | | |
| 890-5732-7 | FS - 16 | 98 | 110 | | | | | | | | | | |
| 890-5732-8 | FS - 17 | 99 | 114 | | | | | | | | | | |
| 890-5732-9 | FS - 18 | 104 | 114 | | | | | | | | | | |
| 890-5732-10 | FS - 22 | 92 | 111 | | | | | | | | | | |
| 890-5732-11 | E - SW - 05 | 79 | 102 | | | | | | | | | | |
| 890-5732-12 | W - SW - 05 | 92 | 112 | | | | | | | | | | |
| 890-5732-13 | FS - 19 | 90 | 116 | | | | | | | | | | |
| 890-5732-14 | FS - 20 | 96 | 108 | | | | | | | | | | |
| 890-5732-15 | FS - 21 | 94 | 110 | | | | | | | | | | |
| 890-5732-16 | FS - 23 | 97 | 110 | | | | | | | | | | |
| 890-5732-17 | FS - 24 | 96 | 114 | | | | | | | | | | |
| 890-5732-18 | S - SW - 03 | 123 | 157 S1+ | | | | | | | | | | |
| 890-5732-19 | FS - 25 | 100 | 118 | | | | | | | | | | |
| 890-5732-20 | FS - 26 | 93 | 109 | | | | | | | | | | |
| 890-5732-21 | FS - 27 | 84 | 77 | | | | | | | | | | |
| 890-5732-21 MS | FS - 27 | 100 | 104 | | | | | | | | | | |
| 890-5732-21 MSD | FS - 27 | 102 | 98 | | | | | | | | | | |
| 890-5732-22 | FS - 28 | 76 | 91 | | | | | | | | | | |
| 890-5732-23 | E - SW - 04 | 74 | 92 | | | | | | | | | | |
| 890-5732-24 | E - SW - 06 | 83 | 71 | | | | | | | | | | |
| 890-5732-25 | W - SW - 04 | 70 | 86 | | | | | | | | | | |
| 890-5732-26 | W - SW - 06 | 76 | 93 | | | | | | | | | | |
| 890-5732-27 | FS - 29 | 76 | 79 | | | | | | | | | | |
| 890-5732-28 | FS - 30 | 79 | 89 | | | | | | | | | | |
| 890-5732-29 | FS - 31 | 82 | 83 | | | | | | | | | | |
| 890-5732-30 | N - SW - 02 | 77 | 74 | | | | | | | | | | |
| 890-5732-31 | N - SW - 03 | 85 | 84 | | | | | | | | | | |
| 890-5732-32 | S - SW - 04 | 87 | 65 S1- | | | | | | | | | | |
| 890-5732-33 | S - SW - 05 | 83 | 82 | | | | | | | | | | |
| LCS 880-68615/1-A | Lab Control Sample | 98 | 99 | | | | | | | | | | |
| LCS 880-68618/1-A | Lab Control Sample | 104 | 108 | | | | | | | | | | |
| LCS 880-68687/1-A | Lab Control Sample | 97 | 112 | | | | | | | | | | |
| LCSD 880-68615/2-A | Lab Control Sample Dup | 100 | 106 | | | | | | | | | | |
| LCSD 880-68618/2-A | Lab Control Sample Dup | 104 | 108 | | | | | | | | | | |
| LCSD 880-68687/2-A | Lab Control Sample Dup | 104 | 110 | | | | | | | | | | |
| MB 880-68391/5-A | Method Blank | 66 S1- | 94 | | | | | | | | | | |
| MB 880-68615/5-A | Method Blank | 116 | 159 S1+ | | | | | | | | | | |
| MB 880-68618/5-A | Method Blank | 66 S1- | 89 | | | | | | | | | | |
| MB 880-68687/5-A | Method Blank | 66 S1- | 91 | | | | | | | | | | |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | 1CO1 (70-130) | OTPH1 (70-130) | | | | | | | | | | |
| 890-5732-1 | FS - 10 | 142 S1+ | 118 | | | | | | | | | | |
| 890-5732-1 MS | FS - 10 | 142 S1+ | 99 | | | | | | | | | | |
| 890-5732-1 MSD | FS - 10 | 146 S1+ | 98 | | | | | | | | | | |
| 890-5732-2 | FS - 11 | 123 | 103 | | | | | | | | | | |
| 890-5732-3 | FS - 12 | 126 | 107 | | | | | | | | | | |
| 890-5732-4 | FS - 13 | 130 | 109 | | | | | | | | | | |
| 890-5732-5 | FS - 14 | 137 S1+ | 115 | | | | | | | | | | |
| 890-5732-6 | FS - 15 | 125 | 104 | | | | | | | | | | |
| 890-5732-7 | FS - 16 | 150 S1+ | 124 | | | | | | | | | | |
| 890-5732-8 | FS - 17 | 131 S1+ | 111 | | | | | | | | | | |
| 890-5732-9 | FS - 18 | 138 S1+ | 113 | | | | | | | | | | |
| 890-5732-10 | FS - 22 | 148 S1+ | 122 | | | | | | | | | | |
| 890-5732-11 | E - SW - 05 | 145 S1+ | 125 | | | | | | | | | | |
| 890-5732-12 | W - SW - 05 | 129 | 109 | | | | | | | | | | |
| 890-5732-13 | FS - 19 | 131 S1+ | 110 | | | | | | | | | | |
| 890-5732-14 | FS - 20 | 124 | 107 | | | | | | | | | | |
| 890-5732-15 | FS - 21 | 137 S1+ | 114 | | | | | | | | | | |
| 890-5732-16 | FS - 23 | 131 S1+ | 111 | | | | | | | | | | |
| 890-5732-17 | FS - 24 | 140 S1+ | 119 | | | | | | | | | | |
| 890-5732-18 | S - SW - 03 | 123 | 105 | | | | | | | | | | |
| 890-5732-19 | FS - 25 | 127 | 109 | | | | | | | | | | |
| 890-5732-20 | FS - 26 | 134 S1+ | 113 | | | | | | | | | | |
| 890-5732-21 | FS - 27 | 113 | 122 | | | | | | | | | | |
| 890-5732-21 MS | FS - 27 | 95 | 95 | | | | | | | | | | |
| 890-5732-21 MSD | FS - 27 | 97 | 96 | | | | | | | | | | |
| 890-5732-22 | FS - 28 | 111 | 122 | | | | | | | | | | |
| 890-5732-23 | E - SW - 04 | 97 | 102 | | | | | | | | | | |
| 890-5732-24 | E - SW - 06 | 89 | 95 | | | | | | | | | | |
| 890-5732-25 | W - SW - 04 | 93 | 99 | | | | | | | | | | |
| 890-5732-26 | W - SW - 06 | 91 | 98 | | | | | | | | | | |
| 890-5732-27 | FS - 29 | 99 | 116 | | | | | | | | | | |
| 890-5732-28 | FS - 30 | 106 | 120 | | | | | | | | | | |
| 890-5732-29 | FS - 31 | 92 | 107 | | | | | | | | | | |
| 890-5732-30 | N - SW - 02 | 102 | 112 | | | | | | | | | | |
| 890-5732-31 | N - SW - 03 | 93 | 108 | | | | | | | | | | |
| 890-5732-32 | S - SW - 04 | 95 | 109 | | | | | | | | | | |
| 890-5732-33 | S - SW - 05 | 110 | 123 | | | | | | | | | | |
| LCS 880-68612/2-A | Lab Control Sample | 97 | 106 | | | | | | | | | | |
| LCS 880-68613/2-A | Lab Control Sample | 98 | 112 | | | | | | | | | | |
| LCSD 880-68612/3-A | Lab Control Sample Dup | 91 | 85 | | | | | | | | | | |
| LCSD 880-68613/3-A | Lab Control Sample Dup | 107 | 130 | | | | | | | | | | |
| MB 880-68612/1-A | Method Blank | 215 S1+ | 202 S1+ | | | | | | | | | | |
| MB 880-68613/1-A | Method Blank | 184 S1+ | 225 S1+ | | | | | | | | | | |

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Method: 8021B - Volatile Organic Compounds (GC)

**Lab Sample ID: MB 880-68391/5-A**
**Matrix: Solid**
**Analysis Batch: 68741**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68391**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 13:40 | 12/09/23 18:59 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 13:40 | 12/09/23 18:59 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 13:40 | 12/09/23 18:59 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/07/23 13:40 | 12/09/23 18:59 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 13:40 | 12/09/23 18:59 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/07/23 13:40 | 12/09/23 18:59 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *66* | *S1-* | *70 - 130* | *12/07/23 13:40* | *12/09/23 18:59* | *1* |
| *1,4-Difluorobenzene (Surr)* | *94* | | *70 - 130* | *12/07/23 13:40* | *12/09/23 18:59* | *1* |

**Lab Sample ID: MB 880-68615/5-A**
**Matrix: Solid**
**Analysis Batch: 68654**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68615**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 12:45 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 12:45 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 12:45 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 12:45 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 12:45 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/07/23 15:02 | 12/08/23 12:45 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *116* | | *70 - 130* | *12/07/23 15:02* | *12/08/23 12:45* | *1* |
| *1,4-Difluorobenzene (Surr)* | *159* | *S1+* | *70 - 130* | *12/07/23 15:02* | *12/08/23 12:45* | *1* |

**Lab Sample ID: LCS 880-68615/1-A**
**Matrix: Solid**
**Analysis Batch: 68654**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68615**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Benzene | 0.100 | 0.09886 | | mg/Kg | | 99 | 70 - 130 |
| Toluene | 0.100 | 0.08882 | | mg/Kg | | 89 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.08438 | | mg/Kg | | 84 | 70 - 130 |
| m-Xylene & p-Xylene | 0.200 | 0.1909 | | mg/Kg | | 95 | 70 - 130 |
| o-Xylene | 0.100 | 0.09251 | | mg/Kg | | 93 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *99* | | *70 - 130* |

**Lab Sample ID: LCSD 880-68615/2-A**
**Matrix: Solid**
**Analysis Batch: 68654**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68615**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.100 | 0.09999 | | mg/Kg | | 100 | 70 - 130 | 1 | 35 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

**Lab Sample ID: LCSD 880-68615/2-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 68654** — **Prep Batch: 68615**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Toluene | | | 0.100 | 0.09100 | | mg/Kg | | 91 | 70 - 130 | 2 | 35 |
| Ethylbenzene | | | 0.100 | 0.08492 | | mg/Kg | | 85 | 70 - 130 | 1 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.2117 | | mg/Kg | | 106 | 70 - 130 | 10 | 35 |
| o-Xylene | | | 0.100 | 0.1051 | | mg/Kg | | 105 | 70 - 130 | 13 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *106* | | *70 - 130* |

**Lab Sample ID: 890-5732-1 MS** — **Client Sample ID: FS - 10**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 68654** — **Prep Batch: 68615**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.0996 | 0.09799 | | mg/Kg | | 98 | 70 - 130 |
| Toluene | <0.00200 | U | 0.0996 | 0.08766 | | mg/Kg | | 87 | 70 - 130 |
| Ethylbenzene | <0.00200 | U | 0.0996 | 0.07953 | | mg/Kg | | 80 | 70 - 130 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.199 | 0.1885 | | mg/Kg | | 95 | 70 - 130 |
| o-Xylene | <0.00200 | U | 0.0996 | 0.09272 | | mg/Kg | | 93 | 70 - 130 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *103* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* |

**Lab Sample ID: 890-5732-1 MSD** — **Client Sample ID: FS - 10**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 68654** — **Prep Batch: 68615**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.0990 | 0.08986 | | mg/Kg | | 91 | 70 - 130 | 9 | 35 |
| Toluene | <0.00200 | U | 0.0990 | 0.08298 | | mg/Kg | | 83 | 70 - 130 | 5 | 35 |
| Ethylbenzene | <0.00200 | U | 0.0990 | 0.07942 | | mg/Kg | | 80 | 70 - 130 | 0 | 35 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.198 | 0.1872 | | mg/Kg | | 95 | 70 - 130 | 1 | 35 |
| o-Xylene | <0.00200 | U | 0.0990 | 0.09135 | | mg/Kg | | 92 | 70 - 130 | 1 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *107* | | *70 - 130* |

**Lab Sample ID: MB 880-68618/5-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 68653** — **Prep Batch: 68618**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 11:39 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 11:39 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 11:39 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 11:39 | 1 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

**Lab Sample ID: MB 880-68618/5-A**
**Matrix: Solid**
**Analysis Batch: 68653**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68618**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 11:39 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/07/23 15:05 | 12/08/23 11:39 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *66* | *S1-* | *70 - 130* | *12/07/23 15:05* | *12/08/23 11:39* | *1* |
| *1,4-Difluorobenzene (Surr)* | *89* | | *70 - 130* | *12/07/23 15:05* | *12/08/23 11:39* | *1* |

**Lab Sample ID: LCS 880-68618/1-A**
**Matrix: Solid**
**Analysis Batch: 68653**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68618**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.08654 | | mg/Kg | | 87 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.08512 | | mg/Kg | | 85 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.09636 | | mg/Kg | | 96 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.1990 | | mg/Kg | | 99 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.09523 | | mg/Kg | | 95 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *108* | | *70 - 130* |

**Lab Sample ID: LCSD 880-68618/2-A**
**Matrix: Solid**
**Analysis Batch: 68653**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68618**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.07984 | | mg/Kg | | 80 | 70 - 130 | 8 | 35 |
| Toluene | | | 0.100 | 0.07920 | | mg/Kg | | 79 | 70 - 130 | 7 | 35 |
| Ethylbenzene | | | 0.100 | 0.08854 | | mg/Kg | | 89 | 70 - 130 | 8 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1827 | | mg/Kg | | 91 | 70 - 130 | 9 | 35 |
| o-Xylene | | | 0.100 | 0.08733 | | mg/Kg | | 87 | 70 - 130 | 9 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *108* | | *70 - 130* |

**Lab Sample ID: 890-5732-21 MS**
**Matrix: Solid**
**Analysis Batch: 68653**

**Client Sample ID: FS - 27**
**Prep Type: Total/NA**
**Prep Batch: 68618**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00202 | U | 0.100 | 0.07474 | | mg/Kg | | 75 | 70 - 130 | | |
| Toluene | <0.00202 | U | 0.100 | 0.07614 | | mg/Kg | | 76 | 70 - 130 | | |
| Ethylbenzene | <0.00202 | U | 0.100 | 0.08155 | | mg/Kg | | 82 | 70 - 130 | | |
| m-Xylene & p-Xylene | <0.00403 | U | 0.200 | 0.1668 | | mg/Kg | | 83 | 70 - 130 | | |
| o-Xylene | <0.00202 | U | 0.100 | 0.07950 | | mg/Kg | | 80 | 70 - 130 | | |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

**Lab Sample ID: 890-5732-21 MS**
**Matrix: Solid**
**Analysis Batch: 68653**

**Client Sample ID: FS - 27**
**Prep Type: Total/NA**
**Prep Batch: 68618**

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 100 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 104 | | 70 - 130 |

**Lab Sample ID: 890-5732-21 MSD**
**Matrix: Solid**
**Analysis Batch: 68653**

**Client Sample ID: FS - 27**
**Prep Type: Total/NA**
**Prep Batch: 68618**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00202 | U | 0.0998 | 0.08101 | | mg/Kg | | 81 | 70 - 130 | 8 | 35 |
| Toluene | <0.00202 | U | 0.0998 | 0.08435 | | mg/Kg | | 82 | 70 - 130 | 10 | 35 |
| Ethylbenzene | <0.00202 | U | 0.0998 | 0.08988 | | mg/Kg | | 90 | 70 - 130 | 10 | 35 |
| m-Xylene & p-Xylene | <0.00403 | U | 0.200 | 0.1854 | | mg/Kg | | 93 | 70 - 130 | 11 | 35 |
| o-Xylene | <0.00202 | U | 0.0998 | 0.08821 | | mg/Kg | | 88 | 70 - 130 | 10 | 35 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 102 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 98 | | 70 - 130 |

**Lab Sample ID: MB 880-68687/5-A**
**Matrix: Solid**
**Analysis Batch: 68741**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68687**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/08/23 14:45 | 12/10/23 05:33 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/08/23 14:45 | 12/10/23 05:33 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/08/23 14:45 | 12/10/23 05:33 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/08/23 14:45 | 12/10/23 05:33 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/08/23 14:45 | 12/10/23 05:33 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/08/23 14:45 | 12/10/23 05:33 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 66 | S1- | 70 - 130 | 12/08/23 14:45 | 12/10/23 05:33 | 1 |
| 1,4-Difluorobenzene (Surr) | 91 | | 70 - 130 | 12/08/23 14:45 | 12/10/23 05:33 | 1 |

**Lab Sample ID: LCS 880-68687/1-A**
**Matrix: Solid**
**Analysis Batch: 68741**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68687**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.08325 | | mg/Kg | | 83 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.07660 | | mg/Kg | | 77 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.08241 | | mg/Kg | | 82 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.1675 | | mg/Kg | | 84 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.08018 | | mg/Kg | | 80 | 70 - 130 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 4-Bromofluorobenzene (Surr) | 97 | | 70 - 130 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

**Lab Sample ID: LCS 880-68687/1-A**
**Matrix: Solid**
**Analysis Batch: 68741**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68687**

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *112* | | *70 - 130* |

**Lab Sample ID: LCSD 880-68687/2-A**
**Matrix: Solid**
**Analysis Batch: 68741**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68687**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.08805 | | mg/Kg | | 88 | 70 - 130 | 6 | 35 |
| Toluene | | | 0.100 | 0.08252 | | mg/Kg | | 83 | 70 - 130 | 7 | 35 |
| Ethylbenzene | | | 0.100 | 0.09102 | | mg/Kg | | 91 | 70 - 130 | 10 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1857 | | mg/Kg | | 93 | 70 - 130 | 10 | 35 |
| o-Xylene | | | 0.100 | 0.08915 | | mg/Kg | | 89 | 70 - 130 | 11 | 35 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 880-68612/1-A**
**Matrix: Solid**
**Analysis Batch: 68556**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68612**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/07/23 14:10 | 12/07/23 19:01 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/07/23 14:10 | 12/07/23 19:01 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/07/23 14:10 | 12/07/23 19:01 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *215* | *S1+* | *70 - 130* | *12/07/23 14:10* | *12/07/23 19:01* | *1* |
| *o-Terphenyl* | *202* | *S1+* | *70 - 130* | *12/07/23 14:10* | *12/07/23 19:01* | *1* |

**Lab Sample ID: LCS 880-68612/2-A**
**Matrix: Solid**
**Analysis Batch: 68556**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68612**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 985.9 | | mg/Kg | | 99 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 909.9 | | mg/Kg | | 91 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| *1-Chlorooctane* | *97* | | *70 - 130* |
| *o-Terphenyl* | *106* | | *70 - 130* |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: LCSD 880-68612/3-A**
**Matrix: Solid**
**Analysis Batch: 68556**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68612**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 1013 | | mg/Kg | | 101 | 70 - 130 | 3 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 894.8 | | mg/Kg | | 89 | 70 - 130 | 2 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *91* | | *70 - 130* |
| *o-Terphenyl* | *85* | | *70 - 130* |

**Lab Sample ID: 890-5732-1 MS**
**Matrix: Solid**
**Analysis Batch: 68556**

**Client Sample ID: FS - 10**
**Prep Type: Total/NA**
**Prep Batch: 68612**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.5 | U | 995 | 953.9 | | mg/Kg | | 93 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | <49.5 | U F1 | 995 | 1437 | F1 | mg/Kg | | 142 | 70 - 130 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *142* | *S1+* | *70 - 130* |
| *o-Terphenyl* | *99* | | *70 - 130* |

**Lab Sample ID: 890-5732-1 MSD**
**Matrix: Solid**
**Analysis Batch: 68556**

**Client Sample ID: FS - 10**
**Prep Type: Total/NA**
**Prep Batch: 68612**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.5 | U | 995 | 979.5 | | mg/Kg | | 96 | 70 - 130 | 3 | 20 |
| Diesel Range Organics (Over C10-C28) | <49.5 | U F1 | 995 | 1436 | F1 | mg/Kg | | 142 | 70 - 130 | 0 | 20 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *146* | *S1+* | *70 - 130* |
| *o-Terphenyl* | *98* | | *70 - 130* |

**Lab Sample ID: MB 880-68613/1-A**
**Matrix: Solid**
**Analysis Batch: 68555**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68613**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 19:01 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 19:01 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/07/23 14:17 | 12/07/23 19:01 | 1 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: MB 880-68613/1-A**
**Matrix: Solid**
**Analysis Batch: 68555**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68613**

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1-Chlorooctane | 184 | S1+ | 70 - 130 | 12/07/23 14:17 | 12/07/23 19:01 | 1 |
| o-Terphenyl | 225 | S1+ | 70 - 130 | 12/07/23 14:17 | 12/07/23 19:01 | 1 |

**Lab Sample ID: LCS 880-68613/2-A**
**Matrix: Solid**
**Analysis Batch: 68555**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68613**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 927.3 | | mg/Kg | | 93 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 905.4 | | mg/Kg | | 91 | 70 - 130 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 98 | | 70 - 130 |
| o-Terphenyl | 112 | | 70 - 130 |

**Lab Sample ID: LCSD 880-68613/3-A**
**Matrix: Solid**
**Analysis Batch: 68555**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68613**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 934.0 | | mg/Kg | | 93 | 70 - 130 | 1 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 924.2 | | mg/Kg | | 92 | 70 - 130 | 2 | 20 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 107 | | 70 - 130 |
| o-Terphenyl | 130 | | 70 - 130 |

**Lab Sample ID: 890-5732-21 MS**
**Matrix: Solid**
**Analysis Batch: 68555**

**Client Sample ID: FS - 27**
**Prep Type: Total/NA**
**Prep Batch: 68613**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 1000 | 1188 | | mg/Kg | | 115 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | <50.3 | U | 1000 | 879.1 | | mg/Kg | | 84 | 70 - 130 | | |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 95 | | 70 - 130 |
| o-Terphenyl | 95 | | 70 - 130 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: 890-5732-21 MSD** — **Client Sample ID: FS - 27**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 68555** — **Prep Batch: 68613**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 1000 | 1208 | | mg/Kg | | 117 | 70 - 130 | 2 | 20 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U | 1000 | 890.4 | | mg/Kg | | 86 | 70 - 130 | 1 | 20 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *97* | | *70 - 130* |
| *o-Terphenyl* | *96* | | *70 - 130* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-68568/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 68608**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <5.00 | U | 5.00 | | mg/Kg | | | 12/07/23 18:38 | 1 |

**Lab Sample ID: LCS 880-68568/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 68608**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Chloride | 250 | 266.2 | | mg/Kg | | 106 | 90 - 110 |

**Lab Sample ID: LCSD 880-68568/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 68608**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 250 | 252.5 | | mg/Kg | | 101 | 90 - 110 | 5 | 20 |

**Lab Sample ID: 890-5732-24 MS** — **Client Sample ID: E - SW - 06**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 68608**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 49.0 | | 248 | 298.2 | | mg/Kg | | 101 | 90 - 110 |

**Lab Sample ID: 890-5732-24 MSD** — **Client Sample ID: E - SW - 06**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 68608**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 49.0 | | 248 | 304.7 | | mg/Kg | | 103 | 90 - 110 | 2 | 20 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: MB 880-68569/1-A**
**Matrix: Solid**
**Analysis Batch: 68619**

**Client Sample ID: Method Blank**
**Prep Type: Soluble**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <5.00 | U | 5.00 | | mg/Kg | | | 12/08/23 11:56 | 1 |

**Lab Sample ID: LCS 880-68569/2-A**
**Matrix: Solid**
**Analysis Batch: 68619**

**Client Sample ID: Lab Control Sample**
**Prep Type: Soluble**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 271.3 | | mg/Kg | | 109 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-68569/3-A**
**Matrix: Solid**
**Analysis Batch: 68619**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Soluble**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 264.0 | | mg/Kg | | 106 | 90 - 110 | 3 | 20 |

**Lab Sample ID: 890-5732-1 MS**
**Matrix: Solid**
**Analysis Batch: 68619**

**Client Sample ID: FS - 10**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 47.3 | | 253 | 309.2 | | mg/Kg | | 104 | 90 - 110 | | |

**Lab Sample ID: 890-5732-1 MSD**
**Matrix: Solid**
**Analysis Batch: 68619**

**Client Sample ID: FS - 10**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 47.3 | | 253 | 310.5 | | mg/Kg | | 104 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 890-5732-11 MS**
**Matrix: Solid**
**Analysis Batch: 68619**

**Client Sample ID: E - SW - 05**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 36.2 | | 251 | 309.4 | | mg/Kg | | 109 | 90 - 110 | | |

**Lab Sample ID: 890-5732-11 MSD**
**Matrix: Solid**
**Analysis Batch: 68619**

**Client Sample ID: E - SW - 05**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 36.2 | | 251 | 309.9 | | mg/Kg | | 109 | 90 - 110 | 0 | 20 |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## GC VOA

### Prep Batch: 68391

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 880-68391/5-A | Method Blank | Total/NA | Solid | 5035 | |

### Prep Batch: 68615

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-1 | FS - 10 | Total/NA | Solid | 5035 | |
| 890-5732-2 | FS - 11 | Total/NA | Solid | 5035 | |
| 890-5732-3 | FS - 12 | Total/NA | Solid | 5035 | |
| 890-5732-4 | FS - 13 | Total/NA | Solid | 5035 | |
| 890-5732-5 | FS - 14 | Total/NA | Solid | 5035 | |
| 890-5732-6 | FS - 15 | Total/NA | Solid | 5035 | |
| 890-5732-7 | FS - 16 | Total/NA | Solid | 5035 | |
| 890-5732-8 | FS - 17 | Total/NA | Solid | 5035 | |
| 890-5732-9 | FS - 18 | Total/NA | Solid | 5035 | |
| 890-5732-10 | FS - 22 | Total/NA | Solid | 5035 | |
| 890-5732-11 | E - SW - 05 | Total/NA | Solid | 5035 | |
| 890-5732-12 | W - SW - 05 | Total/NA | Solid | 5035 | |
| 890-5732-13 | FS - 19 | Total/NA | Solid | 5035 | |
| 890-5732-14 | FS - 20 | Total/NA | Solid | 5035 | |
| 890-5732-15 | FS - 21 | Total/NA | Solid | 5035 | |
| 890-5732-16 | FS - 23 | Total/NA | Solid | 5035 | |
| 890-5732-17 | FS - 24 | Total/NA | Solid | 5035 | |
| 890-5732-18 | S - SW - 03 | Total/NA | Solid | 5035 | |
| 890-5732-19 | FS - 25 | Total/NA | Solid | 5035 | |
| 890-5732-20 | FS - 26 | Total/NA | Solid | 5035 | |
| MB 880-68615/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-68615/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-68615/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 890-5732-1 MS | FS - 10 | Total/NA | Solid | 5035 | |
| 890-5732-1 MSD | FS - 10 | Total/NA | Solid | 5035 | |

### Prep Batch: 68618

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-21 | FS - 27 | Total/NA | Solid | 5035 | |
| 890-5732-22 | FS - 28 | Total/NA | Solid | 5035 | |
| 890-5732-23 | E - SW - 04 | Total/NA | Solid | 5035 | |
| 890-5732-24 | E - SW - 06 | Total/NA | Solid | 5035 | |
| 890-5732-25 | W - SW - 04 | Total/NA | Solid | 5035 | |
| 890-5732-26 | W - SW - 06 | Total/NA | Solid | 5035 | |
| 890-5732-27 | FS - 29 | Total/NA | Solid | 5035 | |
| 890-5732-28 | FS - 30 | Total/NA | Solid | 5035 | |
| 890-5732-30 | N - SW - 02 | Total/NA | Solid | 5035 | |
| 890-5732-31 | N - SW - 03 | Total/NA | Solid | 5035 | |
| 890-5732-32 | S - SW - 04 | Total/NA | Solid | 5035 | |
| 890-5732-33 | S - SW - 05 | Total/NA | Solid | 5035 | |
| MB 880-68618/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-68618/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-68618/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 890-5732-21 MS | FS - 27 | Total/NA | Solid | 5035 | |
| 890-5732-21 MSD | FS - 27 | Total/NA | Solid | 5035 | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## GC VOA

### Analysis Batch: 68653

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-21 | FS - 27 | Total/NA | Solid | 8021B | 68618 |
| 890-5732-22 | FS - 28 | Total/NA | Solid | 8021B | 68618 |
| 890-5732-23 | E - SW - 04 | Total/NA | Solid | 8021B | 68618 |
| 890-5732-24 | E - SW - 06 | Total/NA | Solid | 8021B | 68618 |
| 890-5732-25 | W - SW - 04 | Total/NA | Solid | 8021B | 68618 |
| 890-5732-26 | W - SW - 06 | Total/NA | Solid | 8021B | 68618 |
| 890-5732-27 | FS - 29 | Total/NA | Solid | 8021B | 68618 |
| 890-5732-28 | FS - 30 | Total/NA | Solid | 8021B | 68618 |
| 890-5732-30 | N - SW - 02 | Total/NA | Solid | 8021B | 68618 |
| 890-5732-31 | N - SW - 03 | Total/NA | Solid | 8021B | 68618 |
| 890-5732-32 | S - SW - 04 | Total/NA | Solid | 8021B | 68618 |
| 890-5732-33 | S - SW - 05 | Total/NA | Solid | 8021B | 68618 |
| MB 880-68618/5-A | Method Blank | Total/NA | Solid | 8021B | 68618 |
| LCS 880-68618/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 68618 |
| LCSD 880-68618/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 68618 |
| 890-5732-21 MS | FS - 27 | Total/NA | Solid | 8021B | 68618 |
| 890-5732-21 MSD | FS - 27 | Total/NA | Solid | 8021B | 68618 |

### Analysis Batch: 68654

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-1 | FS - 10 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-2 | FS - 11 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-3 | FS - 12 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-4 | FS - 13 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-5 | FS - 14 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-6 | FS - 15 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-7 | FS - 16 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-8 | FS - 17 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-9 | FS - 18 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-10 | FS - 22 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-11 | E - SW - 05 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-12 | W - SW - 05 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-13 | FS - 19 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-14 | FS - 20 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-15 | FS - 21 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-16 | FS - 23 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-17 | FS - 24 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-18 | S - SW - 03 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-19 | FS - 25 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-20 | FS - 26 | Total/NA | Solid | 8021B | 68615 |
| MB 880-68615/5-A | Method Blank | Total/NA | Solid | 8021B | 68615 |
| LCS 880-68615/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 68615 |
| LCSD 880-68615/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 68615 |
| 890-5732-1 MS | FS - 10 | Total/NA | Solid | 8021B | 68615 |
| 890-5732-1 MSD | FS - 10 | Total/NA | Solid | 8021B | 68615 |

### Prep Batch: 68687

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-29 | FS - 31 | Total/NA | Solid | 5035 | |
| MB 880-68687/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-68687/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## GC VOA (Continued)

### Prep Batch: 68687 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCSD 880-68687/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |

### Analysis Batch: 68741

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-29 | FS - 31 | Total/NA | Solid | 8021B | 68687 |
| MB 880-68391/5-A | Method Blank | Total/NA | Solid | 8021B | 68391 |
| MB 880-68687/5-A | Method Blank | Total/NA | Solid | 8021B | 68687 |
| LCS 880-68687/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 68687 |
| LCSD 880-68687/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 68687 |

### Analysis Batch: 68832

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-1 | FS - 10 | Total/NA | Solid | Total BTEX | |
| 890-5732-2 | FS - 11 | Total/NA | Solid | Total BTEX | |
| 890-5732-3 | FS - 12 | Total/NA | Solid | Total BTEX | |
| 890-5732-4 | FS - 13 | Total/NA | Solid | Total BTEX | |
| 890-5732-5 | FS - 14 | Total/NA | Solid | Total BTEX | |
| 890-5732-6 | FS - 15 | Total/NA | Solid | Total BTEX | |
| 890-5732-7 | FS - 16 | Total/NA | Solid | Total BTEX | |
| 890-5732-8 | FS - 17 | Total/NA | Solid | Total BTEX | |
| 890-5732-9 | FS - 18 | Total/NA | Solid | Total BTEX | |
| 890-5732-10 | FS - 22 | Total/NA | Solid | Total BTEX | |
| 890-5732-11 | E - SW - 05 | Total/NA | Solid | Total BTEX | |
| 890-5732-12 | W - SW - 05 | Total/NA | Solid | Total BTEX | |
| 890-5732-13 | FS - 19 | Total/NA | Solid | Total BTEX | |
| 890-5732-14 | FS - 20 | Total/NA | Solid | Total BTEX | |
| 890-5732-15 | FS - 21 | Total/NA | Solid | Total BTEX | |
| 890-5732-16 | FS - 23 | Total/NA | Solid | Total BTEX | |
| 890-5732-17 | FS - 24 | Total/NA | Solid | Total BTEX | |
| 890-5732-18 | S - SW - 03 | Total/NA | Solid | Total BTEX | |
| 890-5732-19 | FS - 25 | Total/NA | Solid | Total BTEX | |
| 890-5732-20 | FS - 26 | Total/NA | Solid | Total BTEX | |
| 890-5732-21 | FS - 27 | Total/NA | Solid | Total BTEX | |
| 890-5732-22 | FS - 28 | Total/NA | Solid | Total BTEX | |
| 890-5732-23 | E - SW - 04 | Total/NA | Solid | Total BTEX | |
| 890-5732-24 | E - SW - 06 | Total/NA | Solid | Total BTEX | |
| 890-5732-25 | W - SW - 04 | Total/NA | Solid | Total BTEX | |
| 890-5732-26 | W - SW - 06 | Total/NA | Solid | Total BTEX | |
| 890-5732-27 | FS - 29 | Total/NA | Solid | Total BTEX | |
| 890-5732-28 | FS - 30 | Total/NA | Solid | Total BTEX | |
| 890-5732-29 | FS - 31 | Total/NA | Solid | Total BTEX | |
| 890-5732-30 | N - SW - 02 | Total/NA | Solid | Total BTEX | |
| 890-5732-31 | N - SW - 03 | Total/NA | Solid | Total BTEX | |
| 890-5732-32 | S - SW - 04 | Total/NA | Solid | Total BTEX | |
| 890-5732-33 | S - SW - 05 | Total/NA | Solid | Total BTEX | |

## GC Semi VOA

### Analysis Batch: 68555

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-21 | FS - 27 | Total/NA | Solid | 8015B NM | 68613 |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## GC Semi VOA (Continued)

### Analysis Batch: 68555 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-22 | FS - 28 | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-23 | E - SW - 04 | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-24 | E - SW - 06 | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-25 | W - SW - 04 | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-26 | W - SW - 06 | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-27 | FS - 29 | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-28 | FS - 30 | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-29 | FS - 31 | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-30 | N - SW - 02 | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-31 | N - SW - 03 | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-32 | S - SW - 04 | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-33 | S - SW - 05 | Total/NA | Solid | 8015B NM | 68613 |
| MB 880-68613/1-A | Method Blank | Total/NA | Solid | 8015B NM | 68613 |
| LCS 880-68613/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 68613 |
| LCSD 880-68613/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-21 MS | FS - 27 | Total/NA | Solid | 8015B NM | 68613 |
| 890-5732-21 MSD | FS - 27 | Total/NA | Solid | 8015B NM | 68613 |

### Analysis Batch: 68556

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-1 | FS - 10 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-2 | FS - 11 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-3 | FS - 12 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-4 | FS - 13 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-5 | FS - 14 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-6 | FS - 15 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-7 | FS - 16 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-8 | FS - 17 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-9 | FS - 18 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-10 | FS - 22 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-11 | E - SW - 05 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-12 | W - SW - 05 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-13 | FS - 19 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-14 | FS - 20 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-15 | FS - 21 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-16 | FS - 23 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-17 | FS - 24 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-18 | S - SW - 03 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-19 | FS - 25 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-20 | FS - 26 | Total/NA | Solid | 8015B NM | 68612 |
| MB 880-68612/1-A | Method Blank | Total/NA | Solid | 8015B NM | 68612 |
| LCS 880-68612/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 68612 |
| LCSD 880-68612/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-1 MS | FS - 10 | Total/NA | Solid | 8015B NM | 68612 |
| 890-5732-1 MSD | FS - 10 | Total/NA | Solid | 8015B NM | 68612 |

### Prep Batch: 68612

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-1 | FS - 10 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-2 | FS - 11 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-3 | FS - 12 | Total/NA | Solid | 8015NM Prep | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## GC Semi VOA (Continued)

### Prep Batch: 68612 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-4 | FS - 13 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-5 | FS - 14 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-6 | FS - 15 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-7 | FS - 16 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-8 | FS - 17 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-9 | FS - 18 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-10 | FS - 22 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-11 | E - SW - 05 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-12 | W - SW - 05 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-13 | FS - 19 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-14 | FS - 20 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-15 | FS - 21 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-16 | FS - 23 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-17 | FS - 24 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-18 | S - SW - 03 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-19 | FS - 25 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-20 | FS - 26 | Total/NA | Solid | 8015NM Prep | |
| MB 880-68612/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-68612/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-68612/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 890-5732-1 MS | FS - 10 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-1 MSD | FS - 10 | Total/NA | Solid | 8015NM Prep | |

### Prep Batch: 68613

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-21 | FS - 27 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-22 | FS - 28 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-23 | E - SW - 04 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-24 | E - SW - 06 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-25 | W - SW - 04 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-26 | W - SW - 06 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-27 | FS - 29 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-28 | FS - 30 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-29 | FS - 31 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-30 | N - SW - 02 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-31 | N - SW - 03 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-32 | S - SW - 04 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-33 | S - SW - 05 | Total/NA | Solid | 8015NM Prep | |
| MB 880-68613/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-68613/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-68613/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 890-5732-21 MS | FS - 27 | Total/NA | Solid | 8015NM Prep | |
| 890-5732-21 MSD | FS - 27 | Total/NA | Solid | 8015NM Prep | |

### Analysis Batch: 68673

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-1 | FS - 10 | Total/NA | Solid | 8015 NM | |
| 890-5732-2 | FS - 11 | Total/NA | Solid | 8015 NM | |
| 890-5732-3 | FS - 12 | Total/NA | Solid | 8015 NM | |
| 890-5732-4 | FS - 13 | Total/NA | Solid | 8015 NM | |
| 890-5732-5 | FS - 14 | Total/NA | Solid | 8015 NM | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## GC Semi VOA (Continued)

### Analysis Batch: 68673 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-6 | FS - 15 | Total/NA | Solid | 8015 NM | |
| 890-5732-7 | FS - 16 | Total/NA | Solid | 8015 NM | |
| 890-5732-8 | FS - 17 | Total/NA | Solid | 8015 NM | |
| 890-5732-9 | FS - 18 | Total/NA | Solid | 8015 NM | |
| 890-5732-10 | FS - 22 | Total/NA | Solid | 8015 NM | |
| 890-5732-11 | E - SW - 05 | Total/NA | Solid | 8015 NM | |
| 890-5732-12 | W - SW - 05 | Total/NA | Solid | 8015 NM | |
| 890-5732-13 | FS - 19 | Total/NA | Solid | 8015 NM | |
| 890-5732-14 | FS - 20 | Total/NA | Solid | 8015 NM | |
| 890-5732-15 | FS - 21 | Total/NA | Solid | 8015 NM | |
| 890-5732-16 | FS - 23 | Total/NA | Solid | 8015 NM | |
| 890-5732-17 | FS - 24 | Total/NA | Solid | 8015 NM | |
| 890-5732-18 | S - SW - 03 | Total/NA | Solid | 8015 NM | |
| 890-5732-19 | FS - 25 | Total/NA | Solid | 8015 NM | |
| 890-5732-20 | FS - 26 | Total/NA | Solid | 8015 NM | |
| 890-5732-21 | FS - 27 | Total/NA | Solid | 8015 NM | |
| 890-5732-22 | FS - 28 | Total/NA | Solid | 8015 NM | |
| 890-5732-23 | E - SW - 04 | Total/NA | Solid | 8015 NM | |
| 890-5732-24 | E - SW - 06 | Total/NA | Solid | 8015 NM | |
| 890-5732-25 | W - SW - 04 | Total/NA | Solid | 8015 NM | |
| 890-5732-26 | W - SW - 06 | Total/NA | Solid | 8015 NM | |
| 890-5732-27 | FS - 29 | Total/NA | Solid | 8015 NM | |
| 890-5732-28 | FS - 30 | Total/NA | Solid | 8015 NM | |
| 890-5732-29 | FS - 31 | Total/NA | Solid | 8015 NM | |
| 890-5732-30 | N - SW - 02 | Total/NA | Solid | 8015 NM | |
| 890-5732-31 | N - SW - 03 | Total/NA | Solid | 8015 NM | |
| 890-5732-32 | S - SW - 04 | Total/NA | Solid | 8015 NM | |
| 890-5732-33 | S - SW - 05 | Total/NA | Solid | 8015 NM | |

## HPLC/IC

### Leach Batch: 68568

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-21 | FS - 27 | Soluble | Solid | DI Leach | |
| 890-5732-22 | FS - 28 | Soluble | Solid | DI Leach | |
| 890-5732-23 | E - SW - 04 | Soluble | Solid | DI Leach | |
| 890-5732-24 | E - SW - 06 | Soluble | Solid | DI Leach | |
| 890-5732-25 | W - SW - 04 | Soluble | Solid | DI Leach | |
| 890-5732-26 | W - SW - 06 | Soluble | Solid | DI Leach | |
| 890-5732-27 | FS - 29 | Soluble | Solid | DI Leach | |
| 890-5732-28 | FS - 30 | Soluble | Solid | DI Leach | |
| 890-5732-29 | FS - 31 | Soluble | Solid | DI Leach | |
| 890-5732-30 | N - SW - 02 | Soluble | Solid | DI Leach | |
| 890-5732-31 | N - SW - 03 | Soluble | Solid | DI Leach | |
| 890-5732-32 | S - SW - 04 | Soluble | Solid | DI Leach | |
| 890-5732-33 | S - SW - 05 | Soluble | Solid | DI Leach | |
| MB 880-68568/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-68568/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-68568/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-5732-24 MS | E - SW - 06 | Soluble | Solid | DI Leach | |
| 890-5732-24 MSD | E - SW - 06 | Soluble | Solid | DI Leach | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## HPLC/IC

### Leach Batch: 68569

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-1 | FS - 10 | Soluble | Solid | DI Leach | |
| 890-5732-2 | FS - 11 | Soluble | Solid | DI Leach | |
| 890-5732-3 | FS - 12 | Soluble | Solid | DI Leach | |
| 890-5732-4 | FS - 13 | Soluble | Solid | DI Leach | |
| 890-5732-5 | FS - 14 | Soluble | Solid | DI Leach | |
| 890-5732-6 | FS - 15 | Soluble | Solid | DI Leach | |
| 890-5732-7 | FS - 16 | Soluble | Solid | DI Leach | |
| 890-5732-8 | FS - 17 | Soluble | Solid | DI Leach | |
| 890-5732-9 | FS - 18 | Soluble | Solid | DI Leach | |
| 890-5732-10 | FS - 22 | Soluble | Solid | DI Leach | |
| 890-5732-11 | E - SW - 05 | Soluble | Solid | DI Leach | |
| 890-5732-12 | W - SW - 05 | Soluble | Solid | DI Leach | |
| 890-5732-13 | FS - 19 | Soluble | Solid | DI Leach | |
| 890-5732-14 | FS - 20 | Soluble | Solid | DI Leach | |
| 890-5732-15 | FS - 21 | Soluble | Solid | DI Leach | |
| 890-5732-16 | FS - 23 | Soluble | Solid | DI Leach | |
| 890-5732-17 | FS - 24 | Soluble | Solid | DI Leach | |
| 890-5732-18 | S - SW - 03 | Soluble | Solid | DI Leach | |
| 890-5732-19 | FS - 25 | Soluble | Solid | DI Leach | |
| 890-5732-20 | FS - 26 | Soluble | Solid | DI Leach | |
| MB 880-68569/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-68569/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-68569/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-5732-1 MS | FS - 10 | Soluble | Solid | DI Leach | |
| 890-5732-1 MSD | FS - 10 | Soluble | Solid | DI Leach | |
| 890-5732-11 MS | E - SW - 05 | Soluble | Solid | DI Leach | |
| 890-5732-11 MSD | E - SW - 05 | Soluble | Solid | DI Leach | |

### Analysis Batch: 68608

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-21 | FS - 27 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-22 | FS - 28 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-23 | E - SW - 04 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-24 | E - SW - 06 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-25 | W - SW - 04 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-26 | W - SW - 06 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-27 | FS - 29 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-28 | FS - 30 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-29 | FS - 31 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-30 | N - SW - 02 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-31 | N - SW - 03 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-32 | S - SW - 04 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-33 | S - SW - 05 | Soluble | Solid | 300.0 | 68568 |
| MB 880-68568/1-A | Method Blank | Soluble | Solid | 300.0 | 68568 |
| LCS 880-68568/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 68568 |
| LCSD 880-68568/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 68568 |
| 890-5732-24 MS | E - SW - 06 | Soluble | Solid | 300.0 | 68568 |
| 890-5732-24 MSD | E - SW - 06 | Soluble | Solid | 300.0 | 68568 |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## HPLC/IC

### Analysis Batch: 68619

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5732-1 | FS - 10 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-2 | FS - 11 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-3 | FS - 12 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-4 | FS - 13 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-5 | FS - 14 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-6 | FS - 15 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-7 | FS - 16 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-8 | FS - 17 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-9 | FS - 18 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-10 | FS - 22 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-11 | E - SW - 05 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-12 | W - SW - 05 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-13 | FS - 19 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-14 | FS - 20 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-15 | FS - 21 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-16 | FS - 23 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-17 | FS - 24 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-18 | S - SW - 03 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-19 | FS - 25 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-20 | FS - 26 | Soluble | Solid | 300.0 | 68569 |
| MB 880-68569/1-A | Method Blank | Soluble | Solid | 300.0 | 68569 |
| LCS 880-68569/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 68569 |
| LCSD 880-68569/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 68569 |
| 890-5732-1 MS | FS - 10 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-1 MSD | FS - 10 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-11 MS | E - SW - 05 | Soluble | Solid | 300.0 | 68569 |
| 890-5732-11 MSD | E - SW - 05 | Soluble | Solid | 300.0 | 68569 |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 10

**Date Collected: 12/05/23 08:20**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-1

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 13:14 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 13:14 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 20:05 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.10 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/07/23 20:05 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 12:15 | SMC | EET MID |

## Client Sample ID: FS - 11

**Date Collected: 12/05/23 08:22**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-2

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 13:34 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 13:34 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 21:10 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.94 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/07/23 21:10 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 12:35 | SMC | EET MID |

## Client Sample ID: FS - 12

**Date Collected: 12/05/23 08:24**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-3

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 13:55 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 13:55 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 21:31 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/07/23 21:31 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 12:42 | SMC | EET MID |

## Client Sample ID: FS - 13

**Date Collected: 12/05/23 08:26**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-4

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 14:15 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 14:15 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 13

**Date Collected: 12/05/23 08:26**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-4

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 21:53 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.92 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/07/23 21:53 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 12:48 | SMC | EET MID |

## Client Sample ID: FS - 14

**Date Collected: 12/05/23 08:27**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-5

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.97 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 14:36 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 14:36 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 22:15 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.98 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/07/23 22:15 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 12:55 | SMC | EET MID |

## Client Sample ID: FS - 15

**Date Collected: 12/05/23 08:28**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-6

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 14:56 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 14:56 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 22:37 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/07/23 22:37 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 13:14 | SMC | EET MID |

## Client Sample ID: FS - 16

**Date Collected: 12/05/23 10:07**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-7

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 15:17 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 15:17 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 22:58 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.93 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/07/23 22:58 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 16
**Date Collected: 12/05/23 10:07**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-7
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 13:21 | SMC | EET MID |

## Client Sample ID: FS - 17
**Date Collected: 12/05/23 10:09**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-8
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.04 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 15:37 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 15:37 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 23:20 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/07/23 23:20 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 13:27 | SMC | EET MID |

## Client Sample ID: FS - 18
**Date Collected: 12/05/23 10:11**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-9
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 15:58 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 15:58 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 23:41 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.09 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/07/23 23:41 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 13:34 | SMC | EET MID |

## Client Sample ID: FS - 22
**Date Collected: 12/05/23 10:41**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-10
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 16:18 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 16:18 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 00:03 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.96 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/08/23 00:03 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 13:40 | SMC | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: E - SW - 05

**Date Collected: 12/05/23 10:47**
**Date Received: 12/06/23 10:00**

**Lab Sample ID: 890-5732-11**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 18:09 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 18:09 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 00:45 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.92 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/08/23 00:45 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 13:47 | SMC | EET MID |

## Client Sample ID: W - SW - 05

**Date Collected: 12/05/23 10:52**
**Date Received: 12/06/23 10:00**

**Lab Sample ID: 890-5732-12**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 18:30 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 18:30 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 01:07 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/08/23 01:07 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 14:07 | SMC | EET MID |

## Client Sample ID: FS - 19

**Date Collected: 12/05/23 10:13**
**Date Received: 12/06/23 10:00**

**Lab Sample ID: 890-5732-13**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 18:50 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 18:50 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 01:28 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.09 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/08/23 01:28 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 14:13 | SMC | EET MID |

## Client Sample ID: FS - 20

**Date Collected: 12/05/23 11:04**
**Date Received: 12/06/23 10:00**

**Lab Sample ID: 890-5732-14**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 19:11 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 19:11 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 20

**Date Collected: 12/05/23 11:04**
**Date Received: 12/06/23 10:00**

**Lab Sample ID: 890-5732-14**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 01:50 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.09 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/08/23 01:50 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 14:33 | SMC | EET MID |

## Client Sample ID: FS - 21

**Date Collected: 12/05/23 11:06**
**Date Received: 12/06/23 10:00**

**Lab Sample ID: 890-5732-15**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 19:32 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 19:32 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 02:11 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.98 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/08/23 02:11 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 14:39 | SMC | EET MID |

## Client Sample ID: FS - 23

**Date Collected: 12/05/23 12:08**
**Date Received: 12/06/23 10:00**

**Lab Sample ID: 890-5732-16**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.97 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 19:52 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 19:52 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 02:32 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.97 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/08/23 02:32 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 14:47 | SMC | EET MID |

## Client Sample ID: FS - 24

**Date Collected: 12/05/23 12:10**
**Date Received: 12/06/23 10:00**

**Lab Sample ID: 890-5732-17**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.95 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 20:13 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 20:13 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 02:54 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.92 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/08/23 02:54 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 24

**Date Collected: 12/05/23 12:10**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-17

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 14:54 | SMC | EET MID |

## Client Sample ID: S - SW - 03

**Date Collected: 12/05/23 12:20**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-18

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 20:33 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 20:33 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 03:16 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/08/23 03:16 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 15:00 | SMC | EET MID |

## Client Sample ID: FS - 25

**Date Collected: 12/05/23 01:16**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-19

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 20:54 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 20:54 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 03:38 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/08/23 03:38 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 15:07 | SMC | EET MID |

## Client Sample ID: FS - 26

**Date Collected: 12/05/23 01:18**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-20

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 68615 | 12/07/23 15:02 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68654 | 12/08/23 21:14 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 21:14 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 04:00 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 68612 | 12/07/23 14:13 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68556 | 12/08/23 04:00 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 68569 | 12/07/23 09:41 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68619 | 12/08/23 15:13 | SMC | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 27
**Date Collected: 12/05/23 01:20**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-21
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.96 g | 5 mL | 68618 | 12/07/23 15:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68653 | 12/08/23 14:45 | AJ | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 14:45 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 20:05 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.95 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/07/23 20:05 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/07/23 19:57 | CH | EET MID |

## Client Sample ID: FS - 28
**Date Collected: 12/05/23 02:09**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-22
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68618 | 12/07/23 15:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68653 | 12/08/23 12:21 | AJ | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 12:21 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 21:10 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/07/23 21:10 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/07/23 20:03 | CH | EET MID |

## Client Sample ID: E - SW - 04
**Date Collected: 12/05/23 02:11**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-23
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 68618 | 12/07/23 15:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68653 | 12/08/23 12:42 | AJ | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 12:42 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 21:31 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/07/23 21:31 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/07/23 20:08 | CH | EET MID |

## Client Sample ID: E - SW - 06
**Date Collected: 12/05/23 02:13**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-24
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 68618 | 12/07/23 15:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68653 | 12/08/23 13:02 | AJ | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 13:02 | SM | EET MID |

Eurofins Carlsbad

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: E - SW - 06

**Lab Sample ID: 890-5732-24**
**Matrix: Solid**
**Date Collected: 12/05/23 02:13**
**Date Received: 12/06/23 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 21:53 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.08 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/07/23 21:53 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/07/23 20:14 | CH | EET MID |

## Client Sample ID: W - SW - 04

**Lab Sample ID: 890-5732-25**
**Matrix: Solid**
**Date Collected: 12/05/23 02:15**
**Date Received: 12/06/23 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68618 | 12/07/23 15:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68653 | 12/08/23 13:23 | AJ | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 13:23 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 22:15 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.94 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/07/23 22:15 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/08/23 08:01 | CH | EET MID |

## Client Sample ID: W - SW - 06

**Lab Sample ID: 890-5732-26**
**Matrix: Solid**
**Date Collected: 12/05/23 02:20**
**Date Received: 12/06/23 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68618 | 12/07/23 15:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68653 | 12/08/23 13:43 | AJ | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 13:43 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 22:37 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.98 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/07/23 22:37 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/08/23 08:07 | CH | EET MID |

## Client Sample ID: FS - 29

**Lab Sample ID: 890-5732-27**
**Matrix: Solid**
**Date Collected: 12/05/23 03:42**
**Date Received: 12/06/23 10:00**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 68618 | 12/07/23 15:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68653 | 12/08/23 14:04 | AJ | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 14:04 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 22:58 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.92 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/07/23 22:58 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: FS - 29
**Date Collected: 12/05/23 03:42**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-27
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/08/23 08:24 | CH | EET MID |

## Client Sample ID: FS - 30
**Date Collected: 12/05/23 03:44**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-28
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.97 g | 5 mL | 68618 | 12/07/23 15:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68653 | 12/08/23 14:24 | AJ | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 14:24 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 23:20 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/07/23 23:20 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/08/23 08:29 | CH | EET MID |

## Client Sample ID: FS - 31
**Date Collected: 12/05/23 03:45**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-29
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.00 g | 5 mL | 68687 | 12/08/23 14:45 | EL | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68741 | 12/10/23 08:18 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/10/23 08:18 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/07/23 23:41 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/07/23 23:41 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/08/23 08:35 | CH | EET MID |

## Client Sample ID: N - SW - 02
**Date Collected: 12/05/23 03:51**
**Date Received: 12/06/23 10:00**

## Lab Sample ID: 890-5732-30
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 68618 | 12/07/23 15:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68653 | 12/08/23 16:29 | AJ | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 16:29 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 00:03 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/08/23 00:03 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/08/23 08:41 | CH | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Client Sample ID: N - SW - 03

**Lab Sample ID: 890-5732-31**

**Date Collected: 12/05/23 03:53**
**Date Received: 12/06/23 10:00**

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 68618 | 12/07/23 15:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68653 | 12/08/23 16:49 | AJ | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 16:49 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 00:45 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.09 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/08/23 00:45 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/08/23 08:46 | CH | EET MID |

## Client Sample ID: S - SW - 04

**Lab Sample ID: 890-5732-32**

**Date Collected: 12/05/23 03:57**
**Date Received: 12/06/23 10:00**

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 68618 | 12/07/23 15:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68653 | 12/08/23 17:10 | AJ | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 17:10 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 01:07 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.97 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/08/23 01:07 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/08/23 08:52 | CH | EET MID |

## Client Sample ID: S - SW - 05

**Lab Sample ID: 890-5732-33**

**Date Collected: 12/05/23 03:59**
**Date Received: 12/06/23 10:00**

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 68618 | 12/07/23 15:05 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68653 | 12/08/23 17:31 | AJ | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 68832 | 12/08/23 17:31 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 68673 | 12/08/23 01:28 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.92 g | 10 mL | 68613 | 12/07/23 14:17 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68555 | 12/08/23 01:28 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 68568 | 12/07/23 11:00 | SMC | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 68608 | 12/08/23 08:57 | CH | EET MID |

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

## Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Texas | NELAP | T104704400-23-26 | 06-30-24 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 8015 NM | | Solid | Total TPH |
| Total BTEX | | Solid | Total BTEX |

# Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (GC) | SW846 | EET MID |
| Total BTEX | Total BTEX Calculation | TAL SOP | EET MID |
| 8015 NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 8015B NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 300.0 | Anions, Ion Chromatography | EPA | EET MID |
| 5035 | Closed System Purge and Trap | SW846 | EET MID |
| 8015NM Prep | Microextraction | SW846 | EET MID |
| DI Leach | Deionized Water Leaching Procedure | ASTM | EET MID |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5732-1
SDG: KH 237051

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Depth |
|---|---|---|---|---|---|
| 890-5732-1 | FS - 10 | Solid | 12/05/23 08:20 | 12/06/23 10:00 | 2' |
| 890-5732-2 | FS - 11 | Solid | 12/05/23 08:22 | 12/06/23 10:00 | 2' |
| 890-5732-3 | FS - 12 | Solid | 12/05/23 08:24 | 12/06/23 10:00 | 2' |
| 890-5732-4 | FS - 13 | Solid | 12/05/23 08:26 | 12/06/23 10:00 | 3' - ' |
| 890-5732-5 | FS - 14 | Solid | 12/05/23 08:27 | 12/06/23 10:00 | 3' |
| 890-5732-6 | FS - 15 | Solid | 12/05/23 08:28 | 12/06/23 10:00 | 3' |
| 890-5732-7 | FS - 16 | Solid | 12/05/23 10:07 | 12/06/23 10:00 | 3' |
| 890-5732-8 | FS - 17 | Solid | 12/05/23 10:09 | 12/06/23 10:00 | 3' |
| 890-5732-9 | FS - 18 | Solid | 12/05/23 10:11 | 12/06/23 10:00 | 3' |
| 890-5732-10 | FS - 22 | Solid | 12/05/23 10:41 | 12/06/23 10:00 | 3' |
| 890-5732-11 | E - SW - 05 | Solid | 12/05/23 10:47 | 12/06/23 10:00 | 0-3' |
| 890-5732-12 | W - SW - 05 | Solid | 12/05/23 10:52 | 12/06/23 10:00 | 0-3' |
| 890-5732-13 | FS - 19 | Solid | 12/05/23 10:13 | 12/06/23 10:00 | 3' |
| 890-5732-14 | FS - 20 | Solid | 12/05/23 11:04 | 12/06/23 10:00 | 3' |
| 890-5732-15 | FS - 21 | Solid | 12/05/23 11:06 | 12/06/23 10:00 | 3' |
| 890-5732-16 | FS - 23 | Solid | 12/05/23 12:08 | 12/06/23 10:00 | 3' |
| 890-5732-17 | FS - 24 | Solid | 12/05/23 12:10 | 12/06/23 10:00 | 3' |
| 890-5732-18 | S - SW - 03 | Solid | 12/05/23 12:20 | 12/06/23 10:00 | 0-3' |
| 890-5732-19 | FS - 25 | Solid | 12/05/23 01:16 | 12/06/23 10:00 | 3' |
| 890-5732-20 | FS - 26 | Solid | 12/05/23 01:18 | 12/06/23 10:00 | 3' |
| 890-5732-21 | FS - 27 | Solid | 12/05/23 01:20 | 12/06/23 10:00 | 3' |
| 890-5732-22 | FS - 28 | Solid | 12/05/23 02:09 | 12/06/23 10:00 | 3' |
| 890-5732-23 | E - SW - 04 | Solid | 12/05/23 02:11 | 12/06/23 10:00 | 0-3' |
| 890-5732-24 | E - SW - 06 | Solid | 12/05/23 02:13 | 12/06/23 10:00 | 0-3' |
| 890-5732-25 | W - SW - 04 | Solid | 12/05/23 02:15 | 12/06/23 10:00 | 0-3' |
| 890-5732-26 | W - SW - 06 | Solid | 12/05/23 02:20 | 12/06/23 10:00 | 0-3' |
| 890-5732-27 | FS - 29 | Solid | 12/05/23 03:42 | 12/06/23 10:00 | 3' |
| 890-5732-28 | FS - 30 | Solid | 12/05/23 03:44 | 12/06/23 10:00 | 3' |
| 890-5732-29 | FS - 31 | Solid | 12/05/23 03:45 | 12/06/23 10:00 | 3' |
| 890-5732-30 | N - SW - 02 | Solid | 12/05/23 03:51 | 12/06/23 10:00 | 0-3' |
| 890-5732-31 | N - SW - 03 | Solid | 12/05/23 03:53 | 12/06/23 10:00 | 0-3' |
| 890-5732-32 | S - SW - 04 | Solid | 12/05/23 03:57 | 12/06/23 10:00 | 0-3' |
| 890-5732-33 | S - SW - 05 | Solid | 12/05/23 03:59 | 12/06/23 10:00 | 0-3' |

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

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# Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
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EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

890-5732 Chain of Custody

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| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (if different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☒ Rush |
| Project Number: | KH237051 | Due Date: | 48 hr |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Samples Received Intact: | Yes No | Thermometer ID: | TNM00 |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes No N/A | Temperature Reading: | -0.6 |
| Total Containers: | | Corrected Temperature: | -0.4 |

**Preservative Codes**

None: NO; DI Water: $H_2O$; Cool: Cool; MeOH: Me; HCL: HC; $HNO_3$: HN; $H_2SO_4$: $H_2$; NaOH: Na; $H_3PO_4$: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| FS - 10 | Soil | 12/5 | 8:20 | 2' | C | 1 | X | X | X | |
| FS - 11 | Soil | | 8:22 | 2' | C | 1 | X | X | X | |
| FS - 12 | Soil | | 8:24 | 2' | C | 1 | X | X | X | |
| FS - 13 | Soil | | 8:26 | 3' | C | 1 | X | X | X | 3' depth |
| FS - 14 | Soil | | 8:27 | 3' | C | 1 | X | X | X | 3' depth |
| FS - 15 | Soil | | 8:28 | 3' | C | 1 | X | X | X | 3' depth |
| FS - 16 | Soil | | 10:07 | 3' | C | 1 | X | X | X | |
| FS - 17 | Soil | | 10:09 | 3' | C | 1 | X | X | X | |
| FS - 18 | Soil | | 10:11 | 3' | C | 1 | X | X | X | |
| FS - 22 | Soil | | 10:41 | 3' | C | 1 | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| | Relinquished by: (Signature) | Received by: (Signature) | Date/Time | | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|---|---|
| 1 | B Miller | | 12-05-23 2:30pm | 2 | | 1216 100 | |
| 3 | | | | 4 | | | |
| 5 | | | | 6 | | | |

Revised Date: 08/25/2020 Rev. 2020.2

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

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# Chain of Custody

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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (If different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☒ Rush |
| Project Number: | KH237051 | Due Date: | 48hr |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | | |
|---|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No | |
| Samples Received Intact: | Yes No | Thermometer ID: | TAMOO | |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | -0.2 | |
| Sample Custody Seals: | Yes No N/A | Temperature Reading: | -0.6 | |
| Total Containers: | | Corrected Temperature: | -0.8 | |

**Preservative Codes**

None: NO | DI Water: $H_2O$
Cool: Cool | MeOH: Me
HCL: HC | $HNO_3$: HN
$H_2SO_4$: $H_2$ | NaOH: Na
$H_3PO_4$: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| E-SW05 | Soil | 12/5 | 10:47 | 0-3' | C | 1 | X | X | X | |
| W-SW05 | Soil | | 10:52 | 0-3' | C | 1 | X | X | X | |
| FS-19 | Soil | | 10:13 | 3' | C | 1 | X | X | X | |
| FS-20 | Soil | | 11:04 | 3' | C | 1 | X | X | X | |
| FS-21 | Soil | | 11:06 | 3' | C | 1 | X | X | X | |
| FS-23 | Soil | | 12:08 | 3' | C | 1 | X | X | X | |
| FS-24 | Soil | | 12:10 | 3' | C | 1 | X | X | X | |
| S-SW03 | Soil | | 12:20 | 0-3' | C | 1 | X | X | X | |
| FS-25 | Soil | | 1:16 | 3' | C | 1 | X | X | X | |
| FS-26 | Soil | | 1:18 | 3' | C | 1 | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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| | Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|---|
| 1 | | | 12-05-23 2:30pm | 2 | 12/6 10a | |
| 3 | | | | 4 | | |
| 5 | | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

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EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (if different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 Email: | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☒ Rush |
| Project Number: | KH237051 | Due Date: | 48hr |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | Yes No |
| Samples Received Intact: | Yes (No) | Thermometer ID: | TAMOO |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes No (N/A) | Temperature Reading: | -0.6 |
| Total Containers: | | Corrected Temperature: | -0.4 |

**Preservative Codes**

None: NO; DI Water: $H_2O$; Cool: Cool; MeOH: Me; HCL: HC; $HNO_3$: HN; $H_2SO_4$: $H_2$; NaOH: Na; $H_3PO_4$: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Pres. Code | Parameters: Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FS-27 | Soil | 12/5 | 1:20 | 3' | C | 1 | | X | X | X | |
| FS-28 | Soil | | 2:09 | 3' | C | 1 | | X | X | X | |
| E-SW04 | Soil | | 2:11 | 0-3' | C | 1 | | X | X | X | |
| E-SW06 | Soil | | 2:13 | 0-3' | C | 1 | | X | X | X | |
| W-SW04 | Soil | | 2:15 | 0-3' | C | 1 | | X | X | X | |
| W-SW06 | Soil | | 2:20 | 0-3' | C | 1 | | X | X | X | |
| | Soil | | | | | | | X | X | X | |
| | Soil | | | | | | | X | X | X | |
| | Soil | | | | | | | X | X | X | |
| | Soil | | | | | | | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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| | Relinquished by: (Signature) | Received by: (Signature) | Date/Time | | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|---|---|
| 1 | | | 12-05-23 2:30pm | 2 | | 12/6 10a | |
| 3 | | | | 4 | | | |
| 5 | | | | 6 | | | |

Revised Date: 08/25/2020 Rev. 2020.2

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (if different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☑ Rush |
| Project Number: | KH237051 | Due Date: | 48 hour |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | Yes No |
| Samples Received Intact: | Yes No | Thermometer ID: | Tamer |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes No (N/A) | Temperature Reading: | -0.6 |
| Total Containers: | | Corrected Temperature: | -0.4 |

**Preservative Codes**

None: NO; DI Water: $H_2O$; Cool: Cool; MeOH: Me; HCL: HC; $HNO_3$: HN; $H_2SO_4$: $H_2$; NaOH: Na; $H_3PO_4$: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| FS-29 | Soil | 12-05-23 | 3:42 | 3' | C | 1 | X | X | X | |
| FS-30 | Soil | | 3:44 | 3' | C | 1 | X | X | X | |
| FS-31 | Soil | | 3:45 | 3' | C | 1 | X | X | X | |
| N-SW-02 | Soil | | 3:51 | 0-3' | C | 1 | X | X | X | |
| N-SW-03 | Soil | | 3:53 | 0-3' | C | 1 | X | X | X | |
| S-SW-04 | Soil | | 3:57 | 0-3' | C | 1 | X | X | X | |
| S-SW-05 | Soil | | 3:59 | 0-3 | C | 1 | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | | | 2 | 12/6 10a | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 890-5732-1
SDG Number: KH 237051

**Login Number: 5732**
**List Number: 1**
**Creator: Bruns, Shannon**

**List Source: Eurofins Carlsbad**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | N/A | Refer to Job Narrative for details. |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 890-5732-1
SDG Number: KH 237051

**Login Number: 5732**
**List Number: 2**
**Creator: Teel, Brianna**

**List Source: Eurofins Midland**
**List Creation: 12/07/23 11:40 AM**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |

eurofins | Environment Testing



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Joseph Guesnier
Terracon Consulting Eng & Scientists
2526 W Pierce Street
Carlsbad, New Mexico 88220

Generated 12/14/2023 2:50:28 PM

## JOB DESCRIPTION

CURLY SWD
KH237051

## JOB NUMBER

890-5770-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.



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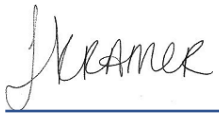
# Eurofins Carlsbad

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



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12/14/2023 2:50:28 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

# Eurofins Carlsbad

## Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD,and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs
· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

Warranties, Terms, and Conditions
· Analyses for Field Parameters are performed by Eurofins Philadelphia field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification # 02015.
VL = field staff performs tests under NJ State certification # 06005.
WG = field staff performs tests under NJ State certification # PA001, PA State certification # 48-01334.
H = field staff performs tests under NJ NELAP certification # PA093, PA NELAP certification # 46-05499.

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

· Reported results related only to the samples as tested. Eurofins Philadelphia is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· Eurofins Philadelphia is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by Eurofins Philadelphia : Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).




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# Table of Contents

Cover Page . . . . . 1
Table of Contents . . . . . 4
Definitions/Glossary . . . . . 5
Case Narrative . . . . . 6
Client Sample Results . . . . . 8
Surrogate Summary . . . . . 27
QC Sample Results . . . . . 29
QC Association Summary . . . . . 37
Lab Chronicle . . . . . 43
Certification Summary . . . . . 50
Method Summary . . . . . 51
Sample Summary . . . . . 52
Chain of Custody . . . . . 53
Receipt Checklists . . . . . 56



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# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Qualifiers

### GC VOA

| Qualifier | Qualifier Description |
|---|---|
| S1- | Surrogate recovery exceeds control limits, low biased. |
| S1+ | Surrogate recovery exceeds control limits, high biased. |
| U | Indicates the analyte was analyzed for but not detected. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |
| F2 | MS/MSD RPD exceeds control limits |
| S1+ | Surrogate recovery exceeds control limits, high biased. |
| U | Indicates the analyte was analyzed for but not detected. |

### HPLC/IC

| Qualifier | Qualifier Description |
|---|---|
| U | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Job ID: 890-5770-1

**Laboratory: Eurofins Carlsbad**

**Narrative**

**Job Narrative**
**890-5770-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**
The samples were received on 12/12/2023 8:49 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.2°C

**Receipt Exceptions**
The following samples were received and analyzed from an unpreserved bulk soil jar: S - HA 02 (890-5770-1), E - SW 07 (890-5770-2), W - SW 07 (890-5770-3), W - SW 08 (890-5770-4), W - SW 09 (890-5770-5), N - SW 04 (890-5770-6), S - HA 01 (890-5770-7), E - HA 02 (890-5770-8), E - HA 01 (890-5770-9), DS - LO 02 (890-5770-10), FS 46 (890-5770-11), FS 47 (890-5770-12), FS 48 (890-5770-13), W - HA 01 (890-5770-14), W - HA 02 (890-5770-15), DS - LO 01 (890-5770-16), DS - LO 03 (890-5770-17), DS - LO 04 (890-5770-18), DS - LO 05 (890-5770-19), DS - LO 06 (890-5770-20), DS - LO 07 (890-5770-21), DS - LO 07 (890-5770-22) and DS - LO 04 (890-5770-23).

**GC VOA**
Method 8021B: Surrogate recovery for the following samples were outside control limits: (MB 880-68998/5-A) and (MB 880-69014/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-69015 and analytical batch 880-68997 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: DS - LO 05 (890-5770-19). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS 46 (890-5770-11), FS 47 (890-5770-12), FS 48 (890-5770-13), (880-36769-A-7-B) and (880-36769-A-7-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: DS - LO 07 (890-5770-22), DS - LO 04 (890-5770-23), (890-5770-A-22-E MS) and (890-5770-A-22-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-69041 and analytical batch 880-68953 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-68977/3-A). Evidence of matrix interferences is not obvious.

# Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Job ID: 890-5770-1 (Continued)

### Laboratory: Eurofins Carlsbad (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: S - HA 02

**Lab Sample ID: 890-5770-1**
**Matrix: Solid**
**Date Collected: 12/11/23 10:09**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:31 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:31 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:31 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:31 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:31 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *93* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 15:31* | *1* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 15:31* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/13/23 15:31 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.2 | U | 50.2 | | mg/Kg | | | 12/13/23 16:23 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.2 | U | 50.2 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 16:23 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.2 | U | 50.2 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 16:23 | 1 |
| OII Range Organics (Over C28-C36) | <50.2 | U | 50.2 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 16:23 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *100* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 16:23* | *1* |
| *o-Terphenyl* | *104* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 16:23* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **10.1** | | 4.99 | | mg/Kg | | | 12/13/23 20:46 | 1 |

## Client Sample ID: E - SW 07

**Lab Sample ID: 890-5770-2**
**Matrix: Solid**
**Date Collected: 12/11/23 11:12**
**Date Received: 12/12/23 08:49**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:52 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:52 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:52 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:52 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:52 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *91* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 15:52* | *1* |

Eurofins Carlsbad

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: E - SW 07

**Date Collected: 12/11/23 11:12**
**Date Received: 12/12/23 08:49**
**Sample Depth: 0-2'**

## Lab Sample ID: 890-5770-2

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 15:52* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/13/23 15:52 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.3 | U | 50.3 | | mg/Kg | | | 12/13/23 16:45 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 50.3 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 16:45 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U | 50.3 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 16:45 | 1 |
| OII Range Organics (Over C28-C36) | <50.3 | U | 50.3 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 16:45 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *94* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 16:45* | *1* |
| *o-Terphenyl* | *96* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 16:45* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **88.8** | | 5.01 | | mg/Kg | | | 12/13/23 21:06 | 1 |

## Client Sample ID: W - SW 07

**Date Collected: 12/11/23 11:16**
**Date Received: 12/12/23 08:49**
**Sample Depth: 0-2'**

## Lab Sample ID: 890-5770-3

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:12 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:12 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:12 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:12 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:12 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *94* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 16:12* | *1* |
| *1,4-Difluorobenzene (Surr)* | *117* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 16:12* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/13/23 16:12 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/13/23 17:07 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: W - SW 07

**Lab Sample ID: 890-5770-3**
**Matrix: Solid**
**Date Collected: 12/11/23 11:16**
**Date Received: 12/12/23 08:49**
**Sample Depth: 0-2'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 17:07 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 17:07 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 17:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *101* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 17:07* | *1* |
| *o-Terphenyl* | *102* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 17:07* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **65.9** | | 4.99 | | mg/Kg | | | 12/13/23 21:12 | 1 |

## Client Sample ID: W - SW 08

**Lab Sample ID: 890-5770-4**
**Matrix: Solid**
**Date Collected: 12/11/23 11:46**
**Date Received: 12/12/23 08:49**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:33 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:33 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:33 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:33 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:33 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:33 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *95* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 16:33* | *1* |
| *1,4-Difluorobenzene (Surr)* | *121* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 16:33* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/13/23 16:33 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/13/23 17:29 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 17:29 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 17:29 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 17:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *102* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 17:29* | *1* |
| *o-Terphenyl* | *100* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 17:29* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: W - SW 08

**Lab Sample ID: 890-5770-4**
**Matrix: Solid**
**Date Collected: 12/11/23 11:46**
**Date Received: 12/12/23 08:49**
**Sample Depth: 0-2'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 27.0 | | 5.05 | | mg/Kg | | | 12/13/23 21:19 | 1 |

## Client Sample ID: W - SW 09

**Lab Sample ID: 890-5770-5**
**Matrix: Solid**
**Date Collected: 12/11/23 11:50**
**Date Received: 12/12/23 08:49**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:53 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:53 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:53 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:53 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:53 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 16:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *90* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 16:53* | *1* |
| *1,4-Difluorobenzene (Surr)* | *118* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 16:53* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/13/23 16:53 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | | 12/13/23 17:51 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 17:51 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 17:51 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 17:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *106* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 17:51* | *1* |
| *o-Terphenyl* | *108* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 17:51* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 23.7 | | 5.03 | | mg/Kg | | | 12/13/23 21:25 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: N - SW 04

**Lab Sample ID: 890-5770-6**
**Matrix: Solid**
**Date Collected: 12/11/23 11:52**
**Date Received: 12/12/23 08:49**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:14 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:14 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:14 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:14 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:14 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 17:14* | *1* |
| *1,4-Difluorobenzene (Surr)* | *118* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 17:14* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/13/23 17:14 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.2 | U | 50.2 | | mg/Kg | | | 12/13/23 18:14 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.2 | U | 50.2 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 18:14 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.2 | U | 50.2 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 18:14 | 1 |
| OII Range Organics (Over C28-C36) | <50.2 | U | 50.2 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 18:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *96* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 18:14* | *1* |
| *o-Terphenyl* | *98* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 18:14* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **10.1** | | 4.95 | | mg/Kg | | | 12/13/23 21:45 | 1 |

## Client Sample ID: S - HA 01

**Lab Sample ID: 890-5770-7**
**Matrix: Solid**
**Date Collected: 12/11/23 11:43**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:34 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:34 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:34 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:34 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:34 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *90* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 17:34* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: S - HA 01

**Lab Sample ID: 890-5770-7**
**Matrix: Solid**
**Date Collected: 12/11/23 11:43**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *113* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 17:34* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/13/23 17:34 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/13/23 18:36 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 18:36 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 18:36 | 1 |
| OII Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 18:36 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *90* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 18:36* | *1* |
| *o-Terphenyl* | *91* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 18:36* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **47.8** | | 5.01 | | mg/Kg | | | 12/13/23 21:51 | 1 |

## Client Sample ID: E - HA 02

**Lab Sample ID: 890-5770-8**
**Matrix: Solid**
**Date Collected: 12/11/23 12:06**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:55 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:55 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:55 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:55 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:55 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 17:55 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *97* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 17:55* | *1* |
| *1,4-Difluorobenzene (Surr)* | *119* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 17:55* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/13/23 17:55 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/13/23 18:58 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: E - HA 02

**Lab Sample ID: 890-5770-8**
**Matrix: Solid**
**Date Collected: 12/11/23 12:06**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 18:58 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 18:58 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 18:58 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *85* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 18:58* | *1* |
| *o-Terphenyl* | *87* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 18:58* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **121** | | 5.04 | | mg/Kg | | | 12/13/23 21:58 | 1 |

## Client Sample ID: E - HA 01

**Lab Sample ID: 890-5770-9**
**Matrix: Solid**
**Date Collected: 12/11/23 12:26**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 18:15 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 18:15 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 18:15 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 18:15 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 18:15 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 18:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 18:15* | *1* |
| *1,4-Difluorobenzene (Surr)* | *115* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 18:15* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/13/23 18:15 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/13/23 19:20 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 19:20 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 19:20 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 19:20 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *82* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 19:20* | *1* |
| *o-Terphenyl* | *82* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 19:20* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: E - HA 01

**Lab Sample ID: 890-5770-9**
**Matrix: Solid**
**Date Collected: 12/11/23 12:26**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 49.9 | | 5.00 | | mg/Kg | | | 12/13/23 22:04 | 1 |

## Client Sample ID: DS - LO 02

**Lab Sample ID: 890-5770-10**
**Matrix: Solid**
**Date Collected: 12/11/23 12:37**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 18:35 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 18:35 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 18:35 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 18:35 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 18:35 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 18:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 18:35* | *1* |
| *1,4-Difluorobenzene (Surr)* | *120* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 18:35* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/13/23 18:35 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | | 12/13/23 19:42 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 19:42 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 19:42 | 1 |
| OII Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 12/13/23 11:50 | 12/13/23 19:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *91* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 19:42* | *1* |
| *o-Terphenyl* | *94* | | *70 - 130* | *12/13/23 11:50* | *12/13/23 19:42* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 1020 | | 4.98 | | mg/Kg | | | 12/13/23 22:11 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: FS 46

**Date Collected: 12/11/23 12:13**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

**Lab Sample ID: 890-5770-11**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 20:26 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 20:26 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 20:26 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 20:26 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 20:26 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 20:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *80* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 20:26* | *1* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 20:26* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/13/23 20:26 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/13/23 14:25 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 14:25 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 14:25 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 14:25 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *133* | *S1+* | *70 - 130* | *12/13/23 11:49* | *12/13/23 14:25* | *1* |
| *o-Terphenyl* | *116* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 14:25* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **110** | | 5.03 | | mg/Kg | | | 12/13/23 22:17 | 1 |

## Client Sample ID: FS 47

**Date Collected: 12/11/23 12:19**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

**Lab Sample ID: 890-5770-12**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 20:47 | 1 |
| Toluene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 20:47 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 20:47 | 1 |
| m-Xylene & p-Xylene | <0.00403 | U | 0.00403 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 20:47 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 20:47 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 20:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 20:47* | *1* |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: FS 47

**Date Collected: 12/11/23 12:19**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

**Lab Sample ID: 890-5770-12**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *121* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 20:47* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00403 | U | 0.00403 | | mg/Kg | | | 12/13/23 20:47 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/13/23 14:47 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 14:47 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 14:47 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 14:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *129* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 14:47* | *1* |
| *o-Terphenyl* | *110* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 14:47* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **326** | | 5.03 | | mg/Kg | | | 12/13/23 22:37 | 1 |

## Client Sample ID: FS 48

**Date Collected: 12/11/23 12:22**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

**Lab Sample ID: 890-5770-13**
**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:07 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:07 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:07 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:07 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:07 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 21:07* | *1* |
| *1,4-Difluorobenzene (Surr)* | *121* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 21:07* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/13/23 21:07 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.2 | U | 50.2 | | mg/Kg | | | 12/13/23 15:10 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: FS 48

**Lab Sample ID: 890-5770-13**
**Matrix: Solid**
**Date Collected: 12/11/23 12:22**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.2 | U | 50.2 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 15:10 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.2 | U | 50.2 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 15:10 | 1 |
| OII Range Organics (Over C28-C36) | <50.2 | U | 50.2 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 15:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *134* | *S1+* | *70 - 130* | *12/13/23 11:49* | *12/13/23 15:10* | *1* |
| *o-Terphenyl* | *116* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 15:10* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **123** | | 4.96 | | mg/Kg | | | 12/13/23 22:43 | 1 |

## Client Sample ID: W - HA 01

**Lab Sample ID: 890-5770-14**
**Matrix: Solid**
**Date Collected: 12/11/23 12:56**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:28 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:28 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:28 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:28 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:28 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *103* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 21:28* | *1* |
| *1,4-Difluorobenzene (Surr)* | *120* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 21:28* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/13/23 21:28 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/13/23 15:32 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 15:32 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 15:32 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 15:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *124* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 15:32* | *1* |
| *o-Terphenyl* | *106* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 15:32* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: W - HA 01

**Lab Sample ID: 890-5770-14**
**Matrix: Solid**
**Date Collected: 12/11/23 12:56**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 12.2 | | 5.04 | | mg/Kg | | | 12/13/23 23:03 | 1 |

## Client Sample ID: W - HA 02

**Lab Sample ID: 890-5770-15**
**Matrix: Solid**
**Date Collected: 12/11/23 01:13**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:48 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:48 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:48 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:48 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:48 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 21:48 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *103* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 21:48* | *1* |
| *1,4-Difluorobenzene (Surr)* | *115* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 21:48* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/13/23 21:48 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/13/23 16:23 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 16:23 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 16:23 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 16:23 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *118* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 16:23* | *1* |
| *o-Terphenyl* | *98* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 16:23* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 26.0 | | 4.98 | | mg/Kg | | | 12/13/23 23:10 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: DS - LO 01

**Lab Sample ID: 890-5770-16**
**Matrix: Solid**
**Date Collected: 12/11/23 02:56**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:09 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:09 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:09 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:09 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:09 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *95* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 22:09* | *1* |
| *1,4-Difluorobenzene (Surr)* | *113* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 22:09* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00400 | U | 0.00400 | | mg/Kg | | | 12/13/23 22:09 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | | 12/13/23 16:45 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 16:45 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 16:45 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 16:45 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *125* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 16:45* | *1* |
| *o-Terphenyl* | *106* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 16:45* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **1610** | | 24.8 | | mg/Kg | | | 12/13/23 23:16 | 5 |

## Client Sample ID: DS - LO 03

**Lab Sample ID: 890-5770-17**
**Matrix: Solid**
**Date Collected: 12/11/23 03:38**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:29 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:29 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:29 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:29 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:29 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 22:29* | *1* |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: DS - LO 03

**Lab Sample ID: 890-5770-17**
**Matrix: Solid**
**Date Collected: 12/11/23 03:38**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *113* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 22:29* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/13/23 22:29 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/13/23 17:07 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 17:07 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 17:07 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 17:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *114* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 17:07* | *1* |
| *o-Terphenyl* | *96* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 17:07* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **58.0** | | 4.97 | | mg/Kg | | | 12/13/23 23:23 | 1 |

## Client Sample ID: DS - LO 04

**Lab Sample ID: 890-5770-18**
**Matrix: Solid**
**Date Collected: 12/11/23 01:41**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:50 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:50 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:50 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:50 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:50 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 22:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *103* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 22:50* | *1* |
| *1,4-Difluorobenzene (Surr)* | *119* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 22:50* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/13/23 22:50 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/13/23 17:29 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: DS - LO 04

**Lab Sample ID: 890-5770-18**
**Matrix: Solid**
**Date Collected: 12/11/23 01:41**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 17:29 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 17:29 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 17:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *117* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 17:29* | *1* |
| *o-Terphenyl* | *99* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 17:29* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **1640** | | 25.3 | | mg/Kg | | | 12/13/23 23:29 | 5 |

## Client Sample ID: DS - LO 05

**Lab Sample ID: 890-5770-19**
**Matrix: Solid**
**Date Collected: 12/11/23 04:02**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 23:10 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 23:10 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 23:10 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 23:10 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 23:10 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 23:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *115* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 23:10* | *1* |
| *1,4-Difluorobenzene (Surr)* | *141* | *S1+* | *70 - 130* | *12/13/23 11:03* | *12/13/23 23:10* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/13/23 23:10 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | | 12/13/23 17:51 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 17:51 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 17:51 | 1 |
| OII Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 17:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *118* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 17:51* | *1* |
| *o-Terphenyl* | *98* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 17:51* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: DS - LO 05

**Lab Sample ID: 890-5770-19**
**Matrix: Solid**
**Date Collected: 12/11/23 04:02**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 71.4 | | 5.02 | | mg/Kg | | | 12/13/23 23:36 | 1 |

## Client Sample ID: DS - LO 06

**Lab Sample ID: 890-5770-20**
**Matrix: Solid**
**Date Collected: 12/11/23 03:13**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 23:31 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 23:31 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 23:31 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 23:31 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 23:31 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 23:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 23:31* | *1* |
| *1,4-Difluorobenzene (Surr)* | *125* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 23:31* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/13/23 23:31 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.2 | U | 50.2 | | mg/Kg | | | 12/13/23 18:14 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.2 | U | 50.2 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 18:14 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.2 | U | 50.2 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 18:14 | 1 |
| OII Range Organics (Over C28-C36) | <50.2 | U | 50.2 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 18:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *114* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 18:14* | *1* |
| *o-Terphenyl* | *97* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 18:14* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 40.9 | | 5.04 | | mg/Kg | | | 12/13/23 23:42 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: DS - LO 07

**Lab Sample ID: 890-5770-21**
**Matrix: Solid**
**Date Collected: 12/11/23 03:25**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 00:59 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 00:59 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 00:59 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 00:59 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 00:59 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 00:59 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *85* | | *70 - 130* | *12/13/23 10:58* | *12/14/23 00:59* | *1* |
| *1,4-Difluorobenzene (Surr)* | *72* | | *70 - 130* | *12/13/23 10:58* | *12/14/23 00:59* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/14/23 00:59 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/13/23 18:36 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 18:36 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 18:36 | 1 |
| OII Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/13/23 11:49 | 12/13/23 18:36 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *112* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 18:36* | *1* |
| *o-Terphenyl* | *95* | | *70 - 130* | *12/13/23 11:49* | *12/13/23 18:36* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **561** | | 5.04 | | mg/Kg | | | 12/14/23 00:35 | 1 |

## Client Sample ID: DS - LO 07

**Lab Sample ID: 890-5770-22**
**Matrix: Solid**
**Date Collected: 12/11/23 03:21**
**Date Received: 12/12/23 08:49**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 01:20 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 01:20 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 01:20 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 01:20 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 01:20 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 01:20 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *86* | | *70 - 130* | *12/13/23 10:58* | *12/14/23 01:20* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: DS - LO 07

**Lab Sample ID: 890-5770-22**
**Matrix: Solid**
**Date Collected: 12/11/23 03:21**
**Date Received: 12/12/23 08:49**
**Sample Depth: 1'**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *74* | | *70 - 130* | *12/13/23 10:58* | *12/14/23 01:20* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/14/23 01:20 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/13/23 21:34 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U F2 | 50.5 | | mg/Kg | | 12/13/23 16:04 | 12/13/23 21:34 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U F1 | 50.5 | | mg/Kg | | 12/13/23 16:04 | 12/13/23 21:34 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 16:04 | 12/13/23 21:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *139* | *S1+* | *70 - 130* | *12/13/23 16:04* | *12/13/23 21:34* | *1* |
| *o-Terphenyl* | *121* | | *70 - 130* | *12/13/23 16:04* | *12/13/23 21:34* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **3170** | | 25.0 | | mg/Kg | | | 12/14/23 00:54 | 5 |

## Client Sample ID: DS - LO 04

**Lab Sample ID: 890-5770-23**
**Matrix: Solid**
**Date Collected: 12/11/23 01:41**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 01:40 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 01:40 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 01:40 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 01:40 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 01:40 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/13/23 10:58 | 12/14/23 01:40 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *83* | | *70 - 130* | *12/13/23 10:58* | *12/14/23 01:40* | *1* |
| *1,4-Difluorobenzene (Surr)* | *77* | | *70 - 130* | *12/13/23 10:58* | *12/14/23 01:40* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/14/23 01:40 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/13/23 22:39 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: DS - LO 04

**Date Collected: 12/11/23 01:41**
**Date Received: 12/12/23 08:49**
**Sample Depth: 2'**

## Lab Sample ID: 890-5770-23

**Matrix: Solid**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 16:04 | 12/13/23 22:39 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 16:04 | 12/13/23 22:39 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/13/23 16:04 | 12/13/23 22:39 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *144* | *S1+* | *70 - 130* | *12/13/23 16:04* | *12/13/23 22:39* | *1* |
| *o-Terphenyl* | *126* | | *70 - 130* | *12/13/23 16:04* | *12/13/23 22:39* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **84.9** | | 4.95 | | mg/Kg | | | 12/14/23 01:01 | 1 |

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | BFB1 (70-130) | DFBZ1 (70-130) | | | | | | | | | | |
| 890-5770-1 | S - HA 02 | 93 | 110 | | | | | | | | | | |
| 890-5770-1 MS | S - HA 02 | 99 | 116 | | | | | | | | | | |
| 890-5770-1 MSD | S - HA 02 | 97 | 111 | | | | | | | | | | |
| 890-5770-2 | E - SW 07 | 91 | 110 | | | | | | | | | | |
| 890-5770-3 | W - SW 07 | 94 | 117 | | | | | | | | | | |
| 890-5770-4 | W - SW 08 | 95 | 121 | | | | | | | | | | |
| 890-5770-5 | W - SW 09 | 90 | 118 | | | | | | | | | | |
| 890-5770-6 | N - SW 04 | 100 | 118 | | | | | | | | | | |
| 890-5770-7 | S - HA 01 | 90 | 113 | | | | | | | | | | |
| 890-5770-8 | E - HA 02 | 97 | 119 | | | | | | | | | | |
| 890-5770-9 | E - HA 01 | 98 | 115 | | | | | | | | | | |
| 890-5770-10 | DS - LO 02 | 96 | 120 | | | | | | | | | | |
| 890-5770-11 | FS 46 | 80 | 110 | | | | | | | | | | |
| 890-5770-12 | FS 47 | 100 | 121 | | | | | | | | | | |
| 890-5770-13 | FS 48 | 100 | 121 | | | | | | | | | | |
| 890-5770-14 | W - HA 01 | 103 | 120 | | | | | | | | | | |
| 890-5770-15 | W - HA 02 | 103 | 115 | | | | | | | | | | |
| 890-5770-16 | DS - LO 01 | 95 | 113 | | | | | | | | | | |
| 890-5770-17 | DS - LO 03 | 96 | 113 | | | | | | | | | | |
| 890-5770-18 | DS - LO 04 | 103 | 119 | | | | | | | | | | |
| 890-5770-19 | DS - LO 05 | 115 | 141 S1+ | | | | | | | | | | |
| 890-5770-20 | DS - LO 06 | 104 | 125 | | | | | | | | | | |
| 890-5770-21 | DS - LO 07 | 85 | 72 | | | | | | | | | | |
| 890-5770-22 | DS - LO 07 | 86 | 74 | | | | | | | | | | |
| 890-5770-23 | DS - LO 04 | 83 | 77 | | | | | | | | | | |
| LCS 880-69014/1-A | Lab Control Sample | 96 | 108 | | | | | | | | | | |
| LCS 880-69015/1-A | Lab Control Sample | 99 | 119 | | | | | | | | | | |
| LCSD 880-69014/2-A | Lab Control Sample Dup | 94 | 105 | | | | | | | | | | |
| LCSD 880-69015/2-A | Lab Control Sample Dup | 99 | 112 | | | | | | | | | | |
| MB 880-68998/5-A | Method Blank | 67 S1- | 93 | | | | | | | | | | |
| MB 880-69014/5-A | Method Blank | 68 S1- | 90 | | | | | | | | | | |
| MB 880-69015/5-A | Method Blank | 112 | 141 S1+ | | | | | | | | | | |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | 1CO1 (70-130) | OTPH1 (70-130) | | | | | | | | | | |
| 890-5770-1 | S - HA 02 | 100 | 104 | | | | | | | | | | |
| 890-5770-2 | E - SW 07 | 94 | 96 | | | | | | | | | | |
| 890-5770-3 | W - SW 07 | 101 | 102 | | | | | | | | | | |
| 890-5770-4 | W - SW 08 | 102 | 100 | | | | | | | | | | |
| 890-5770-5 | W - SW 09 | 106 | 108 | | | | | | | | | | |
| 890-5770-6 | N - SW 04 | 96 | 98 | | | | | | | | | | |
| 890-5770-7 | S - HA 01 | 90 | 91 | | | | | | | | | | |

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | Client Sample ID | 1CO1 (70-130) | OTPH1 (70-130) | | | | | | | | |
| 890-5770-8 | E - HA 02 | 85 | 87 | | | | | | | | |
| 890-5770-9 | E - HA 01 | 82 | 82 | | | | | | | | |
| 890-5770-10 | DS - LO 02 | 91 | 94 | | | | | | | | |
| 890-5770-11 | FS 46 | 133 S1+ | 116 | | | | | | | | |
| 890-5770-12 | FS 47 | 129 | 110 | | | | | | | | |
| 890-5770-13 | FS 48 | 134 S1+ | 116 | | | | | | | | |
| 890-5770-14 | W - HA 01 | 124 | 106 | | | | | | | | |
| 890-5770-15 | W - HA 02 | 118 | 98 | | | | | | | | |
| 890-5770-16 | DS - LO 01 | 125 | 106 | | | | | | | | |
| 890-5770-17 | DS - LO 03 | 114 | 96 | | | | | | | | |
| 890-5770-18 | DS - LO 04 | 117 | 99 | | | | | | | | |
| 890-5770-19 | DS - LO 05 | 118 | 98 | | | | | | | | |
| 890-5770-20 | DS - LO 06 | 114 | 97 | | | | | | | | |
| 890-5770-21 | DS - LO 07 | 112 | 95 | | | | | | | | |
| 890-5770-22 | DS - LO 07 | 139 S1+ | 121 | | | | | | | | |
| 890-5770-22 MS | DS - LO 07 | 137 S1+ | 97 | | | | | | | | |
| 890-5770-22 MSD | DS - LO 07 | 151 S1+ | 111 | | | | | | | | |
| 890-5770-23 | DS - LO 04 | 144 S1+ | 126 | | | | | | | | |
| LCS 880-68976/2-A | Lab Control Sample | 103 | 109 | | | | | | | | |
| LCS 880-68977/2-A | Lab Control Sample | 109 | 119 | | | | | | | | |
| LCS 880-69041/2-A | Lab Control Sample | 95 | 102 | | | | | | | | |
| LCSD 880-68976/3-A | Lab Control Sample Dup | 93 | 87 | | | | | | | | |
| LCSD 880-68977/3-A | Lab Control Sample Dup | 135 S1+ | 155 S1+ | | | | | | | | |
| LCSD 880-69041/3-A | Lab Control Sample Dup | 89 | 82 | | | | | | | | |
| MB 880-68976/1-A | Method Blank | 112 | 103 | | | | | | | | |
| MB 880-68977/1-A | Method Blank | 86 | 96 | | | | | | | | |
| MB 880-69041/1-A | Method Blank | 115 | 104 | | | | | | | | |

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC)

**Lab Sample ID: MB 880-68998/5-A**
**Matrix: Solid**
**Analysis Batch: 68975**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68998**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 10:32 | 12/13/23 12:07 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 10:32 | 12/13/23 12:07 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 10:32 | 12/13/23 12:07 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/13/23 10:32 | 12/13/23 12:07 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 10:32 | 12/13/23 12:07 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/13/23 10:32 | 12/13/23 12:07 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *67* | *S1-* | *70 - 130* | *12/13/23 10:32* | *12/13/23 12:07* | *1* |
| *1,4-Difluorobenzene (Surr)* | *93* | | *70 - 130* | *12/13/23 10:32* | *12/13/23 12:07* | *1* |

**Lab Sample ID: MB 880-69014/5-A**
**Matrix: Solid**
**Analysis Batch: 68975**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 69014**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 10:58 | 12/13/23 23:16 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 10:58 | 12/13/23 23:16 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 10:58 | 12/13/23 23:16 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/13/23 10:58 | 12/13/23 23:16 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 10:58 | 12/13/23 23:16 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/13/23 10:58 | 12/13/23 23:16 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *68* | *S1-* | *70 - 130* | *12/13/23 10:58* | *12/13/23 23:16* | *1* |
| *1,4-Difluorobenzene (Surr)* | *90* | | *70 - 130* | *12/13/23 10:58* | *12/13/23 23:16* | *1* |

**Lab Sample ID: LCS 880-69014/1-A**
**Matrix: Solid**
**Analysis Batch: 68975**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 69014**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Benzene | 0.100 | 0.08356 | | mg/Kg | | 84 | 70 - 130 |
| Toluene | 0.100 | 0.07786 | | mg/Kg | | 78 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.08620 | | mg/Kg | | 86 | 70 - 130 |
| m-Xylene & p-Xylene | 0.200 | 0.1762 | | mg/Kg | | 88 | 70 - 130 |
| o-Xylene | 0.100 | 0.08457 | | mg/Kg | | 85 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *108* | | *70 - 130* |

**Lab Sample ID: LCSD 880-69014/2-A**
**Matrix: Solid**
**Analysis Batch: 68975**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 69014**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.100 | 0.08480 | | mg/Kg | | 85 | 70 - 130 | 1 | 35 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

**Lab Sample ID: LCSD 880-69014/2-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 68975** — **Prep Batch: 69014**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Toluene | | | 0.100 | 0.08267 | | mg/Kg | | 83 | 70 - 130 | 6 | 35 |
| Ethylbenzene | | | 0.100 | 0.09053 | | mg/Kg | | 91 | 70 - 130 | 5 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1845 | | mg/Kg | | 92 | 70 - 130 | 5 | 35 |
| o-Xylene | | | 0.100 | 0.08822 | | mg/Kg | | 88 | 70 - 130 | 4 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *94* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *105* | | *70 - 130* |

**Lab Sample ID: MB 880-69015/5-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 68997** — **Prep Batch: 69015**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:02 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:02 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:02 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:02 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:02 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/13/23 11:03 | 12/13/23 15:02 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *112* | | *70 - 130* | *12/13/23 11:03* | *12/13/23 15:02* | *1* |
| *1,4-Difluorobenzene (Surr)* | *141* | *S1+* | *70 - 130* | *12/13/23 11:03* | *12/13/23 15:02* | *1* |

**Lab Sample ID: LCS 880-69015/1-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 68997** — **Prep Batch: 69015**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.1168 | | mg/Kg | | 117 | 70 - 130 |
| Toluene | | | 0.100 | 0.08523 | | mg/Kg | | 85 | 70 - 130 |
| Ethylbenzene | | | 0.100 | 0.08671 | | mg/Kg | | 87 | 70 - 130 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1913 | | mg/Kg | | 96 | 70 - 130 |
| o-Xylene | | | 0.100 | 0.08887 | | mg/Kg | | 89 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *119* | | *70 - 130* |

**Lab Sample ID: LCSD 880-69015/2-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 68997** — **Prep Batch: 69015**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.1197 | | mg/Kg | | 120 | 70 - 130 | 2 | 35 |
| Toluene | | | 0.100 | 0.08394 | | mg/Kg | | 84 | 70 - 130 | 2 | 35 |
| Ethylbenzene | | | 0.100 | 0.08331 | | mg/Kg | | 83 | 70 - 130 | 4 | 35 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

**Lab Sample ID: LCSD 880-69015/2-A**
**Matrix: Solid**
**Analysis Batch: 68997**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 69015**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| m-Xylene & p-Xylene | | | 0.200 | 0.1675 | | mg/Kg | | 84 | 70 - 130 | 13 | 35 |
| o-Xylene | | | 0.100 | 0.08594 | | mg/Kg | | 86 | 70 - 130 | 3 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *112* | | *70 - 130* |

**Lab Sample ID: 890-5770-1 MS**
**Matrix: Solid**
**Analysis Batch: 68997**

**Client Sample ID: S - HA 02**
**Prep Type: Total/NA**
**Prep Batch: 69015**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.0996 | 0.1240 | | mg/Kg | | 125 | 70 - 130 | | |
| Toluene | <0.00199 | U | 0.0996 | 0.08589 | | mg/Kg | | 86 | 70 - 130 | | |
| Ethylbenzene | <0.00199 | U | 0.0996 | 0.09009 | | mg/Kg | | 90 | 70 - 130 | | |
| m-Xylene & p-Xylene | <0.00398 | U | 0.199 | 0.1983 | | mg/Kg | | 100 | 70 - 130 | | |
| o-Xylene | <0.00199 | U | 0.0996 | 0.09145 | | mg/Kg | | 92 | 70 - 130 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *116* | | *70 - 130* |

**Lab Sample ID: 890-5770-1 MSD**
**Matrix: Solid**
**Analysis Batch: 68997**

**Client Sample ID: S - HA 02**
**Prep Type: Total/NA**
**Prep Batch: 69015**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.0990 | 0.1132 | | mg/Kg | | 114 | 70 - 130 | 9 | 35 |
| Toluene | <0.00199 | U | 0.0990 | 0.08324 | | mg/Kg | | 84 | 70 - 130 | 3 | 35 |
| Ethylbenzene | <0.00199 | U | 0.0990 | 0.08498 | | mg/Kg | | 86 | 70 - 130 | 6 | 35 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.198 | 0.1896 | | mg/Kg | | 96 | 70 - 130 | 5 | 35 |
| o-Xylene | <0.00199 | U | 0.0990 | 0.08775 | | mg/Kg | | 89 | 70 - 130 | 4 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *97* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *111* | | *70 - 130* |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 880-68976/1-A**
**Matrix: Solid**
**Analysis Batch: 68953**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 68976**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 07:22 | 12/13/23 08:05 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 07:22 | 12/13/23 08:05 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 07:22 | 12/13/23 08:05 | 1 |

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1-Chlorooctane | 112 | | 70 - 130 | 12/13/23 07:22 | 12/13/23 08:05 | 1 |
| o-Terphenyl | 103 | | 70 - 130 | 12/13/23 07:22 | 12/13/23 08:05 | 1 |

**Lab Sample ID: LCS 880-68976/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 68953** — **Prep Batch: 68976**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 962.2 | | mg/Kg | | 96 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 938.7 | | mg/Kg | | 94 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 103 | | 70 - 130 |
| o-Terphenyl | 109 | | 70 - 130 |

**Lab Sample ID: LCSD 880-68976/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 68953** — **Prep Batch: 68976**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 957.7 | | mg/Kg | | 96 | 70 - 130 | 0 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 958.0 | | mg/Kg | | 96 | 70 - 130 | 2 | 20 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 93 | | 70 - 130 |
| o-Terphenyl | 87 | | 70 - 130 |

**Lab Sample ID: MB 880-68977/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 68955** — **Prep Batch: 68977**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 07:25 | 12/13/23 08:05 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 07:25 | 12/13/23 08:05 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 07:25 | 12/13/23 08:05 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1-Chlorooctane | 86 | | 70 - 130 | 12/13/23 07:25 | 12/13/23 08:05 | 1 |
| o-Terphenyl | 96 | | 70 - 130 | 12/13/23 07:25 | 12/13/23 08:05 | 1 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: LCS 880-68977/2-A**
**Matrix: Solid**
**Analysis Batch: 68955**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 68977**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 1115 | | mg/Kg | | 111 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 1006 | | mg/Kg | | 101 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *109* | | *70 - 130* |
| *o-Terphenyl* | *119* | | *70 - 130* |

**Lab Sample ID: LCSD 880-68977/3-A**
**Matrix: Solid**
**Analysis Batch: 68955**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 68977**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 999.4 | | mg/Kg | | 100 | 70 - 130 | 11 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 1135 | | mg/Kg | | 114 | 70 - 130 | 12 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *135* | *S1+* | *70 - 130* |
| *o-Terphenyl* | *155* | *S1+* | *70 - 130* |

**Lab Sample ID: MB 880-69041/1-A**
**Matrix: Solid**
**Analysis Batch: 68953**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 69041**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 16:04 | 12/13/23 20:27 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 16:04 | 12/13/23 20:27 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/13/23 16:04 | 12/13/23 20:27 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *115* | | *70 - 130* | *12/13/23 16:04* | *12/13/23 20:27* | *1* |
| *o-Terphenyl* | *104* | | *70 - 130* | *12/13/23 16:04* | *12/13/23 20:27* | *1* |

**Lab Sample ID: LCS 880-69041/2-A**
**Matrix: Solid**
**Analysis Batch: 68953**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 69041**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 958.7 | | mg/Kg | | 96 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 868.3 | | mg/Kg | | 87 | 70 - 130 | | |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: LCS 880-69041/2-A**
**Matrix: Solid**
**Analysis Batch: 68953**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 69041**

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 95 | | 70 - 130 |
| o-Terphenyl | 102 | | 70 - 130 |

**Lab Sample ID: LCSD 880-69041/3-A**
**Matrix: Solid**
**Analysis Batch: 68953**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 69041**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 948.5 | | mg/Kg | | 95 | 70 - 130 | 1 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 906.4 | | mg/Kg | | 91 | 70 - 130 | 4 | 20 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 89 | | 70 - 130 |
| o-Terphenyl | 82 | | 70 - 130 |

**Lab Sample ID: 890-5770-22 MS**
**Matrix: Solid**
**Analysis Batch: 68953**

**Client Sample ID: DS - LO 07**
**Prep Type: Total/NA**
**Prep Batch: 69041**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U F2 | 997 | 900.2 | | mg/Kg | | 87 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | <50.5 | U F1 | 997 | 1302 | | mg/Kg | | 129 | 70 - 130 | | |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 137 | S1+ | 70 - 130 |
| o-Terphenyl | 97 | | 70 - 130 |

**Lab Sample ID: 890-5770-22 MSD**
**Matrix: Solid**
**Analysis Batch: 68953**

**Client Sample ID: DS - LO 07**
**Prep Type: Total/NA**
**Prep Batch: 69041**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U F2 | 997 | 1130 | F2 | mg/Kg | | 110 | 70 - 130 | 23 | 20 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U F1 | 997 | 1491 | F1 | mg/Kg | | 148 | 70 - 130 | 14 | 20 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 151 | S1+ | 70 - 130 |
| o-Terphenyl | 111 | | 70 - 130 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-68971/1-A**
**Matrix: Solid**
**Analysis Batch: 69035**

**Client Sample ID: Method Blank**
**Prep Type: Soluble**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <5.00 | U | 5.00 | | mg/Kg | | | 12/13/23 20:26 | 1 |

**Lab Sample ID: LCS 880-68971/2-A**
**Matrix: Solid**
**Analysis Batch: 69035**

**Client Sample ID: Lab Control Sample**
**Prep Type: Soluble**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Chloride | 250 | 259.3 | | mg/Kg | | 104 | 90 - 110 |

**Lab Sample ID: LCSD 880-68971/3-A**
**Matrix: Solid**
**Analysis Batch: 69035**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Soluble**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 250 | 254.9 | | mg/Kg | | 102 | 90 - 110 | 2 | 20 |

**Lab Sample ID: 890-5770-1 MS**
**Matrix: Solid**
**Analysis Batch: 69035**

**Client Sample ID: S - HA 02**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 10.1 | | 250 | 259.3 | | mg/Kg | | 100 | 90 - 110 |

**Lab Sample ID: 890-5770-1 MSD**
**Matrix: Solid**
**Analysis Batch: 69035**

**Client Sample ID: S - HA 02**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 10.1 | | 250 | 260.5 | | mg/Kg | | 100 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 890-5770-11 MS**
**Matrix: Solid**
**Analysis Batch: 69035**

**Client Sample ID: FS 46**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 110 | | 252 | 356.2 | | mg/Kg | | 98 | 90 - 110 |

**Lab Sample ID: 890-5770-11 MSD**
**Matrix: Solid**
**Analysis Batch: 69035**

**Client Sample ID: FS 46**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 110 | | 252 | 357.8 | | mg/Kg | | 98 | 90 - 110 | 0 | 20 |

**Lab Sample ID: MB 880-68974/1-A**
**Matrix: Solid**
**Analysis Batch: 69036**

**Client Sample ID: Method Blank**
**Prep Type: Soluble**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <5.00 | U | 5.00 | | mg/Kg | | | 12/14/23 00:15 | 1 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: LCS 880-68974/2-A**
**Matrix: Solid**
**Analysis Batch: 69036**

**Client Sample ID: Lab Control Sample**
**Prep Type: Soluble**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 257.3 | | mg/Kg | | 103 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-68974/3-A**
**Matrix: Solid**
**Analysis Batch: 69036**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Soluble**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 256.8 | | mg/Kg | | 103 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 890-5770-21 MS**
**Matrix: Solid**
**Analysis Batch: 69036**

**Client Sample ID: DS - LO 07**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 561 | | 252 | 814.7 | | mg/Kg | | 101 | 90 - 110 | | |

**Lab Sample ID: 890-5770-21 MSD**
**Matrix: Solid**
**Analysis Batch: 69036**

**Client Sample ID: DS - LO 07**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 561 | | 252 | 816.1 | | mg/Kg | | 101 | 90 - 110 | 0 | 20 |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## GC VOA

### Analysis Batch: 68975

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-21 | DS - LO 07 | Total/NA | Solid | 8021B | 69014 |
| 890-5770-22 | DS - LO 07 | Total/NA | Solid | 8021B | 69014 |
| 890-5770-23 | DS - LO 04 | Total/NA | Solid | 8021B | 69014 |
| MB 880-68998/5-A | Method Blank | Total/NA | Solid | 8021B | 68998 |
| MB 880-69014/5-A | Method Blank | Total/NA | Solid | 8021B | 69014 |
| LCS 880-69014/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 69014 |
| LCSD 880-69014/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 69014 |

### Analysis Batch: 68997

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-1 | S - HA 02 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-2 | E - SW 07 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-3 | W - SW 07 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-4 | W - SW 08 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-5 | W - SW 09 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-6 | N - SW 04 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-7 | S - HA 01 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-8 | E - HA 02 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-9 | E - HA 01 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-10 | DS - LO 02 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-11 | FS 46 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-12 | FS 47 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-13 | FS 48 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-14 | W - HA 01 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-15 | W - HA 02 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-16 | DS - LO 01 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-17 | DS - LO 03 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-18 | DS - LO 04 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-19 | DS - LO 05 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-20 | DS - LO 06 | Total/NA | Solid | 8021B | 69015 |
| MB 880-69015/5-A | Method Blank | Total/NA | Solid | 8021B | 69015 |
| LCS 880-69015/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 69015 |
| LCSD 880-69015/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 69015 |
| 890-5770-1 MS | S - HA 02 | Total/NA | Solid | 8021B | 69015 |
| 890-5770-1 MSD | S - HA 02 | Total/NA | Solid | 8021B | 69015 |

### Prep Batch: 68998

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 880-68998/5-A | Method Blank | Total/NA | Solid | 5035 | |

### Prep Batch: 69014

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-21 | DS - LO 07 | Total/NA | Solid | 5035 | |
| 890-5770-22 | DS - LO 07 | Total/NA | Solid | 5035 | |
| 890-5770-23 | DS - LO 04 | Total/NA | Solid | 5035 | |
| MB 880-69014/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-69014/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-69014/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## GC VOA

### Prep Batch: 69015

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-1 | S - HA 02 | Total/NA | Solid | 5035 | |
| 890-5770-2 | E - SW 07 | Total/NA | Solid | 5035 | |
| 890-5770-3 | W - SW 07 | Total/NA | Solid | 5035 | |
| 890-5770-4 | W - SW 08 | Total/NA | Solid | 5035 | |
| 890-5770-5 | W - SW 09 | Total/NA | Solid | 5035 | |
| 890-5770-6 | N - SW 04 | Total/NA | Solid | 5035 | |
| 890-5770-7 | S - HA 01 | Total/NA | Solid | 5035 | |
| 890-5770-8 | E - HA 02 | Total/NA | Solid | 5035 | |
| 890-5770-9 | E - HA 01 | Total/NA | Solid | 5035 | |
| 890-5770-10 | DS - LO 02 | Total/NA | Solid | 5035 | |
| 890-5770-11 | FS 46 | Total/NA | Solid | 5035 | |
| 890-5770-12 | FS 47 | Total/NA | Solid | 5035 | |
| 890-5770-13 | FS 48 | Total/NA | Solid | 5035 | |
| 890-5770-14 | W - HA 01 | Total/NA | Solid | 5035 | |
| 890-5770-15 | W - HA 02 | Total/NA | Solid | 5035 | |
| 890-5770-16 | DS - LO 01 | Total/NA | Solid | 5035 | |
| 890-5770-17 | DS - LO 03 | Total/NA | Solid | 5035 | |
| 890-5770-18 | DS - LO 04 | Total/NA | Solid | 5035 | |
| 890-5770-19 | DS - LO 05 | Total/NA | Solid | 5035 | |
| 890-5770-20 | DS - LO 06 | Total/NA | Solid | 5035 | |
| MB 880-69015/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-69015/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-69015/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 890-5770-1 MS | S - HA 02 | Total/NA | Solid | 5035 | |
| 890-5770-1 MSD | S - HA 02 | Total/NA | Solid | 5035 | |

### Analysis Batch: 69107

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-1 | S - HA 02 | Total/NA | Solid | Total BTEX | |
| 890-5770-2 | E - SW 07 | Total/NA | Solid | Total BTEX | |
| 890-5770-3 | W - SW 07 | Total/NA | Solid | Total BTEX | |
| 890-5770-4 | W - SW 08 | Total/NA | Solid | Total BTEX | |
| 890-5770-5 | W - SW 09 | Total/NA | Solid | Total BTEX | |
| 890-5770-6 | N - SW 04 | Total/NA | Solid | Total BTEX | |
| 890-5770-7 | S - HA 01 | Total/NA | Solid | Total BTEX | |
| 890-5770-8 | E - HA 02 | Total/NA | Solid | Total BTEX | |
| 890-5770-9 | E - HA 01 | Total/NA | Solid | Total BTEX | |
| 890-5770-10 | DS - LO 02 | Total/NA | Solid | Total BTEX | |
| 890-5770-11 | FS 46 | Total/NA | Solid | Total BTEX | |
| 890-5770-12 | FS 47 | Total/NA | Solid | Total BTEX | |
| 890-5770-13 | FS 48 | Total/NA | Solid | Total BTEX | |
| 890-5770-14 | W - HA 01 | Total/NA | Solid | Total BTEX | |
| 890-5770-15 | W - HA 02 | Total/NA | Solid | Total BTEX | |
| 890-5770-16 | DS - LO 01 | Total/NA | Solid | Total BTEX | |
| 890-5770-17 | DS - LO 03 | Total/NA | Solid | Total BTEX | |
| 890-5770-18 | DS - LO 04 | Total/NA | Solid | Total BTEX | |
| 890-5770-19 | DS - LO 05 | Total/NA | Solid | Total BTEX | |
| 890-5770-20 | DS - LO 06 | Total/NA | Solid | Total BTEX | |
| 890-5770-21 | DS - LO 07 | Total/NA | Solid | Total BTEX | |
| 890-5770-22 | DS - LO 07 | Total/NA | Solid | Total BTEX | |
| 890-5770-23 | DS - LO 04 | Total/NA | Solid | Total BTEX | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## GC Semi VOA

### Analysis Batch: 68953

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-11 | FS 46 | Total/NA | Solid | 8015B NM | 68976 |
| 890-5770-12 | FS 47 | Total/NA | Solid | 8015B NM | 68976 |
| 890-5770-13 | FS 48 | Total/NA | Solid | 8015B NM | 68976 |
| 890-5770-14 | W - HA 01 | Total/NA | Solid | 8015B NM | 68976 |
| 890-5770-15 | W - HA 02 | Total/NA | Solid | 8015B NM | 68976 |
| 890-5770-16 | DS - LO 01 | Total/NA | Solid | 8015B NM | 68976 |
| 890-5770-17 | DS - LO 03 | Total/NA | Solid | 8015B NM | 68976 |
| 890-5770-18 | DS - LO 04 | Total/NA | Solid | 8015B NM | 68976 |
| 890-5770-19 | DS - LO 05 | Total/NA | Solid | 8015B NM | 68976 |
| 890-5770-20 | DS - LO 06 | Total/NA | Solid | 8015B NM | 68976 |
| 890-5770-21 | DS - LO 07 | Total/NA | Solid | 8015B NM | 68976 |
| 890-5770-22 | DS - LO 07 | Total/NA | Solid | 8015B NM | 69041 |
| 890-5770-23 | DS - LO 04 | Total/NA | Solid | 8015B NM | 69041 |
| MB 880-68976/1-A | Method Blank | Total/NA | Solid | 8015B NM | 68976 |
| MB 880-69041/1-A | Method Blank | Total/NA | Solid | 8015B NM | 69041 |
| LCS 880-68976/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 68976 |
| LCS 880-69041/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 69041 |
| LCSD 880-68976/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 68976 |
| LCSD 880-69041/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 69041 |
| 890-5770-22 MS | DS - LO 07 | Total/NA | Solid | 8015B NM | 69041 |
| 890-5770-22 MSD | DS - LO 07 | Total/NA | Solid | 8015B NM | 69041 |

### Analysis Batch: 68955

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-1 | S - HA 02 | Total/NA | Solid | 8015B NM | 68977 |
| 890-5770-2 | E - SW 07 | Total/NA | Solid | 8015B NM | 68977 |
| 890-5770-3 | W - SW 07 | Total/NA | Solid | 8015B NM | 68977 |
| 890-5770-4 | W - SW 08 | Total/NA | Solid | 8015B NM | 68977 |
| 890-5770-5 | W - SW 09 | Total/NA | Solid | 8015B NM | 68977 |
| 890-5770-6 | N - SW 04 | Total/NA | Solid | 8015B NM | 68977 |
| 890-5770-7 | S - HA 01 | Total/NA | Solid | 8015B NM | 68977 |
| 890-5770-8 | E - HA 02 | Total/NA | Solid | 8015B NM | 68977 |
| 890-5770-9 | E - HA 01 | Total/NA | Solid | 8015B NM | 68977 |
| 890-5770-10 | DS - LO 02 | Total/NA | Solid | 8015B NM | 68977 |
| MB 880-68977/1-A | Method Blank | Total/NA | Solid | 8015B NM | 68977 |
| LCS 880-68977/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 68977 |
| LCSD 880-68977/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 68977 |

### Prep Batch: 68976

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-11 | FS 46 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-12 | FS 47 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-13 | FS 48 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-14 | W - HA 01 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-15 | W - HA 02 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-16 | DS - LO 01 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-17 | DS - LO 03 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-18 | DS - LO 04 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-19 | DS - LO 05 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-20 | DS - LO 06 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-21 | DS - LO 07 | Total/NA | Solid | 8015NM Prep | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## GC Semi VOA (Continued)

### Prep Batch: 68976 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 880-68976/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-68976/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-68976/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

### Prep Batch: 68977

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-1 | S - HA 02 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-2 | E - SW 07 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-3 | W - SW 07 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-4 | W - SW 08 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-5 | W - SW 09 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-6 | N - SW 04 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-7 | S - HA 01 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-8 | E - HA 02 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-9 | E - HA 01 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-10 | DS - LO 02 | Total/NA | Solid | 8015NM Prep | |
| MB 880-68977/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-68977/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-68977/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

### Prep Batch: 69041

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-22 | DS - LO 07 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-23 | DS - LO 04 | Total/NA | Solid | 8015NM Prep | |
| MB 880-69041/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-69041/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-69041/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 890-5770-22 MS | DS - LO 07 | Total/NA | Solid | 8015NM Prep | |
| 890-5770-22 MSD | DS - LO 07 | Total/NA | Solid | 8015NM Prep | |

### Analysis Batch: 69089

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-1 | S - HA 02 | Total/NA | Solid | 8015 NM | |
| 890-5770-2 | E - SW 07 | Total/NA | Solid | 8015 NM | |
| 890-5770-3 | W - SW 07 | Total/NA | Solid | 8015 NM | |
| 890-5770-4 | W - SW 08 | Total/NA | Solid | 8015 NM | |
| 890-5770-5 | W - SW 09 | Total/NA | Solid | 8015 NM | |
| 890-5770-6 | N - SW 04 | Total/NA | Solid | 8015 NM | |
| 890-5770-7 | S - HA 01 | Total/NA | Solid | 8015 NM | |
| 890-5770-8 | E - HA 02 | Total/NA | Solid | 8015 NM | |
| 890-5770-9 | E - HA 01 | Total/NA | Solid | 8015 NM | |
| 890-5770-10 | DS - LO 02 | Total/NA | Solid | 8015 NM | |
| 890-5770-11 | FS 46 | Total/NA | Solid | 8015 NM | |
| 890-5770-12 | FS 47 | Total/NA | Solid | 8015 NM | |
| 890-5770-13 | FS 48 | Total/NA | Solid | 8015 NM | |
| 890-5770-14 | W - HA 01 | Total/NA | Solid | 8015 NM | |
| 890-5770-15 | W - HA 02 | Total/NA | Solid | 8015 NM | |
| 890-5770-16 | DS - LO 01 | Total/NA | Solid | 8015 NM | |
| 890-5770-17 | DS - LO 03 | Total/NA | Solid | 8015 NM | |
| 890-5770-18 | DS - LO 04 | Total/NA | Solid | 8015 NM | |
| 890-5770-19 | DS - LO 05 | Total/NA | Solid | 8015 NM | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## GC Semi VOA (Continued)

### Analysis Batch: 69089 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-20 | DS - LO 06 | Total/NA | Solid | 8015 NM | |
| 890-5770-21 | DS - LO 07 | Total/NA | Solid | 8015 NM | |
| 890-5770-22 | DS - LO 07 | Total/NA | Solid | 8015 NM | |
| 890-5770-23 | DS - LO 04 | Total/NA | Solid | 8015 NM | |

## HPLC/IC

### Leach Batch: 68971

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-1 | S - HA 02 | Soluble | Solid | DI Leach | |
| 890-5770-2 | E - SW 07 | Soluble | Solid | DI Leach | |
| 890-5770-3 | W - SW 07 | Soluble | Solid | DI Leach | |
| 890-5770-4 | W - SW 08 | Soluble | Solid | DI Leach | |
| 890-5770-5 | W - SW 09 | Soluble | Solid | DI Leach | |
| 890-5770-6 | N - SW 04 | Soluble | Solid | DI Leach | |
| 890-5770-7 | S - HA 01 | Soluble | Solid | DI Leach | |
| 890-5770-8 | E - HA 02 | Soluble | Solid | DI Leach | |
| 890-5770-9 | E - HA 01 | Soluble | Solid | DI Leach | |
| 890-5770-10 | DS - LO 02 | Soluble | Solid | DI Leach | |
| 890-5770-11 | FS 46 | Soluble | Solid | DI Leach | |
| 890-5770-12 | FS 47 | Soluble | Solid | DI Leach | |
| 890-5770-13 | FS 48 | Soluble | Solid | DI Leach | |
| 890-5770-14 | W - HA 01 | Soluble | Solid | DI Leach | |
| 890-5770-15 | W - HA 02 | Soluble | Solid | DI Leach | |
| 890-5770-16 | DS - LO 01 | Soluble | Solid | DI Leach | |
| 890-5770-17 | DS - LO 03 | Soluble | Solid | DI Leach | |
| 890-5770-18 | DS - LO 04 | Soluble | Solid | DI Leach | |
| 890-5770-19 | DS - LO 05 | Soluble | Solid | DI Leach | |
| 890-5770-20 | DS - LO 06 | Soluble | Solid | DI Leach | |
| MB 880-68971/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-68971/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-68971/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-5770-1 MS | S - HA 02 | Soluble | Solid | DI Leach | |
| 890-5770-1 MSD | S - HA 02 | Soluble | Solid | DI Leach | |
| 890-5770-11 MS | FS 46 | Soluble | Solid | DI Leach | |
| 890-5770-11 MSD | FS 46 | Soluble | Solid | DI Leach | |

### Leach Batch: 68974

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-21 | DS - LO 07 | Soluble | Solid | DI Leach | |
| 890-5770-22 | DS - LO 07 | Soluble | Solid | DI Leach | |
| 890-5770-23 | DS - LO 04 | Soluble | Solid | DI Leach | |
| MB 880-68974/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-68974/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-68974/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-5770-21 MS | DS - LO 07 | Soluble | Solid | DI Leach | |
| 890-5770-21 MSD | DS - LO 07 | Soluble | Solid | DI Leach | |

### Analysis Batch: 69035

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-1 | S - HA 02 | Soluble | Solid | 300.0 | 68971 |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## HPLC/IC (Continued)

### Analysis Batch: 69035 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-2 | E - SW 07 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-3 | W - SW 07 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-4 | W - SW 08 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-5 | W - SW 09 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-6 | N - SW 04 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-7 | S - HA 01 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-8 | E - HA 02 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-9 | E - HA 01 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-10 | DS - LO 02 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-11 | FS 46 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-12 | FS 47 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-13 | FS 48 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-14 | W - HA 01 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-15 | W - HA 02 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-16 | DS - LO 01 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-17 | DS - LO 03 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-18 | DS - LO 04 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-19 | DS - LO 05 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-20 | DS - LO 06 | Soluble | Solid | 300.0 | 68971 |
| MB 880-68971/1-A | Method Blank | Soluble | Solid | 300.0 | 68971 |
| LCS 880-68971/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 68971 |
| LCSD 880-68971/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 68971 |
| 890-5770-1 MS | S - HA 02 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-1 MSD | S - HA 02 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-11 MS | FS 46 | Soluble | Solid | 300.0 | 68971 |
| 890-5770-11 MSD | FS 46 | Soluble | Solid | 300.0 | 68971 |

### Analysis Batch: 69036

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5770-21 | DS - LO 07 | Soluble | Solid | 300.0 | 68974 |
| 890-5770-22 | DS - LO 07 | Soluble | Solid | 300.0 | 68974 |
| 890-5770-23 | DS - LO 04 | Soluble | Solid | 300.0 | 68974 |
| MB 880-68974/1-A | Method Blank | Soluble | Solid | 300.0 | 68974 |
| LCS 880-68974/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 68974 |
| LCSD 880-68974/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 68974 |
| 890-5770-21 MS | DS - LO 07 | Soluble | Solid | 300.0 | 68974 |
| 890-5770-21 MSD | DS - LO 07 | Soluble | Solid | 300.0 | 68974 |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: S - HA 02

**Lab Sample ID: 890-5770-1**

**Date Collected: 12/11/23 10:09**
**Matrix: Solid**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 15:31 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 15:31 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 16:23 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.96 g | 10 mL | 68977 | 12/13/23 11:50 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68955 | 12/13/23 16:23 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 20:46 | CH | EET MID |

## Client Sample ID: E - SW 07

**Lab Sample ID: 890-5770-2**

**Date Collected: 12/11/23 11:12**
**Matrix: Solid**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 15:52 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 15:52 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 16:45 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.94 g | 10 mL | 68977 | 12/13/23 11:50 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68955 | 12/13/23 16:45 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 21:06 | CH | EET MID |

## Client Sample ID: W - SW 07

**Lab Sample ID: 890-5770-3**

**Date Collected: 12/11/23 11:16**
**Matrix: Solid**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 16:12 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 16:12 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 17:07 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 68977 | 12/13/23 11:50 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68955 | 12/13/23 17:07 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 21:12 | CH | EET MID |

## Client Sample ID: W - SW 08

**Lab Sample ID: 890-5770-4**

**Date Collected: 12/11/23 11:46**
**Matrix: Solid**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 16:33 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 16:33 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: W - SW 08

**Lab Sample ID: 890-5770-4**
**Matrix: Solid**
**Date Collected: 12/11/23 11:46**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 17:29 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.09 g | 10 mL | 68977 | 12/13/23 11:50 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68955 | 12/13/23 17:29 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 21:19 | CH | EET MID |

## Client Sample ID: W - SW 09

**Lab Sample ID: 890-5770-5**
**Matrix: Solid**
**Date Collected: 12/11/23 11:50**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 16:53 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 16:53 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 17:51 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 68977 | 12/13/23 11:50 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68955 | 12/13/23 17:51 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 21:25 | CH | EET MID |

## Client Sample ID: N - SW 04

**Lab Sample ID: 890-5770-6**
**Matrix: Solid**
**Date Collected: 12/11/23 11:52**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 17:14 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 17:14 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 18:14 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.97 g | 10 mL | 68977 | 12/13/23 11:50 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68955 | 12/13/23 18:14 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 21:45 | CH | EET MID |

## Client Sample ID: S - HA 01

**Lab Sample ID: 890-5770-7**
**Matrix: Solid**
**Date Collected: 12/11/23 11:43**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 17:34 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 17:34 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 18:36 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.92 g | 10 mL | 68977 | 12/13/23 11:50 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68955 | 12/13/23 18:36 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: S - HA 01

**Lab Sample ID: 890-5770-7**
**Matrix: Solid**
**Date Collected: 12/11/23 11:43**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 21:51 | CH | EET MID |

## Client Sample ID: E - HA 02

**Lab Sample ID: 890-5770-8**
**Matrix: Solid**
**Date Collected: 12/11/23 12:06**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.97 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 17:55 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 17:55 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 18:58 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 68977 | 12/13/23 11:50 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68955 | 12/13/23 18:58 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 21:58 | CH | EET MID |

## Client Sample ID: E - HA 01

**Lab Sample ID: 890-5770-9**
**Matrix: Solid**
**Date Collected: 12/11/23 12:26**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 18:15 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 18:15 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 19:20 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.07 g | 10 mL | 68977 | 12/13/23 11:50 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68955 | 12/13/23 19:20 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 22:04 | CH | EET MID |

## Client Sample ID: DS - LO 02

**Lab Sample ID: 890-5770-10**
**Matrix: Solid**
**Date Collected: 12/11/23 12:37**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 18:35 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 18:35 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 19:42 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 68977 | 12/13/23 11:50 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68955 | 12/13/23 19:42 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 22:11 | CH | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: FS 46

**Date Collected: 12/11/23 12:13**
**Date Received: 12/12/23 08:49**

**Lab Sample ID: 890-5770-11**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 20:26 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 20:26 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 14:25 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.08 g | 10 mL | 68976 | 12/13/23 11:49 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 14:25 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 22:17 | CH | EET MID |

## Client Sample ID: FS 47

**Date Collected: 12/11/23 12:19**
**Date Received: 12/12/23 08:49**

**Lab Sample ID: 890-5770-12**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.96 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 20:47 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 20:47 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 14:47 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 68976 | 12/13/23 11:49 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 14:47 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 22:37 | CH | EET MID |

## Client Sample ID: FS 48

**Date Collected: 12/11/23 12:22**
**Date Received: 12/12/23 08:49**

**Lab Sample ID: 890-5770-13**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 21:07 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 21:07 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 15:10 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.96 g | 10 mL | 68976 | 12/13/23 11:49 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 15:10 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 22:43 | CH | EET MID |

## Client Sample ID: W - HA 01

**Date Collected: 12/11/23 12:56**
**Date Received: 12/12/23 08:49**

**Lab Sample ID: 890-5770-14**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 21:28 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 21:28 | SM | EET MID |

Eurofins Carlsbad

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: W - HA 01

**Lab Sample ID: 890-5770-14**

**Date Collected: 12/11/23 12:56**
**Date Received: 12/12/23 08:49**

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 15:32 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.91 g | 10 mL | 68976 | 12/13/23 11:49 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 15:32 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 23:03 | CH | EET MID |

## Client Sample ID: W - HA 02

**Lab Sample ID: 890-5770-15**

**Date Collected: 12/11/23 01:13**
**Date Received: 12/12/23 08:49**

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 21:48 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 21:48 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 16:23 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 68976 | 12/13/23 11:49 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 16:23 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 23:10 | CH | EET MID |

## Client Sample ID: DS - LO 01

**Lab Sample ID: 890-5770-16**

**Date Collected: 12/11/23 02:56**
**Date Received: 12/12/23 08:49**

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.00 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 22:09 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 22:09 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 16:45 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 68976 | 12/13/23 11:49 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 16:45 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 5 | | | 69035 | 12/13/23 23:16 | CH | EET MID |

## Client Sample ID: DS - LO 03

**Lab Sample ID: 890-5770-17**

**Date Collected: 12/11/23 03:38**
**Date Received: 12/12/23 08:49**

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.97 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 22:29 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 22:29 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 17:07 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.08 g | 10 mL | 68976 | 12/13/23 11:49 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 17:07 | SM | EET MID |

Eurofins Carlsbad

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: DS - LO 03

**Lab Sample ID: 890-5770-17**
**Matrix: Solid**
**Date Collected: 12/11/23 03:38**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 23:23 | CH | EET MID |

## Client Sample ID: DS - LO 04

**Lab Sample ID: 890-5770-18**
**Matrix: Solid**
**Date Collected: 12/11/23 01:41**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 22:50 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 22:50 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 17:29 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 68976 | 12/13/23 11:49 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 17:29 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 5 | | | 69035 | 12/13/23 23:29 | CH | EET MID |

## Client Sample ID: DS - LO 05

**Lab Sample ID: 890-5770-19**
**Matrix: Solid**
**Date Collected: 12/11/23 04:02**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 23:10 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 23:10 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 17:51 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 68976 | 12/13/23 11:49 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 17:51 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 23:36 | CH | EET MID |

## Client Sample ID: DS - LO 06

**Lab Sample ID: 890-5770-20**
**Matrix: Solid**
**Date Collected: 12/11/23 03:13**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 69015 | 12/13/23 11:03 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68997 | 12/13/23 23:31 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/13/23 23:31 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 18:14 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.97 g | 10 mL | 68976 | 12/13/23 11:49 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 18:14 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 68971 | 12/13/23 08:53 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69035 | 12/13/23 23:42 | CH | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Client Sample ID: DS - LO 07

**Lab Sample ID: 890-5770-21**
**Matrix: Solid**
**Date Collected: 12/11/23 03:25**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 69014 | 12/13/23 10:58 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68975 | 12/14/23 00:59 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/14/23 00:59 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 18:36 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.92 g | 10 mL | 68976 | 12/13/23 11:49 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 18:36 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 68974 | 12/13/23 08:55 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69036 | 12/14/23 00:35 | CH | EET MID |

## Client Sample ID: DS - LO 07

**Lab Sample ID: 890-5770-22**
**Matrix: Solid**
**Date Collected: 12/11/23 03:21**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 69014 | 12/13/23 10:58 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68975 | 12/14/23 01:20 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/14/23 01:20 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 21:34 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.91 g | 10 mL | 69041 | 12/13/23 16:04 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 21:34 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5 g | 50 mL | 68974 | 12/13/23 08:55 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 5 | | | 69036 | 12/14/23 00:54 | CH | EET MID |

## Client Sample ID: DS - LO 04

**Lab Sample ID: 890-5770-23**
**Matrix: Solid**
**Date Collected: 12/11/23 01:41**
**Date Received: 12/12/23 08:49**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.97 g | 5 mL | 69014 | 12/13/23 10:58 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 68975 | 12/14/23 01:40 | SM | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69107 | 12/14/23 01:40 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69089 | 12/13/23 22:39 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 69041 | 12/13/23 16:04 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 68953 | 12/13/23 22:39 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 68974 | 12/13/23 08:55 | CH | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69036 | 12/14/23 01:01 | CH | EET MID |

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

## Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Texas | NELAP | T104704400-23-26 | 06-30-24 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 8015 NM | | Solid | Total TPH |
| Total BTEX | | Solid | Total BTEX |

# Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (GC) | SW846 | EET MID |
| Total BTEX | Total BTEX Calculation | TAL SOP | EET MID |
| 8015 NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 8015B NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 300.0 | Anions, Ion Chromatography | EPA | EET MID |
| 5035 | Closed System Purge and Trap | SW846 | EET MID |
| 8015NM Prep | Microextraction | SW846 | EET MID |
| DI Leach | Deionized Water Leaching Procedure | ASTM | EET MID |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5770-1
SDG: KH237051

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Depth |
|---|---|---|---|---|---|
| 890-5770-1 | S - HA 02 | Solid | 12/11/23 10:09 | 12/12/23 08:49 | 2' |
| 890-5770-2 | E - SW 07 | Solid | 12/11/23 11:12 | 12/12/23 08:49 | 0-2' |
| 890-5770-3 | W - SW 07 | Solid | 12/11/23 11:16 | 12/12/23 08:49 | 0-2' |
| 890-5770-4 | W - SW 08 | Solid | 12/11/23 11:46 | 12/12/23 08:49 | 0-2' |
| 890-5770-5 | W - SW 09 | Solid | 12/11/23 11:50 | 12/12/23 08:49 | 0-2' |
| 890-5770-6 | N - SW 04 | Solid | 12/11/23 11:52 | 12/12/23 08:49 | 0-2' |
| 890-5770-7 | S - HA 01 | Solid | 12/11/23 11:43 | 12/12/23 08:49 | 2' |
| 890-5770-8 | E - HA 02 | Solid | 12/11/23 12:06 | 12/12/23 08:49 | 2' |
| 890-5770-9 | E - HA 01 | Solid | 12/11/23 12:26 | 12/12/23 08:49 | 2' |
| 890-5770-10 | DS - LO 02 | Solid | 12/11/23 12:37 | 12/12/23 08:49 | 2' |
| 890-5770-11 | FS 46 | Solid | 12/11/23 12:13 | 12/12/23 08:49 | 2' |
| 890-5770-12 | FS 47 | Solid | 12/11/23 12:19 | 12/12/23 08:49 | 2' |
| 890-5770-13 | FS 48 | Solid | 12/11/23 12:22 | 12/12/23 08:49 | 2' |
| 890-5770-14 | W - HA 01 | Solid | 12/11/23 12:56 | 12/12/23 08:49 | 2' |
| 890-5770-15 | W - HA 02 | Solid | 12/11/23 01:13 | 12/12/23 08:49 | 2' |
| 890-5770-16 | DS - LO 01 | Solid | 12/11/23 02:56 | 12/12/23 08:49 | 2' |
| 890-5770-17 | DS - LO 03 | Solid | 12/11/23 03:38 | 12/12/23 08:49 | 2' |
| 890-5770-18 | DS - LO 04 | Solid | 12/11/23 01:41 | 12/12/23 08:49 | 2' |
| 890-5770-19 | DS - LO 05 | Solid | 12/11/23 04:02 | 12/12/23 08:49 | 2' |
| 890-5770-20 | DS - LO 06 | Solid | 12/11/23 03:13 | 12/12/23 08:49 | 2' |
| 890-5770-21 | DS - LO 07 | Solid | 12/11/23 03:25 | 12/12/23 08:49 | 2' |
| 890-5770-22 | DS - LO 07 | Solid | 12/11/23 03:21 | 12/12/23 08:49 | 1' |
| 890-5770-23 | DS - LO 04 | Solid | 12/11/23 01:41 | 12/12/23 08:49 | 2' |

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

eurofins | Environment Testing Xenco

# Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

890-5770 Chain of Custody

www.xenco.com Page 1 of 3

| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (If different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☒ Rush |
| Project Number: | KH237051 | Due Date: | 48 hr |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

**SAMPLE RECEIPT**

| | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Samples Received Intact: | Yes No | Thermometer ID: | -0.2 |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | TNM007 |
| Sample Custody Seals: | Yes No N/A | Temperature Reading: | 4.4 |
| Total Containers: | | Corrected Temperature: | 4.2 |

Pres. Code: Xenco Parameters

**Preservative Codes**

None: NO; DI Water: $H_2O$; Cool: Cool; MeOH: Me; HCL: HC; $HNO_3$: HN; $H_2SO_4$: $H_2$; NaOH: Na; $H_3PO_4$: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S-HA 02 | Soil | 12/11 | 10:09 | 2' | G | 1 | X | X | X | |
| E-SW 07 | Soil | | 11:12 | 0-2' | C | 1 | X | X | X | |
| W-SW 07 | Soil | | 11:16 | 0-2' | C | 1 | X | X | X | |
| W-SW 08 | Soil | | 11:46 | 0-2' | C | 1 | X | X | X | |
| W-SW 09 | Soil | | 11:50 | 0-2' | C | 1 | X | X | X | |
| N-SW 04 | Soil | | 11:52 | 0-2' | C | 1 | X | X | X | |
| S-HA 01 | Soil | | 11:43 | 2' | G | 1 | X | X | X | |
| E-HA 02 | Soil | | 12:06 | 2' | G | 1 | X | X | X | |
| E-HA 01 | Soil | | 12:26 | 2' | G | 1 | X | X | X | |
| DS-Lo 02 | Soil | | 12:37 | 2' | G | 1 | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | | 12-11-23 2:30pm | 2 | 12/12 8:49 | |
| | | | 4 | | |
| | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

12/14/2023

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

# Chain of Custody

eurofins | Environment Testing Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 5[illegible]
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-12[illegible]
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-31[illegible]

Work Order No: _____

www.xenco.com Page 2 of 3

| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (If different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☒ Rush |
| Project Number: | KH237051 | Due Date: | 48 hr |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | (Yes) No | Wet Ice: | Yes No |
| Samples Received Intact: | (Yes) No | Thermometer ID: | TNM00 |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | -02 |
| Sample Custody Seals: | Yes No (N/A) | Temperature Reading: | 4.4 |
| Total Containers: | | Corrected Temperature: | 4.2 |

**Preservative Codes**

None: NO | DI Water: $H_2O$
Cool: Cool | MeOH: Me
HCL: HC | $HNO_3$: HN
$H_2SO_4$: $H_2$ | NaOH: Na
$H_3PO_4$: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| FS 46 | Soil | 12/11 | 12:13 | 2' | C | 1 | X | X | X | |
| FS 47 | Soil | | 12:19 | 2' | C | 1 | X | X | X | |
| FS 48 | Soil | | 12:22 | 2' | C | 1 | X | X | X | |
| W-HA01 | Soil | | 12:56 | 2' | G | 1 | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | 1 | 12-11-23 2:30 | 3 | 12/12 849 | |
| 2 | | | 4 | | |
| | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

Page 157 of 157
12/14/2023
Page 310 of 408

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

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# Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 3 of 7

| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (if different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☑ Routine ☐ Rush |
| Project Number: | KH237051 | Due Date: | 48 hrs |
| Project Location: | | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Samples Received Intact: | Yes No | Thermometer ID: | INMOO |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes No N/A | Temperature Reading: | 4.4 |
| Total Containers: | | Corrected Temperature: | 4.2 |

**Preservative Codes**

None: NO; DI Water: $H_2O$; Cool: Cool; MeOH: Me; HCL: HC; $HNO_3$: HN; $H_2SO_4$: $H_2$; NaOH: Na; $H_3PO_4$: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| W-HA-02 | Soil | 12-11-23 | 1:13 pm | 2 | G | 1 | X | X | X | |
| DS-Lo-01 | Soil | 12-11-23 | 2:56 | 2 | | | X | X | X | |
| ~~DS-Lo-02~~ | Soil | | | | | | X | X | X | |
| DS-Lo-03 | Soil | 12-11-23 | 3:38 | 2 | G | 1 | X | X | X | |
| DS-Lo-04 | Soil | 12-11-23 | 1:41 | 2 | G | 1 | X | X | X | |
| DS-Lo-05 | Soil | | 4:02 | 2 | G | 1 | X | X | X | |
| DS-Lo-06 | Soil | | 3:13 | 2 | G | 1 | X | X | X | |
| DS-Lo-07 | Soil | | 3:25 | 2 | G | 1 | X | X | X | |
| DS-Lo-07 | Soil | | 3:21 | 1 | G | 1 | X | X | X | |
| ~~DS-Lo-08~~ | Soil | | | | | | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| | | 12-11-23 | 3 | 12/12 8:49 | |
| | | | 4 | | |
| | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

Page 309 of 571
12/14/2023
Page 311 of 408

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 890-5770-1
SDG Number: KH237051

**Login Number: 5770**
**List Number: 1**
**Creator: Bruns, Shannon**

**List Source: Eurofins Carlsbad**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | N/A | Refer to Job Narrative for details. |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 890-5770-1
SDG Number: KH237051

**Login Number: 5770**
**List Number: 2**
**Creator: Rodriguez, Leticia**

**List Source: Eurofins Midland**
**List Creation: 12/13/23 11:31 AM**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Joseph Guesnier
Terracon Consulting Eng & Scientists
5847 50th St
Lubbock, Texas 79424

Generated 12/15/2023 3:26:14 PM

## JOB DESCRIPTION

Curly SWD
KH237051

## JOB NUMBER

890-5780-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.



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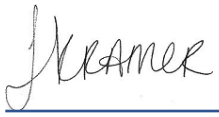
# Eurofins Carlsbad

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



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Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

# Eurofins Carlsbad

## Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD,and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs
· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

Warranties, Terms, and Conditions
· Analyses for Field Parameters are performed by Eurofins Philadelphia field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification # 02015.
VL = field staff performs tests under NJ State certification # 06005.
WG = field staff performs tests under NJ State certification # PA001, PA State certification # 48-01334.
H = field staff performs tests under NJ NELAP certification # PA093, PA NELAP certification # 46-05499.

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

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· All samples are collected as "grab" samples unless otherwise identified.

· Reported results related only to the samples as tested. Eurofins Philadelphia is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· Eurofins Philadelphia is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by Eurofins Philadelphia : Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).




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# Table of Contents

Cover Page . . . . . 1
Table of Contents . . . . . 4
Definitions/Glossary . . . . . 5
Case Narrative . . . . . 6
Client Sample Results . . . . . 7
Surrogate Summary . . . . . 19
QC Sample Results . . . . . 21
QC Association Summary . . . . . 26
Lab Chronicle . . . . . 30
Certification Summary . . . . . 35
Method Summary . . . . . 36
Sample Summary . . . . . 37
Chain of Custody . . . . . 38
Receipt Checklists . . . . . 42

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Qualifiers

### GC VOA

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |
| S1- | Surrogate recovery exceeds control limits, low biased. |
| U | Indicates the analyte was analyzed for but not detected. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| S1+ | Surrogate recovery exceeds control limits, high biased. |
| U | Indicates the analyte was analyzed for but not detected. |

### HPLC/IC

| Qualifier | Qualifier Description |
|---|---|
| U | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Job ID: 890-5780-1

**Laboratory: Eurofins Carlsbad**

**Narrative**

**Job Narrative**
**890-5780-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**
The samples were received on 12/13/2023 8:26 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

**Receipt Exceptions**
The following samples were received and analyzed from an unpreserved bulk soil jar: FS 56 (890-5780-1), FS 57 (890-5780-2), FS 58 (890-5780-3), FS 59 (890-5780-4), FS 60 (890-5780-5), FS 61 (890-5780-6), FS 62 (890-5780-7), FS 63 (890-5780-8), FS 64 (890-5780-9), FS 67 (890-5780-10), FS 69 (890-5780-11), FS 72 (890-5780-12), FS 79 (890-5780-13) and FS 80 (890-5780-14).

**GC VOA**
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-69031 and 880-69114 and analytical batch 880-69086 was outside the control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS 58 (890-5780-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-69114 and analytical batch 880-69086 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-69098/3-A). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 56

**Lab Sample ID: 890-5780-1**
**Matrix: Solid**
**Date Collected: 12/12/23 10:23**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U F1 | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:32 | 1 |
| Toluene | <0.00199 | U F1 | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:32 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:32 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:32 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:32 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *82* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 00:32* | *1* |
| *1,4-Difluorobenzene (Surr)* | *83* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 00:32* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/15/23 00:32 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total TPH** | **63.8** | | 49.5 | | mg/Kg | | | 12/14/23 13:26 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.5 | U | 49.5 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 13:26 | 1 |
| **Diesel Range Organics (Over C10-C28)** | **63.8** | | 49.5 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 13:26 | 1 |
| OII Range Organics (Over C28-C36) | <49.5 | U | 49.5 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 13:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *106* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 13:26* | *1* |
| *o-Terphenyl* | *111* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 13:26* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **330** | | 4.96 | | mg/Kg | | | 12/15/23 13:23 | 1 |

## Client Sample ID: FS 57

**Lab Sample ID: 890-5780-2**
**Matrix: Solid**
**Date Collected: 12/12/23 10:24**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:53 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:53 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:53 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:53 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:53 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *78* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 00:53* | *1* |

Eurofins Carlsbad

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 57

**Date Collected: 12/12/23 10:24**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

## Lab Sample ID: 890-5780-2

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *72* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 00:53* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/15/23 00:53 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.3 | U | 50.3 | | mg/Kg | | | 12/14/23 14:31 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 50.3 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 14:31 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U | 50.3 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 14:31 | 1 |
| OII Range Organics (Over C28-C36) | <50.3 | U | 50.3 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 14:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *105* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 14:31* | *1* |
| *o-Terphenyl* | *110* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 14:31* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **430** | | 5.00 | | mg/Kg | | | 12/15/23 13:38 | 1 |

## Client Sample ID: FS 58

**Date Collected: 12/12/23 10:27**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

## Lab Sample ID: 890-5780-3

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:13 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:13 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:13 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:13 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:13 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:13 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *79* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 01:13* | *1* |
| *1,4-Difluorobenzene (Surr)* | *70* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 01:13* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/15/23 01:13 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total TPH** | **50.5** | | 50.1 | | mg/Kg | | | 12/14/23 14:53 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 58

**Lab Sample ID: 890-5780-3**
**Matrix: Solid**
**Date Collected: 12/12/23 10:27**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.1 | U | 50.1 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 14:53 | 1 |
| **Diesel Range Organics (Over C10-C28)** | **50.5** | | 50.1 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 14:53 | 1 |
| OII Range Organics (Over C28-C36) | <50.1 | U | 50.1 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 14:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *108* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 14:53* | *1* |
| *o-Terphenyl* | *113* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 14:53* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **446** | | 4.98 | | mg/Kg | | | 12/15/23 13:43 | 1 |

## Client Sample ID: FS 59

**Lab Sample ID: 890-5780-4**
**Matrix: Solid**
**Date Collected: 12/12/23 10:29**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:34 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:34 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:34 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:34 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:34 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *81* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 01:34* | *1* |
| *1,4-Difluorobenzene (Surr)* | *72* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 01:34* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/15/23 01:34 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/14/23 15:16 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 15:16 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 15:16 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 15:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *95* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 15:16* | *1* |
| *o-Terphenyl* | *98* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 15:16* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 59

**Lab Sample ID: 890-5780-4**
**Matrix: Solid**
**Date Collected: 12/12/23 10:29**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 404 | | 4.95 | | mg/Kg | | | 12/15/23 13:48 | 1 |

## Client Sample ID: FS 60

**Lab Sample ID: 890-5780-5**
**Matrix: Solid**
**Date Collected: 12/12/23 10:30**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:54 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:54 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:54 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:54 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:54 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 01:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *80* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 01:54* | *1* |
| *1,4-Difluorobenzene (Surr)* | *71* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 01:54* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/15/23 01:54 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/14/23 15:38 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 15:38 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 15:38 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 15:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *101* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 15:38* | *1* |
| *o-Terphenyl* | *102* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 15:38* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 350 | | 4.97 | | mg/Kg | | | 12/15/23 13:52 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 61

**Lab Sample ID: 890-5780-6**
**Matrix: Solid**
**Date Collected: 12/12/23 10:31**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:15 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:15 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:15 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:15 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:15 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *78* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 02:15* | *1* |
| *1,4-Difluorobenzene (Surr)* | *83* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 02:15* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/15/23 02:15 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | | 12/14/23 16:00 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 16:00 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 16:00 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 16:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *97* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 16:00* | *1* |
| *o-Terphenyl* | *99* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 16:00* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **312** | | 4.99 | | mg/Kg | | | 12/15/23 14:07 | 1 |

## Client Sample ID: FS 62

**Lab Sample ID: 890-5780-7**
**Matrix: Solid**
**Date Collected: 12/12/23 10:33**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:35 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:35 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:35 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:35 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:35 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *77* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 02:35* | *1* |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 62

**Lab Sample ID: 890-5780-7**
**Matrix: Solid**
**Date Collected: 12/12/23 10:33**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *88* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 02:35* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/15/23 02:35 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.2 | U | 50.2 | | mg/Kg | | | 12/14/23 16:22 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.2 | U | 50.2 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 16:22 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.2 | U | 50.2 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 16:22 | 1 |
| OII Range Organics (Over C28-C36) | <50.2 | U | 50.2 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 16:22 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *119* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 16:22* | *1* |
| *o-Terphenyl* | *125* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 16:22* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **477** | | 5.05 | | mg/Kg | | | 12/15/23 14:12 | 1 |

## Client Sample ID: FS 63

**Lab Sample ID: 890-5780-8**
**Matrix: Solid**
**Date Collected: 12/12/23 10:34**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:56 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:56 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:56 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:56 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:56 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 02:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *85* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 02:56* | *1* |
| *1,4-Difluorobenzene (Surr)* | *77* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 02:56* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/15/23 02:56 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/14/23 16:44 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 63

**Lab Sample ID: 890-5780-8**
**Matrix: Solid**
**Date Collected: 12/12/23 10:34**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 16:44 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 16:44 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 16:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *106* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 16:44* | *1* |
| *o-Terphenyl* | *111* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 16:44* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **410** | | 4.98 | | mg/Kg | | | 12/15/23 14:17 | 1 |

## Client Sample ID: FS 64

**Lab Sample ID: 890-5780-9**
**Matrix: Solid**
**Date Collected: 12/12/23 10:35**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 03:16 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 03:16 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 03:16 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 03:16 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 03:16 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 03:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *83* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 03:16* | *1* |
| *1,4-Difluorobenzene (Surr)* | *72* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 03:16* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/15/23 03:16 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/14/23 17:06 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 17:06 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 17:06 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 17:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *109* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 17:06* | *1* |
| *o-Terphenyl* | *114* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 17:06* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 64

**Lab Sample ID: 890-5780-9**
**Matrix: Solid**
**Date Collected: 12/12/23 10:35**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 396 | | 5.02 | | mg/Kg | | | 12/15/23 14:21 | 1 |

## Client Sample ID: FS 67

**Lab Sample ID: 890-5780-10**
**Matrix: Solid**
**Date Collected: 12/12/23 10:44**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 03:37 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 03:37 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 03:37 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 03:37 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 03:37 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 03:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *81* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 03:37* | *1* |
| *1,4-Difluorobenzene (Surr)* | *72* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 03:37* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/15/23 03:37 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/14/23 17:29 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 17:29 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 17:29 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 17:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *100* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 17:29* | *1* |
| *o-Terphenyl* | *105* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 17:29* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 373 | | 4.99 | | mg/Kg | | | 12/15/23 14:26 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 69

**Lab Sample ID: 890-5780-11**
**Matrix: Solid**
**Date Collected: 12/12/23 01:03**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:00 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:00 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:00 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:00 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:00 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *84* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 05:00* | *1* |
| *1,4-Difluorobenzene (Surr)* | *78* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 05:00* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/15/23 05:00 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.3 | U | 50.3 | | mg/Kg | | | 12/14/23 18:12 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 50.3 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 18:12 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U | 50.3 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 18:12 | 1 |
| OII Range Organics (Over C28-C36) | <50.3 | U | 50.3 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 18:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *106* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 18:12* | *1* |
| *o-Terphenyl* | *108* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 18:12* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **446** | | 5.04 | | mg/Kg | | | 12/15/23 14:31 | 1 |

## Client Sample ID: FS 72

**Lab Sample ID: 890-5780-12**
**Matrix: Solid**
**Date Collected: 12/12/23 01:10**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:21 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:21 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:21 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:21 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:21 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:21 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *77* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 05:21* | *1* |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 72

**Lab Sample ID: 890-5780-12**
**Matrix: Solid**
**Date Collected: 12/12/23 01:10**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *80* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 05:21* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/15/23 05:21 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.1 | U | 50.1 | | mg/Kg | | | 12/14/23 18:34 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.1 | U | 50.1 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 18:34 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.1 | U | 50.1 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 18:34 | 1 |
| OII Range Organics (Over C28-C36) | <50.1 | U | 50.1 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 18:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *109* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 18:34* | *1* |
| *o-Terphenyl* | *111* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 18:34* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **349** | | 5.00 | | mg/Kg | | | 12/15/23 14:46 | 1 |

## Client Sample ID: FS 79

**Lab Sample ID: 890-5780-13**
**Matrix: Solid**
**Date Collected: 12/12/23 01:16**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:41 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:41 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:41 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:41 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:41 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 05:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *87* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 05:41* | *1* |
| *1,4-Difluorobenzene (Surr)* | *82* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 05:41* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/15/23 05:41 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.4 | U | 50.4 | | mg/Kg | | | 12/14/23 18:56 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 79

**Lab Sample ID: 890-5780-13**
**Matrix: Solid**
**Date Collected: 12/12/23 01:16**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.4 | U | 50.4 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 18:56 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.4 | U | 50.4 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 18:56 | 1 |
| OII Range Organics (Over C28-C36) | <50.4 | U | 50.4 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 18:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *109* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 18:56* | *1* |
| *o-Terphenyl* | *112* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 18:56* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **434** | | 4.98 | | mg/Kg | | | 12/15/23 14:51 | 1 |

## Client Sample ID: FS 80

**Lab Sample ID: 890-5780-14**
**Matrix: Solid**
**Date Collected: 12/12/23 01:18**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 06:02 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 06:02 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 06:02 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 06:02 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 06:02 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 06:02 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *86* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 06:02* | *1* |
| *1,4-Difluorobenzene (Surr)* | *82* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 06:02* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/15/23 06:02 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/14/23 19:18 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 19:18 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 19:18 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/14/23 12:11 | 12/14/23 19:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *106* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 19:18* | *1* |
| *o-Terphenyl* | *108* | | *70 - 130* | *12/14/23 12:11* | *12/14/23 19:18* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

**Client Sample ID: FS 80**
**Date Collected: 12/12/23 01:18**
**Date Received: 12/13/23 08:26**
**Sample Depth: 2**

**Lab Sample ID: 890-5780-14**
**Matrix: Solid**

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 320 | | 4.99 | | mg/Kg | | | 12/15/23 15:05 | 1 |

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | BFB1 (70-130) | DFBZ1 (70-130) |
| 890-5780-1 | FS 56 | 82 | 83 |
| 890-5780-1 MS | FS 56 | 113 | 110 |
| 890-5780-1 MSD | FS 56 | 107 | 109 |
| 890-5780-2 | FS 57 | 78 | 72 |
| 890-5780-3 | FS 58 | 79 | 70 |
| 890-5780-4 | FS 59 | 81 | 72 |
| 890-5780-5 | FS 60 | 80 | 71 |
| 890-5780-6 | FS 61 | 78 | 83 |
| 890-5780-7 | FS 62 | 77 | 88 |
| 890-5780-8 | FS 63 | 85 | 77 |
| 890-5780-9 | FS 64 | 83 | 72 |
| 890-5780-10 | FS 67 | 81 | 72 |
| 890-5780-11 | FS 69 | 84 | 78 |
| 890-5780-12 | FS 72 | 77 | 80 |
| 890-5780-13 | FS 79 | 87 | 82 |
| 890-5780-14 | FS 80 | 86 | 82 |
| LCS 880-69114/1-A | Lab Control Sample | 107 | 98 |
| LCSD 880-69114/2-A | Lab Control Sample Dup | 107 | 96 |
| MB 880-69031/5-A | Method Blank | 68 S1- | 90 |
| MB 880-69114/5-A | Method Blank | 67 S1- | 89 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | 1CO1 (70-130) | OTPH1 (70-130) |
| 890-5780-1 | FS 56 | 106 | 111 |
| 890-5780-1 MS | FS 56 | 128 | 121 |
| 890-5780-1 MSD | FS 56 | 107 | 100 |
| 890-5780-2 | FS 57 | 105 | 110 |
| 890-5780-3 | FS 58 | 108 | 113 |
| 890-5780-4 | FS 59 | 95 | 98 |
| 890-5780-5 | FS 60 | 101 | 102 |
| 890-5780-6 | FS 61 | 97 | 99 |
| 890-5780-7 | FS 62 | 119 | 125 |
| 890-5780-8 | FS 63 | 106 | 111 |
| 890-5780-9 | FS 64 | 109 | 114 |
| 890-5780-10 | FS 67 | 100 | 105 |
| 890-5780-11 | FS 69 | 106 | 108 |
| 890-5780-12 | FS 72 | 109 | 111 |
| 890-5780-13 | FS 79 | 109 | 112 |
| 890-5780-14 | FS 80 | 106 | 108 |
| LCS 880-69098/2-A | Lab Control Sample | 104 | 121 |
| LCSD 880-69098/3-A | Lab Control Sample Dup | 121 | 142 S1+ |
| MB 880-69098/1-A | Method Blank | 93 | 108 |

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

**Surrogate Legend**

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC)

**Lab Sample ID: MB 880-69031/5-A**
**Matrix: Solid**
**Analysis Batch: 69086**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 69031**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 15:09 | 12/14/23 13:30 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 15:09 | 12/14/23 13:30 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 15:09 | 12/14/23 13:30 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/13/23 15:09 | 12/14/23 13:30 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/13/23 15:09 | 12/14/23 13:30 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/13/23 15:09 | 12/14/23 13:30 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *68* | *S1-* | *70 - 130* | *12/13/23 15:09* | *12/14/23 13:30* | *1* |
| *1,4-Difluorobenzene (Surr)* | *90* | | *70 - 130* | *12/13/23 15:09* | *12/14/23 13:30* | *1* |

**Lab Sample ID: MB 880-69114/5-A**
**Matrix: Solid**
**Analysis Batch: 69086**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 69114**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:11 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:11 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:11 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:11 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:11 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/14/23 14:30 | 12/15/23 00:11 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *67* | *S1-* | *70 - 130* | *12/14/23 14:30* | *12/15/23 00:11* | *1* |
| *1,4-Difluorobenzene (Surr)* | *89* | | *70 - 130* | *12/14/23 14:30* | *12/15/23 00:11* | *1* |

**Lab Sample ID: LCS 880-69114/1-A**
**Matrix: Solid**
**Analysis Batch: 69086**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 69114**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Benzene | 0.100 | 0.07917 | | mg/Kg | | 79 | 70 - 130 |
| Toluene | 0.100 | 0.07794 | | mg/Kg | | 78 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.09197 | | mg/Kg | | 92 | 70 - 130 |
| m-Xylene & p-Xylene | 0.200 | 0.1887 | | mg/Kg | | 94 | 70 - 130 |
| o-Xylene | 0.100 | 0.08940 | | mg/Kg | | 89 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *107* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *98* | | *70 - 130* |

**Lab Sample ID: LCSD 880-69114/2-A**
**Matrix: Solid**
**Analysis Batch: 69086**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 69114**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 0.100 | 0.08417 | | mg/Kg | | 84 | 70 - 130 | 6 | 35 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

**Lab Sample ID: LCSD 880-69114/2-A**
**Matrix: Solid**
**Analysis Batch: 69086**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 69114**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Toluene | | | 0.100 | 0.08173 | | mg/Kg | | 82 | 70 - 130 | 5 | 35 |
| Ethylbenzene | | | 0.100 | 0.09144 | | mg/Kg | | 91 | 70 - 130 | 1 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1913 | | mg/Kg | | 96 | 70 - 130 | 1 | 35 |
| o-Xylene | | | 0.100 | 0.09092 | | mg/Kg | | 91 | 70 - 130 | 2 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *107* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *96* | | *70 - 130* |

**Lab Sample ID: 890-5780-1 MS**
**Matrix: Solid**
**Analysis Batch: 69086**

**Client Sample ID: FS 56**
**Prep Type: Total/NA**
**Prep Batch: 69114**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U F1 | 0.0996 | 0.06939 | | mg/Kg | | 70 | 70 - 130 |
| Toluene | <0.00199 | U F1 | 0.0996 | 0.06707 | F1 | mg/Kg | | 67 | 70 - 130 |
| Ethylbenzene | <0.00199 | U | 0.0996 | 0.08071 | | mg/Kg | | 81 | 70 - 130 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.199 | 0.1625 | | mg/Kg | | 82 | 70 - 130 |
| o-Xylene | <0.00199 | U | 0.0996 | 0.07799 | | mg/Kg | | 78 | 70 - 130 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *113* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* |

**Lab Sample ID: 890-5780-1 MSD**
**Matrix: Solid**
**Analysis Batch: 69086**

**Client Sample ID: FS 56**
**Prep Type: Total/NA**
**Prep Batch: 69114**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U F1 | 0.0990 | 0.06718 | F1 | mg/Kg | | 68 | 70 - 130 | 3 | 35 |
| Toluene | <0.00199 | U F1 | 0.0990 | 0.06429 | F1 | mg/Kg | | 64 | 70 - 130 | 4 | 35 |
| Ethylbenzene | <0.00199 | U | 0.0990 | 0.07615 | | mg/Kg | | 77 | 70 - 130 | 6 | 35 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.198 | 0.1505 | | mg/Kg | | 76 | 70 - 130 | 8 | 35 |
| o-Xylene | <0.00199 | U | 0.0990 | 0.07211 | | mg/Kg | | 73 | 70 - 130 | 8 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *107* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *109* | | *70 - 130* |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 880-69098/1-A**
**Matrix: Solid**
**Analysis Batch: 69044**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 69098**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/14/23 08:11 | 12/14/23 08:51 | 1 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: MB 880-69098/1-A**
**Matrix: Solid**
**Analysis Batch: 69044**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 69098**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/14/23 08:11 | 12/14/23 08:51 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/14/23 08:11 | 12/14/23 08:51 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *93* | | *70 - 130* | *12/14/23 08:11* | *12/14/23 08:51* | *1* |
| *o-Terphenyl* | *108* | | *70 - 130* | *12/14/23 08:11* | *12/14/23 08:51* | *1* |

**Lab Sample ID: LCS 880-69098/2-A**
**Matrix: Solid**
**Analysis Batch: 69044**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 69098**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 875.7 | | mg/Kg | | 88 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 891.3 | | mg/Kg | | 89 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *104* | | *70 - 130* |
| *o-Terphenyl* | *121* | | *70 - 130* |

**Lab Sample ID: LCSD 880-69098/3-A**
**Matrix: Solid**
**Analysis Batch: 69044**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 69098**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 1059 | | mg/Kg | | 106 | 70 - 130 | 19 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 1042 | | mg/Kg | | 104 | 70 - 130 | 16 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *121* | | *70 - 130* |
| *o-Terphenyl* | *142* | *S1+* | *70 - 130* |

**Lab Sample ID: 890-5780-1 MS**
**Matrix: Solid**
**Analysis Batch: 69044**

**Client Sample ID: FS 56**
**Prep Type: Total/NA**
**Prep Batch: 69098**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.5 | U | 991 | 1027 | | mg/Kg | | 99 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | 63.8 | | 991 | 1210 | | mg/Kg | | 116 | 70 - 130 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *128* | | *70 - 130* |
| *o-Terphenyl* | *121* | | *70 - 130* |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: 890-5780-1 MSD**
**Matrix: Solid**
**Analysis Batch: 69044**

**Client Sample ID: FS 56**
**Prep Type: Total/NA**
**Prep Batch: 69098**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.5 | U | 991 | 882.8 | | mg/Kg | | 84 | 70 - 130 | 15 | 20 |
| Diesel Range Organics (Over C10-C28) | 63.8 | | 991 | 1019 | | mg/Kg | | 96 | 70 - 130 | 17 | 20 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *107* | | *70 - 130* |
| *o-Terphenyl* | *100* | | *70 - 130* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-69162/1-A**
**Matrix: Solid**
**Analysis Batch: 69206**

**Client Sample ID: Method Blank**
**Prep Type: Soluble**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <5.00 | U | 5.00 | | mg/Kg | | | 12/15/23 13:09 | 1 |

**Lab Sample ID: LCS 880-69162/2-A**
**Matrix: Solid**
**Analysis Batch: 69206**

**Client Sample ID: Lab Control Sample**
**Prep Type: Soluble**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Chloride | 250 | 264.9 | | mg/Kg | | 106 | 90 - 110 |

**Lab Sample ID: LCSD 880-69162/3-A**
**Matrix: Solid**
**Analysis Batch: 69206**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Soluble**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 250 | 261.5 | | mg/Kg | | 105 | 90 - 110 | 1 | 20 |

**Lab Sample ID: 890-5780-1 MS**
**Matrix: Solid**
**Analysis Batch: 69206**

**Client Sample ID: FS 56**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 330 | | 248 | 566.5 | | mg/Kg | | 95 | 90 - 110 |

**Lab Sample ID: 890-5780-1 MSD**
**Matrix: Solid**
**Analysis Batch: 69206**

**Client Sample ID: FS 56**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 330 | | 248 | 562.8 | | mg/Kg | | 94 | 90 - 110 | 1 | 20 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: 890-5780-11 MS**
**Matrix: Solid**
**Analysis Batch: 69206**

**Client Sample ID: FS 69**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 446 | | 252 | 693.5 | | mg/Kg | | 98 | 90 - 110 | | |

**Lab Sample ID: 890-5780-11 MSD**
**Matrix: Solid**
**Analysis Batch: 69206**

**Client Sample ID: FS 69**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 446 | | 252 | 687.0 | | mg/Kg | | 96 | 90 - 110 | 1 | 20 |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## GC VOA

### Prep Batch: 69031

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 880-69031/5-A | Method Blank | Total/NA | Solid | 5035 | |

### Analysis Batch: 69086

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5780-1 | FS 56 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-2 | FS 57 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-3 | FS 58 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-4 | FS 59 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-5 | FS 60 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-6 | FS 61 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-7 | FS 62 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-8 | FS 63 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-9 | FS 64 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-10 | FS 67 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-11 | FS 69 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-12 | FS 72 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-13 | FS 79 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-14 | FS 80 | Total/NA | Solid | 8021B | 69114 |
| MB 880-69031/5-A | Method Blank | Total/NA | Solid | 8021B | 69031 |
| MB 880-69114/5-A | Method Blank | Total/NA | Solid | 8021B | 69114 |
| LCS 880-69114/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 69114 |
| LCSD 880-69114/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 69114 |
| 890-5780-1 MS | FS 56 | Total/NA | Solid | 8021B | 69114 |
| 890-5780-1 MSD | FS 56 | Total/NA | Solid | 8021B | 69114 |

### Prep Batch: 69114

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5780-1 | FS 56 | Total/NA | Solid | 5035 | |
| 890-5780-2 | FS 57 | Total/NA | Solid | 5035 | |
| 890-5780-3 | FS 58 | Total/NA | Solid | 5035 | |
| 890-5780-4 | FS 59 | Total/NA | Solid | 5035 | |
| 890-5780-5 | FS 60 | Total/NA | Solid | 5035 | |
| 890-5780-6 | FS 61 | Total/NA | Solid | 5035 | |
| 890-5780-7 | FS 62 | Total/NA | Solid | 5035 | |
| 890-5780-8 | FS 63 | Total/NA | Solid | 5035 | |
| 890-5780-9 | FS 64 | Total/NA | Solid | 5035 | |
| 890-5780-10 | FS 67 | Total/NA | Solid | 5035 | |
| 890-5780-11 | FS 69 | Total/NA | Solid | 5035 | |
| 890-5780-12 | FS 72 | Total/NA | Solid | 5035 | |
| 890-5780-13 | FS 79 | Total/NA | Solid | 5035 | |
| 890-5780-14 | FS 80 | Total/NA | Solid | 5035 | |
| MB 880-69114/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-69114/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-69114/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 890-5780-1 MS | FS 56 | Total/NA | Solid | 5035 | |
| 890-5780-1 MSD | FS 56 | Total/NA | Solid | 5035 | |

### Analysis Batch: 69235

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5780-1 | FS 56 | Total/NA | Solid | Total BTEX | |
| 890-5780-2 | FS 57 | Total/NA | Solid | Total BTEX | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## GC VOA (Continued)

### Analysis Batch: 69235 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5780-3 | FS 58 | Total/NA | Solid | Total BTEX | |
| 890-5780-4 | FS 59 | Total/NA | Solid | Total BTEX | |
| 890-5780-5 | FS 60 | Total/NA | Solid | Total BTEX | |
| 890-5780-6 | FS 61 | Total/NA | Solid | Total BTEX | |
| 890-5780-7 | FS 62 | Total/NA | Solid | Total BTEX | |
| 890-5780-8 | FS 63 | Total/NA | Solid | Total BTEX | |
| 890-5780-9 | FS 64 | Total/NA | Solid | Total BTEX | |
| 890-5780-10 | FS 67 | Total/NA | Solid | Total BTEX | |
| 890-5780-11 | FS 69 | Total/NA | Solid | Total BTEX | |
| 890-5780-12 | FS 72 | Total/NA | Solid | Total BTEX | |
| 890-5780-13 | FS 79 | Total/NA | Solid | Total BTEX | |
| 890-5780-14 | FS 80 | Total/NA | Solid | Total BTEX | |

## GC Semi VOA

### Analysis Batch: 69044

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5780-1 | FS 56 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-2 | FS 57 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-3 | FS 58 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-4 | FS 59 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-5 | FS 60 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-6 | FS 61 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-7 | FS 62 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-8 | FS 63 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-9 | FS 64 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-10 | FS 67 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-11 | FS 69 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-12 | FS 72 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-13 | FS 79 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-14 | FS 80 | Total/NA | Solid | 8015B NM | 69098 |
| MB 880-69098/1-A | Method Blank | Total/NA | Solid | 8015B NM | 69098 |
| LCS 880-69098/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 69098 |
| LCSD 880-69098/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-1 MS | FS 56 | Total/NA | Solid | 8015B NM | 69098 |
| 890-5780-1 MSD | FS 56 | Total/NA | Solid | 8015B NM | 69098 |

### Prep Batch: 69098

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5780-1 | FS 56 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-2 | FS 57 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-3 | FS 58 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-4 | FS 59 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-5 | FS 60 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-6 | FS 61 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-7 | FS 62 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-8 | FS 63 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-9 | FS 64 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-10 | FS 67 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-11 | FS 69 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-12 | FS 72 | Total/NA | Solid | 8015NM Prep | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## GC Semi VOA (Continued)

### Prep Batch: 69098 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5780-13 | FS 79 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-14 | FS 80 | Total/NA | Solid | 8015NM Prep | |
| MB 880-69098/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-69098/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-69098/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 890-5780-1 MS | FS 56 | Total/NA | Solid | 8015NM Prep | |
| 890-5780-1 MSD | FS 56 | Total/NA | Solid | 8015NM Prep | |

### Analysis Batch: 69199

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5780-1 | FS 56 | Total/NA | Solid | 8015 NM | |
| 890-5780-2 | FS 57 | Total/NA | Solid | 8015 NM | |
| 890-5780-3 | FS 58 | Total/NA | Solid | 8015 NM | |
| 890-5780-4 | FS 59 | Total/NA | Solid | 8015 NM | |
| 890-5780-5 | FS 60 | Total/NA | Solid | 8015 NM | |
| 890-5780-6 | FS 61 | Total/NA | Solid | 8015 NM | |
| 890-5780-7 | FS 62 | Total/NA | Solid | 8015 NM | |
| 890-5780-8 | FS 63 | Total/NA | Solid | 8015 NM | |
| 890-5780-9 | FS 64 | Total/NA | Solid | 8015 NM | |
| 890-5780-10 | FS 67 | Total/NA | Solid | 8015 NM | |
| 890-5780-11 | FS 69 | Total/NA | Solid | 8015 NM | |
| 890-5780-12 | FS 72 | Total/NA | Solid | 8015 NM | |
| 890-5780-13 | FS 79 | Total/NA | Solid | 8015 NM | |
| 890-5780-14 | FS 80 | Total/NA | Solid | 8015 NM | |

## HPLC/IC

### Leach Batch: 69162

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5780-1 | FS 56 | Soluble | Solid | DI Leach | |
| 890-5780-2 | FS 57 | Soluble | Solid | DI Leach | |
| 890-5780-3 | FS 58 | Soluble | Solid | DI Leach | |
| 890-5780-4 | FS 59 | Soluble | Solid | DI Leach | |
| 890-5780-5 | FS 60 | Soluble | Solid | DI Leach | |
| 890-5780-6 | FS 61 | Soluble | Solid | DI Leach | |
| 890-5780-7 | FS 62 | Soluble | Solid | DI Leach | |
| 890-5780-8 | FS 63 | Soluble | Solid | DI Leach | |
| 890-5780-9 | FS 64 | Soluble | Solid | DI Leach | |
| 890-5780-10 | FS 67 | Soluble | Solid | DI Leach | |
| 890-5780-11 | FS 69 | Soluble | Solid | DI Leach | |
| 890-5780-12 | FS 72 | Soluble | Solid | DI Leach | |
| 890-5780-13 | FS 79 | Soluble | Solid | DI Leach | |
| 890-5780-14 | FS 80 | Soluble | Solid | DI Leach | |
| MB 880-69162/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-69162/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-69162/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-5780-1 MS | FS 56 | Soluble | Solid | DI Leach | |
| 890-5780-1 MSD | FS 56 | Soluble | Solid | DI Leach | |
| 890-5780-11 MS | FS 69 | Soluble | Solid | DI Leach | |
| 890-5780-11 MSD | FS 69 | Soluble | Solid | DI Leach | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## HPLC/IC

### Analysis Batch: 69206

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5780-1 | FS 56 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-2 | FS 57 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-3 | FS 58 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-4 | FS 59 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-5 | FS 60 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-6 | FS 61 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-7 | FS 62 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-8 | FS 63 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-9 | FS 64 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-10 | FS 67 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-11 | FS 69 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-12 | FS 72 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-13 | FS 79 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-14 | FS 80 | Soluble | Solid | 300.0 | 69162 |
| MB 880-69162/1-A | Method Blank | Soluble | Solid | 300.0 | 69162 |
| LCS 880-69162/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 69162 |
| LCSD 880-69162/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 69162 |
| 890-5780-1 MS | FS 56 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-1 MSD | FS 56 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-11 MS | FS 69 | Soluble | Solid | 300.0 | 69162 |
| 890-5780-11 MSD | FS 69 | Soluble | Solid | 300.0 | 69162 |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 56

**Lab Sample ID: 890-5780-1**

**Date Collected: 12/12/23 10:23**
**Matrix: Solid**
**Date Received: 12/13/23 08:26**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 00:32 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 00:32 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 13:26 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.10 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 13:26 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 13:23 | CH | EET MID |

## Client Sample ID: FS 57

**Lab Sample ID: 890-5780-2**

**Date Collected: 12/12/23 10:24**
**Matrix: Solid**
**Date Received: 12/13/23 08:26**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 00:53 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 00:53 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 14:31 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.94 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 14:31 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 13:38 | CH | EET MID |

## Client Sample ID: FS 58

**Lab Sample ID: 890-5780-3**

**Date Collected: 12/12/23 10:27**
**Matrix: Solid**
**Date Received: 12/13/23 08:26**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 01:13 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 01:13 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 14:53 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.98 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 14:53 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 13:43 | CH | EET MID |

## Client Sample ID: FS 59

**Lab Sample ID: 890-5780-4**

**Date Collected: 12/12/23 10:29**
**Matrix: Solid**
**Date Received: 12/13/23 08:26**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 01:34 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 01:34 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 59

**Date Collected: 12/12/23 10:29**
**Date Received: 12/13/23 08:26**

## Lab Sample ID: 890-5780-4

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 15:16 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 15:16 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 13:48 | CH | EET MID |

## Client Sample ID: FS 60

**Date Collected: 12/12/23 10:30**
**Date Received: 12/13/23 08:26**

## Lab Sample ID: 890-5780-5

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 01:54 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 01:54 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 15:38 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 15:38 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 13:52 | CH | EET MID |

## Client Sample ID: FS 61

**Date Collected: 12/12/23 10:31**
**Date Received: 12/13/23 08:26**

## Lab Sample ID: 890-5780-6

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 02:15 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 02:15 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 16:00 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 16:00 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 14:07 | CH | EET MID |

## Client Sample ID: FS 62

**Date Collected: 12/12/23 10:33**
**Date Received: 12/13/23 08:26**

## Lab Sample ID: 890-5780-7

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 02:35 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 02:35 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 16:22 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.96 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 16:22 | SM | EET MID |

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# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 62

**Date Collected: 12/12/23 10:33**
**Date Received: 12/13/23 08:26**

## Lab Sample ID: 890-5780-7

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 14:12 | CH | EET MID |

## Client Sample ID: FS 63

**Date Collected: 12/12/23 10:34**
**Date Received: 12/13/23 08:26**

## Lab Sample ID: 890-5780-8

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.97 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 02:56 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 02:56 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 16:44 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 16:44 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 14:17 | CH | EET MID |

## Client Sample ID: FS 64

**Date Collected: 12/12/23 10:35**
**Date Received: 12/13/23 08:26**

## Lab Sample ID: 890-5780-9

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 03:16 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 03:16 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 17:06 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 17:06 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 14:21 | CH | EET MID |

## Client Sample ID: FS 67

**Date Collected: 12/12/23 10:44**
**Date Received: 12/13/23 08:26**

## Lab Sample ID: 890-5780-10

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.97 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 03:37 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 03:37 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 17:29 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.08 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 17:29 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 14:26 | CH | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 69

**Lab Sample ID: 890-5780-11**
**Matrix: Solid**
**Date Collected: 12/12/23 01:03**
**Date Received: 12/13/23 08:26**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 05:00 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 05:00 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 18:12 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.94 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 18:12 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 14:31 | CH | EET MID |

## Client Sample ID: FS 72

**Lab Sample ID: 890-5780-12**
**Matrix: Solid**
**Date Collected: 12/12/23 01:10**
**Date Received: 12/13/23 08:26**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 05:21 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 05:21 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 18:34 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.98 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 18:34 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 14:46 | CH | EET MID |

## Client Sample ID: FS 79

**Lab Sample ID: 890-5780-13**
**Matrix: Solid**
**Date Collected: 12/12/23 01:16**
**Date Received: 12/13/23 08:26**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 05:41 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 05:41 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 18:56 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.93 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 18:56 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 14:51 | CH | EET MID |

## Client Sample ID: FS 80

**Lab Sample ID: 890-5780-14**
**Matrix: Solid**
**Date Collected: 12/12/23 01:18**
**Date Received: 12/13/23 08:26**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 69114 | 12/14/23 14:30 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69086 | 12/15/23 06:02 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69235 | 12/15/23 06:02 | SM | EET MID |

Eurofins Carlsbad

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Client Sample ID: FS 80

**Date Collected: 12/12/23 01:18**
**Date Received: 12/13/23 08:26**

## Lab Sample ID: 890-5780-14

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 69199 | 12/14/23 19:18 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 69098 | 12/14/23 12:11 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69044 | 12/14/23 19:18 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 69162 | 12/15/23 07:59 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69206 | 12/15/23 15:05 | CH | EET MID |

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

## Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Texas | NELAP | T104704400-23-26 | 06-30-24 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 8015 NM | | Solid | Total TPH |
| Total BTEX | | Solid | Total BTEX |

# Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (GC) | SW846 | EET MID |
| Total BTEX | Total BTEX Calculation | TAL SOP | EET MID |
| 8015 NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 8015B NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 300.0 | Anions, Ion Chromatography | EPA | EET MID |
| 5035 | Closed System Purge and Trap | SW846 | EET MID |
| 8015NM Prep | Microextraction | SW846 | EET MID |
| DI Leach | Deionized Water Leaching Procedure | ASTM | EET MID |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Curly SWD

Job ID: 890-5780-1
SDG: KH237051

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Depth |
|---|---|---|---|---|---|
| 890-5780-1 | FS 56 | Solid | 12/12/23 10:23 | 12/13/23 08:26 | 2 |
| 890-5780-2 | FS 57 | Solid | 12/12/23 10:24 | 12/13/23 08:26 | 2 |
| 890-5780-3 | FS 58 | Solid | 12/12/23 10:27 | 12/13/23 08:26 | 2 |
| 890-5780-4 | FS 59 | Solid | 12/12/23 10:29 | 12/13/23 08:26 | 2 |
| 890-5780-5 | FS 60 | Solid | 12/12/23 10:30 | 12/13/23 08:26 | 2 |
| 890-5780-6 | FS 61 | Solid | 12/12/23 10:31 | 12/13/23 08:26 | 2 |
| 890-5780-7 | FS 62 | Solid | 12/12/23 10:33 | 12/13/23 08:26 | 2 |
| 890-5780-8 | FS 63 | Solid | 12/12/23 10:34 | 12/13/23 08:26 | 2 |
| 890-5780-9 | FS 64 | Solid | 12/12/23 10:35 | 12/13/23 08:26 | 2 |
| 890-5780-10 | FS 67 | Solid | 12/12/23 10:44 | 12/13/23 08:26 | 2 |
| 890-5780-11 | FS 69 | Solid | 12/12/23 01:03 | 12/13/23 08:26 | 2 |
| 890-5780-12 | FS 72 | Solid | 12/12/23 01:10 | 12/13/23 08:26 | 2 |
| 890-5780-13 | FS 79 | Solid | 12/12/23 01:16 | 12/13/23 08:26 | 2 |
| 890-5780-14 | FS 80 | Solid | 12/12/23 01:18 | 12/13/23 08:26 | 2 |

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

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# Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 2

| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (if different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☒ Rush |
| Project Number: | KH237051 | Due Date: | 48 hrs |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | | |
|---|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No | |
| Samples Received Intact: | Yes No | Thermometer ID: | IR#007 | |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | -0.2 | |
| Sample Custody Seals: | Yes No N/A | Temperature Reading: | 1.2 | |
| Total Containers: | | Corrected Temperature: | 1.0 | |

**Preservative Codes**

None: NO; DI Water: $H_2O$; Cool: Cool; MeOH: Me; HCL: HC; $HNO_3$: HN; $H_2SO_4$: $H_2$; NaOH: Na; $H_3PO_4$: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: NaSO 3; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| FS 56 | Soil | 12/12 | 10:23 | 2' | C | 1 | X | X | X | |
| FS 57 | Soil | | 10:24 | 2' | C | 1 | X | X | X | |
| FS 58 | Soil | | 10:27 | 2' | C | 1 | X | X | X | |
| FS 59 | Soil | | 10:29 | 2' | C | 1 | X | X | X | |
| FS 60 | Soil | | 10:30 | 2' | C | 1 | X | X | X | |
| FS 61 | Soil | | 10:31 | 2' | C | 1 | X | X | X | |
| FS 62 | Soil | | 10:33 | 2' | C | 1 | X | X | X | |
| FS 63 | Soil | | 10:34 | 2' | C | 1 | X | X | X | |
| FS 64 | Soil | | 10:35 | 2' | C | 1 | X | X | X | |
| FS 67 | Soil | | 10:44 | 2' | C | 1 | X | X | X | |

890-5780 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| | Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|---|
| 1 | B Mitchell | [illegible] | 8:26 12/13 | | | |
| 3 | | | | 4 | | |
| 5 | | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

eurofins | Environment Testing Xenco

# Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 2 of 2

| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (if different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☒ Rush |
| Project Number: | KH237051 | Due Date: | 48 hr |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Samples Received Intact: | Yes No | Thermometer ID: | |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | |
| Sample Custody Seals: | Yes No N/A | Temperature Reading: | |
| Total Containers: | | Corrected Temperature: | |

**Preservative Codes**

None: NO; DI Water: $H_2O$; Cool: Cool; MeOH: Me; HCL: HC; $HNO_3$: HN; $H_2SO_4$: $H_2$; NaOH: Na; $H_3PO_4$: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| FS 69 | Soil | 12/12 | 1:03 | 2' | C | 1 | X | X | X | |
| FS 72 | Soil | | 1:10 | 2' | C | 1 | X | X | X | |
| FS 79 | Soil | | 1:16 | 2' | C | 1 | X | X | X | |
| FS 80 | Soil | | 1:18 | 2' | C | 1 | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 B Mallus | | 8:24 12/13 | 3 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

**Eurofins Carlsbad**
1089 N Canal St
Carlsbad, NM 88220
Phone. 575-988-3199 Fax 575-988-3199

# Chain of Custody Record

eurofins | Environment Testing

| | | | | |
|---|---|---|---|---|
| **Client Information (Sub Contract Lab)** | Sampler: | Lab PM: Kramer Jessica | Carrier Tracking No(s): | COC No: 890-1970 1 |
| Client Contact: Shipping/Receiving | Phone | E-Mail: Jessica Kramer@et.eurofinsus com | State of Origin: New Mexico | Page: Page 1 of 2 |
| Company: Eurofins Environment Testing South Centr | | Accreditations Required (See note): NELAP - Texas | | Job #: 890-5780-1 |
| Address: 1211 W Florida Ave | Due Date Requested: 12/15/2023 | | | |
| City: Midland | TAT Requested (days): | | | |
| State, Zip: TX 79701 | PO #: | | | |
| Phone: 432-704-5440(Tel) | WO #: | | | |
| Email | | | | |
| Project Name: Curly SWD | Project #: 89000140 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes**

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F - MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U - Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8021B/5035FP_Calc (MOD) BTEX | Total_BTEX_GCV | 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH | 8015MOD_Calc | 300_ORGFM_28D/DI_LEACH Chloride | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | | |
| FS 56 (890-5780-1) | 12/12/23 | 10 23 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS 57 (890-5780-2) | 12/12/23 | 10 24 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS 58 (890-5780-3) | 12/12/23 | 10 27 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS 59 (890-5780-4) | 12/12/23 | 10 29 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS 60 (890-5780-5) | 12/12/23 | 10 30 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS 61 (890-5780-6) | 12/12/23 | 10 31 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS 62 (890-5780-7) | 12/12/23 | 10 33 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS 63 (890-5780-8) | 12/12/23 | 10 34 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS 64 (890-5780-9) | 12/12/23 | 10 35 Mountain | | Solid | | | X | X | X | X | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC.

| | |
|---|---|
| ***Possible Hazard Identification*** *Unconfirmed* | ***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months* |
| Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements. |

| | | | | | | |
|---|---|---|---|---|---|---|
| Empty Kit Relinquished by | | Date | Time | Method of Shipment: | | |
| Relinquished by: | Date/Time: | Company | Received by: KRAMER | Date/Time: 12/14/23 | Company | |
| Relinquished by: | Date/Time | Company | Received by: | Date/Time: 1105 | Company | |
| Relinquished by: | Date/Time. | Company | Received by: | Date/Time: | Company | |

| | | |
|---|---|---|
| Custody Seals Intact: Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks: 2.4/2.6 |

Ver: 06/08/2021

Page 353 of 408
Received by OCD: 2/26/2024 10:02:59 AM
12/15/2023
Page 40 of 43
Released to Imaging: 5/3/2024 11:19:07 AM

**Eurofins Carlsbad**
1089 N Canal St
Carlsbad NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

# Chain of Custody Record

eurofins | Environment Testing

| | | | | |
|---|---|---|---|---|
| **Client Information (Sub Contract Lab)** | Sampler: | Lab PM: Kramer, Jessica | Carrier Tracking No(s): | COC No: 890-1970 2 |
| Client Contact: Shipping/Receiving | Phone: | E-Mail: Jessica Kramer@et.eurofinsus com | State of Origin: New Mexico | Page: Page 2 of 2 |
| Company: Eurofins Environment Testing South Centr | | Accreditations Required (See note): NELAP - Texas | | Job #: 890-5780-1 |
| Address: 1211 W Florida Ave, | Due Date Requested: 12/15/2023 | | | |
| City: Midland | TAT Requested (days): | | | |
| State Zip: TX 79701 | | | | |
| Phone: 432-704-5440(Tel) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Curly SWD | Project #: 89000140 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes**

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O - AsNaO2, P Na2O4S, Q - Na2SO3, R Na2S2O3, S - H2SO4, T TSP Dodecahydrate, U - Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8021B/5035FP_Calc (MOD) BTEX | Total_BTEX_GCV | 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH | 8015MOD_Calc | 300_ORGFM_28D/DI_LEACH Chloride | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | | |
| FS 67 (890-5780-10) | 12/12/23 | 10 44 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS 69 (890-5780-11) | 12/12/23 | 01 03 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS 72 (890-5780-12) | 12/12/23 | 01 10 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS 79 (890-5780-13) | 12/12/23 | 01 16 Mountain | | Solid | | | X | X | X | X | X | 1 | |
| FS 80 (890-5780-14) | 12/12/23 | 01 18 Mountain | | Solid | | | X | X | X | X | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC.

| | |
|---|---|
| **Possible Hazard Identification** Unconfirmed | **Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)** ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank. 2 | Special Instructions/QC Requirements. |

| | | | | | |
|---|---|---|---|---|---|
| Empty Kit Relinquished by | Date | Time. | Method of Shipment: | | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time | Company | Received by: | Date/Time | Company |
| Relinquished by: | Date/Time | Company | Received by: | Date/Time. | Company |

| | |
|---|---|
| Custody Seals Intact: Δ Yes Δ No | Custody Seal No |
| | Cooler Temperature(s) °C and Other Remarks: |

Ver: 06/08/2021

Page 354 of 408
Received by OCD: 2/26/2024 10:02:59 AM
12/15/2023
Page 41 of 43
Released to Imaging: 5/3/2024 11:19:07 AM

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 890-5780-1
SDG Number: KH237051

**Login Number: 5780**
**List Number: 1**
**Creator: Lopez, Abraham**

**List Source: Eurofins Carlsbad**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | N/A | Refer to Job Narrative for details. |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 890-5780-1
SDG Number: KH237051

**Login Number: 5780**
**List Number: 2**
**Creator: Kramer, Jessica**

**List Source: Eurofins Midland**
**List Creation: 12/14/23 11:17 AM**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Joseph Guesnier
Terracon Consulting Eng & Scientists
2526 W Pierce Street
Carlsbad, New Mexico 88220

Generated 12/15/2023 2:49:41 PM

## JOB DESCRIPTION

CURLY SWD
KH237051

## JOB NUMBER

890-5777-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.



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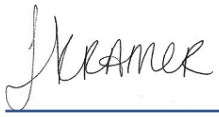
# Eurofins Carlsbad

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



Generated
12/15/2023 2:49:41 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

# Eurofins Carlsbad

## Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD,and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs
· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

Warranties, Terms, and Conditions
· Analyses for Field Parameters are performed by Eurofins Philadelphia field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification # 02015.
VL = field staff performs tests under NJ State certification # 06005.
WG = field staff performs tests under NJ State certification # PA001, PA State certification # 48-01334.
H = field staff performs tests under NJ NELAP certification # PA093, PA NELAP certification # 46-05499.

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

· Reported results related only to the samples as tested. Eurofins Philadelphia is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· Eurofins Philadelphia is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by Eurofins Philadelphia : Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).




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Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Laboratory Job ID: 890-5777-1
SDG: KH237051

# Table of Contents

Cover Page . . . . . 1
Table of Contents . . . . . 4
Definitions/Glossary . . . . . 5
Case Narrative . . . . . 6
Client Sample Results . . . . . 8
Surrogate Summary . . . . . 17
QC Sample Results . . . . . 18
QC Association Summary . . . . . 22
Lab Chronicle . . . . . 25
Certification Summary . . . . . 29
Method Summary . . . . . 30
Sample Summary . . . . . 31
Chain of Custody . . . . . 32
Receipt Checklists . . . . . 34

# Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Qualifiers

### GC VOA

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |
| S1+ | Surrogate recovery exceeds control limits, high biased. |
| U | Indicates the analyte was analyzed for but not detected. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |
| S1- | Surrogate recovery exceeds control limits, low biased. |
| S1+ | Surrogate recovery exceeds control limits, high biased. |
| U | Indicates the analyte was analyzed for but not detected. |

### HPLC/IC

| Qualifier | Qualifier Description |
|---|---|
| U | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Job ID: 890-5777-1

**Laboratory: Eurofins Carlsbad**

**Narrative**

**Job Narrative**
**890-5777-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**
The samples were received on 12/12/2023 2:52 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.0°C

**Receipt Exceptions**
The following samples were received and analyzed from an unpreserved bulk soil jar: E - SW 08 (890-5777-1), E - SW 09 (890-5777-2), FS 49 (890-5777-3), FS 50 (890-5777-4), FS 51 (890-5777-5), FS 52 (890-5777-6), FS 53 (890-5777-7), FS 54 (890-5777-8), S - SW 05 (890-5777-9), E - SW 10 (890-5777-10) and FS 55 (890-5777-11).

**GC VOA**
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-69096 and analytical batch 880-69095 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-69096 and analytical batch 880-69095 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: E - SW 08 (890-5777-1), FS 51 (890-5777-5), S - SW 05 (890-5777-9) and E - SW 10 (890-5777-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-5777-A-1-E MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-69097 and analytical batch 880-69042 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: E - SW 08 (890-5777-1), E - SW 09 (890-5777-2), FS 50 (890-5777-4), FS 51 (890-5777-5), FS 52 (890-5777-6), FS 53 (890-5777-7), FS 54 (890-5777-8), S - SW 05 (890-5777-9), E - SW 10 (890-5777-10), FS 55 (890-5777-11), (890-5777-A-1-I MS) and (890-5777-A-1-J MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-69097 and analytical batch 880-69042 contained Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

# Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Job ID: 890-5777-1 (Continued)

### Laboratory: Eurofins Carlsbad (Continued)

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-69097 and analytical batch 880-69042 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: E - SW 08

**Lab Sample ID: 890-5777-1**
**Matrix: Solid**
**Date Collected: 12/12/23 09:38**
**Date Received: 12/12/23 14:52**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U F1 | 0.00199 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:12 | 1 |
| Toluene | <0.00199 | U F1 | 0.00199 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:12 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:12 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:12 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:12 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *176* | *S1+* | *70 - 130* | *12/14/23 11:50* | *12/14/23 15:12* | *1* |
| *1,4-Difluorobenzene (Surr)* | *125* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 15:12* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/14/23 15:12 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.3 | U | 50.3 | | mg/Kg | | | 12/14/23 13:26 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 50.3 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 13:26 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U F1 | 50.3 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 13:26 | 1 |
| OII Range Organics (Over C28-C36) | <50.3 | U | 50.3 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 13:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *151* | *S1+* | *70 - 130* | *12/14/23 12:00* | *12/14/23 13:26* | *1* |
| *o-Terphenyl* | *126* | | *70 - 130* | *12/14/23 12:00* | *12/14/23 13:26* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **51.4** | | 5.05 | | mg/Kg | | | 12/14/23 13:15 | 1 |

## Client Sample ID: E - SW 09

**Lab Sample ID: 890-5777-2**
**Matrix: Solid**
**Date Collected: 12/12/23 09:40**
**Date Received: 12/12/23 14:52**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:33 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:33 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:33 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:33 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:33 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:33 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *91* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 15:33* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: E - SW 09

**Lab Sample ID: 890-5777-2**
**Matrix: Solid**
**Date Collected: 12/12/23 09:40**
**Date Received: 12/12/23 14:52**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *116* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 15:33* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/14/23 15:33 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/14/23 14:31 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 14:31 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 14:31 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 14:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *137* | *S1+* | *70 - 130* | *12/14/23 12:00* | *12/14/23 14:31* | *1* |
| *o-Terphenyl* | *111* | | *70 - 130* | *12/14/23 12:00* | *12/14/23 14:31* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **61.6** | | 5.02 | | mg/Kg | | | 12/14/23 13:35 | 1 |

## Client Sample ID: FS 49

**Lab Sample ID: 890-5777-3**
**Matrix: Solid**
**Date Collected: 12/12/23 09:43**
**Date Received: 12/12/23 14:52**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:53 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:53 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:53 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:53 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:53 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 15:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *91* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 15:53* | *1* |
| *1,4-Difluorobenzene (Surr)* | *115* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 15:53* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | | 12/14/23 15:53 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/14/23 14:53 | 1 |

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# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: FS 49

**Lab Sample ID: 890-5777-3**
**Matrix: Solid**
**Date Collected: 12/12/23 09:43**
**Date Received: 12/12/23 14:52**
**Sample Depth: 2'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 14:53 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 14:53 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 14:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *130* | | *70 - 130* | *12/14/23 12:00* | *12/14/23 14:53* | *1* |
| *o-Terphenyl* | *107* | | *70 - 130* | *12/14/23 12:00* | *12/14/23 14:53* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **130** | | 4.99 | | mg/Kg | | | 12/14/23 13:41 | 1 |

## Client Sample ID: FS 50

**Lab Sample ID: 890-5777-4**
**Matrix: Solid**
**Date Collected: 12/12/23 09:46**
**Date Received: 12/12/23 14:52**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:14 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:14 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:14 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:14 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:14 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *94* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 16:14* | *1* |
| *1,4-Difluorobenzene (Surr)* | *117* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 16:14* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/14/23 16:14 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | | 12/14/23 15:16 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 15:16 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 15:16 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 15:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *153* | *S1+* | *70 - 130* | *12/14/23 12:00* | *12/14/23 15:16* | *1* |
| *o-Terphenyl* | *127* | | *70 - 130* | *12/14/23 12:00* | *12/14/23 15:16* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: FS 50

**Lab Sample ID: 890-5777-4**
**Matrix: Solid**
**Date Collected: 12/12/23 09:46**
**Date Received: 12/12/23 14:52**
**Sample Depth: 2'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 126 | | 4.97 | | mg/Kg | | | 12/14/23 13:48 | 1 |

## Client Sample ID: FS 51

**Lab Sample ID: 890-5777-5**
**Matrix: Solid**
**Date Collected: 12/12/23 09:48**
**Date Received: 12/12/23 14:52**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:34 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:34 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:34 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:34 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:34 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *122* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 16:34* | *1* |
| *1,4-Difluorobenzene (Surr)* | *145* | *S1+* | *70 - 130* | *12/14/23 11:50* | *12/14/23 16:34* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/14/23 16:34 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.6 | U | 49.6 | | mg/Kg | | | 12/14/23 15:38 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.6 | U | 49.6 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 15:38 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.6 | U | 49.6 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 15:38 | 1 |
| OII Range Organics (Over C28-C36) | <49.6 | U | 49.6 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 15:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *151* | *S1+* | *70 - 130* | *12/14/23 12:00* | *12/14/23 15:38* | *1* |
| *o-Terphenyl* | *127* | | *70 - 130* | *12/14/23 12:00* | *12/14/23 15:38* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 272 | | 4.97 | | mg/Kg | | | 12/14/23 13:54 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: FS 52

**Lab Sample ID: 890-5777-6**
**Matrix: Solid**
**Date Collected: 12/12/23 09:50**
**Date Received: 12/12/23 14:52**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:55 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:55 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:55 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:55 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:55 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 16:55 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 16:55* | *1* |
| *1,4-Difluorobenzene (Surr)* | *118* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 16:55* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00396 | U | 0.00396 | | mg/Kg | | | 12/14/23 16:55 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.3 | U | 50.3 | | mg/Kg | | | 12/14/23 16:00 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 50.3 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 16:00 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U | 50.3 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 16:00 | 1 |
| OII Range Organics (Over C28-C36) | <50.3 | U | 50.3 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 16:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *156* | *S1+* | *70 - 130* | *12/14/23 12:00* | *12/14/23 16:00* | *1* |
| *o-Terphenyl* | *137* | *S1+* | *70 - 130* | *12/14/23 12:00* | *12/14/23 16:00* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **92.3** | | 5.01 | | mg/Kg | | | 12/14/23 14:14 | 1 |

## Client Sample ID: FS 53

**Lab Sample ID: 890-5777-7**
**Matrix: Solid**
**Date Collected: 12/12/23 09:52**
**Date Received: 12/12/23 14:52**
**Sample Depth: 2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:15 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:15 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:15 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:15 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:15 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *106* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 17:15* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: FS 53

**Date Collected: 12/12/23 09:52**
**Date Received: 12/12/23 14:52**
**Sample Depth: 2'**

## Lab Sample ID: 890-5777-7

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Difluorobenzene (Surr)* | *116* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 17:15* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/14/23 17:15 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.5 | U | 50.5 | | mg/Kg | | | 12/14/23 16:22 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.5 | U | 50.5 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 16:22 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.5 | U | 50.5 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 16:22 | 1 |
| OII Range Organics (Over C28-C36) | <50.5 | U | 50.5 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 16:22 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *148* | *S1+* | *70 - 130* | *12/14/23 12:00* | *12/14/23 16:22* | *1* |
| *o-Terphenyl* | *125* | | *70 - 130* | *12/14/23 12:00* | *12/14/23 16:22* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **132** | | 5.00 | | mg/Kg | | | 12/14/23 14:21 | 1 |

## Client Sample ID: FS 54

**Date Collected: 12/12/23 09:53**
**Date Received: 12/12/23 14:52**
**Sample Depth: 2'**

## Lab Sample ID: 890-5777-8

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:36 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:36 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:36 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:36 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:36 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:36 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *106* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 17:36* | *1* |
| *1,4-Difluorobenzene (Surr)* | *118* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 17:36* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | | 12/14/23 17:36 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/14/23 16:44 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: FS 54

**Lab Sample ID: 890-5777-8**
**Matrix: Solid**
**Date Collected: 12/12/23 09:53**
**Date Received: 12/12/23 14:52**
**Sample Depth: 2'**

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 16:44 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 16:44 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 16:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *156* | *S1+* | *70 - 130* | *12/14/23 12:00* | *12/14/23 16:44* | *1* |
| *o-Terphenyl* | *129* | | *70 - 130* | *12/14/23 12:00* | *12/14/23 16:44* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **436** | | 5.03 | | mg/Kg | | | 12/14/23 14:27 | 1 |

## Client Sample ID: S - SW 05

**Lab Sample ID: 890-5777-9**
**Matrix: Solid**
**Date Collected: 12/12/23 10:02**
**Date Received: 12/12/23 14:52**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:56 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:56 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:56 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:56 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:56 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 17:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *323* | *S1+* | *70 - 130* | *12/14/23 11:50* | *12/14/23 17:56* | *1* |
| *1,4-Difluorobenzene (Surr)* | *76* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 17:56* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | | 12/14/23 17:56 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | | 12/14/23 17:06 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 17:06 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 17:06 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 17:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *152* | *S1+* | *70 - 130* | *12/14/23 12:00* | *12/14/23 17:06* | *1* |
| *o-Terphenyl* | *126* | | *70 - 130* | *12/14/23 12:00* | *12/14/23 17:06* | *1* |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: S - SW 05

**Lab Sample ID: 890-5777-9**
**Matrix: Solid**
**Date Collected: 12/12/23 10:02**
**Date Received: 12/12/23 14:52**
**Sample Depth: 0-2'**

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 105 | | 5.04 | | mg/Kg | | | 12/14/23 14:34 | 1 |

## Client Sample ID: E - SW 10

**Lab Sample ID: 890-5777-10**
**Matrix: Solid**
**Date Collected: 12/12/23 10:03**
**Date Received: 12/12/23 14:52**
**Sample Depth: 0-2'**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 18:17 | 1 |
| Toluene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 18:17 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 18:17 | 1 |
| m-Xylene & p-Xylene | <0.00404 | U | 0.00404 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 18:17 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 18:17 | 1 |
| Xylenes, Total | <0.00404 | U | 0.00404 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 18:17 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *162* | *S1+* | *70 - 130* | *12/14/23 11:50* | *12/14/23 18:17* | *1* |
| *1,4-Difluorobenzene (Surr)* | *132* | *S1+* | *70 - 130* | *12/14/23 11:50* | *12/14/23 18:17* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00404 | U | 0.00404 | | mg/Kg | | | 12/14/23 18:17 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | | 12/14/23 17:29 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 49.7 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 17:29 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 17:29 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 17:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *154* | *S1+* | *70 - 130* | *12/14/23 12:00* | *12/14/23 17:29* | *1* |
| *o-Terphenyl* | *127* | | *70 - 130* | *12/14/23 12:00* | *12/14/23 17:29* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 757 | | 4.98 | | mg/Kg | | | 12/14/23 14:40 | 1 |

# Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: FS 55

**Date Collected: 12/12/23 10:13**
**Date Received: 12/12/23 14:52**
**Sample Depth: 2'**

## Lab Sample ID: 890-5777-11

**Matrix: Solid**

### Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 20:07 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 20:07 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 20:07 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 20:07 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 20:07 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 20:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *85* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 20:07* | *1* |
| *1,4-Difluorobenzene (Surr)* | *108* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 20:07* | *1* |

### Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | | 12/14/23 20:07 | 1 |

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total TPH | <50.1 | U | 50.1 | | mg/Kg | | | 12/14/23 18:12 | 1 |

### Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.1 | U | 50.1 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 18:12 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.1 | U | 50.1 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 18:12 | 1 |
| OII Range Organics (Over C28-C36) | <50.1 | U | 50.1 | | mg/Kg | | 12/14/23 12:00 | 12/14/23 18:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *143* | *S1+* | *70 - 130* | *12/14/23 12:00* | *12/14/23 18:12* | *1* |
| *o-Terphenyl* | *112* | | *70 - 130* | *12/14/23 12:00* | *12/14/23 18:12* | *1* |

### Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **219** | | 5.02 | | mg/Kg | | | 12/14/23 14:47 | 1 |

# Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | BFB1 | DFBZ1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 890-5777-1 | E - SW 08 | 176 S1+ | 125 |
| 890-5777-1 MS | E - SW 08 | 109 | 140 S1+ |
| 890-5777-1 MSD | E - SW 08 | 130 | 129 |
| 890-5777-2 | E - SW 09 | 91 | 116 |
| 890-5777-3 | FS 49 | 91 | 115 |
| 890-5777-4 | FS 50 | 94 | 117 |
| 890-5777-5 | FS 51 | 122 | 145 S1+ |
| 890-5777-6 | FS 52 | 99 | 118 |
| 890-5777-7 | FS 53 | 106 | 116 |
| 890-5777-8 | FS 54 | 106 | 118 |
| 890-5777-9 | S - SW 05 | 323 S1+ | 76 |
| 890-5777-10 | E - SW 10 | 162 S1+ | 132 S1+ |
| 890-5777-11 | FS 55 | 85 | 108 |
| LCS 880-69096/1-A | Lab Control Sample | 91 | 107 |
| LCSD 880-69096/2-A | Lab Control Sample Dup | 93 | 107 |
| MB 880-69096/5-A | Method Blank | 116 | 146 S1+ |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | 1CO1 | OTPH1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 890-5777-1 | E - SW 08 | 151 S1+ | 126 |
| 890-5777-1 MS | E - SW 08 | 39 S1- | 105 |
| 890-5777-1 MSD | E - SW 08 | 40 S1- | 104 |
| 890-5777-2 | E - SW 09 | 137 S1+ | 111 |
| 890-5777-3 | FS 49 | 130 | 107 |
| 890-5777-4 | FS 50 | 153 S1+ | 127 |
| 890-5777-5 | FS 51 | 151 S1+ | 127 |
| 890-5777-6 | FS 52 | 156 S1+ | 137 S1+ |
| 890-5777-7 | FS 53 | 148 S1+ | 125 |
| 890-5777-8 | FS 54 | 156 S1+ | 129 |
| 890-5777-9 | S - SW 05 | 152 S1+ | 126 |
| 890-5777-10 | E - SW 10 | 154 S1+ | 127 |
| 890-5777-11 | FS 55 | 143 S1+ | 112 |
| LCS 880-69097/2-A | Lab Control Sample | 121 | 130 |
| LCSD 880-69097/3-A | Lab Control Sample Dup | 107 | 100 |
| MB 880-69097/1-A | Method Blank | 147 S1+ | 134 S1+ |

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC)

**Lab Sample ID: MB 880-69096/5-A**
**Matrix: Solid**
**Analysis Batch: 69095**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 69096**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 14:43 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 14:43 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 14:43 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 14:43 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 14:43 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 12/14/23 11:50 | 12/14/23 14:43 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *116* | | *70 - 130* | *12/14/23 11:50* | *12/14/23 14:43* | *1* |
| *1,4-Difluorobenzene (Surr)* | *146* | *S1+* | *70 - 130* | *12/14/23 11:50* | *12/14/23 14:43* | *1* |

**Lab Sample ID: LCS 880-69096/1-A**
**Matrix: Solid**
**Analysis Batch: 69095**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 69096**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.1196 | | mg/Kg | | 120 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.09689 | | mg/Kg | | 97 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.09204 | | mg/Kg | | 92 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.1935 | | mg/Kg | | 97 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.09213 | | mg/Kg | | 92 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *91* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *107* | | *70 - 130* |

**Lab Sample ID: LCSD 880-69096/2-A**
**Matrix: Solid**
**Analysis Batch: 69095**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 69096**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.1071 | | mg/Kg | | 107 | 70 - 130 | 11 | 35 |
| Toluene | | | 0.100 | 0.08187 | | mg/Kg | | 82 | 70 - 130 | 17 | 35 |
| Ethylbenzene | | | 0.100 | 0.08058 | | mg/Kg | | 81 | 70 - 130 | 13 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1770 | | mg/Kg | | 88 | 70 - 130 | 9 | 35 |
| o-Xylene | | | 0.100 | 0.08475 | | mg/Kg | | 85 | 70 - 130 | 8 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *93* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *107* | | *70 - 130* |

**Lab Sample ID: 890-5777-1 MS**
**Matrix: Solid**
**Analysis Batch: 69095**

**Client Sample ID: E - SW 08**
**Prep Type: Total/NA**
**Prep Batch: 69096**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U F1 | 0.0996 | 0.1376 | F1 | mg/Kg | | 138 | 70 - 130 | | |
| Toluene | <0.00199 | U F1 | 0.0996 | 0.07741 | | mg/Kg | | 78 | 70 - 130 | | |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

**Lab Sample ID: 890-5777-1 MS**
**Matrix: Solid**
**Analysis Batch: 69095**

**Client Sample ID: E - SW 08**
**Prep Type: Total/NA**
**Prep Batch: 69096**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | <0.00199 | U | 0.0996 | 0.07454 | | mg/Kg | | 75 | 70 - 130 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.199 | 0.2276 | | mg/Kg | | 114 | 70 - 130 |
| o-Xylene | <0.00199 | U | 0.0996 | 0.1105 | | mg/Kg | | 110 | 70 - 130 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *109* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *140* | *S1+* | *70 - 130* |

**Lab Sample ID: 890-5777-1 MSD**
**Matrix: Solid**
**Analysis Batch: 69095**

**Client Sample ID: E - SW 08**
**Prep Type: Total/NA**
**Prep Batch: 69096**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U F1 | 0.0990 | 0.1228 | | mg/Kg | | 124 | 70 - 130 | 11 | 35 |
| Toluene | <0.00199 | U F1 | 0.0990 | 0.06251 | F1 | mg/Kg | | 63 | 70 - 130 | 21 | 35 |
| Ethylbenzene | <0.00199 | U | 0.0990 | 0.07244 | | mg/Kg | | 73 | 70 - 130 | 3 | 35 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.198 | 0.2425 | | mg/Kg | | 122 | 70 - 130 | 6 | 35 |
| o-Xylene | <0.00199 | U | 0.0990 | 0.1207 | | mg/Kg | | 121 | 70 - 130 | 9 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *130* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *129* | | *70 - 130* |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 880-69097/1-A**
**Matrix: Solid**
**Analysis Batch: 69042**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 69097**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 12/14/23 07:59 | 12/14/23 08:51 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 12/14/23 07:59 | 12/14/23 08:51 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 12/14/23 07:59 | 12/14/23 08:51 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *147* | *S1+* | *70 - 130* | *12/14/23 07:59* | *12/14/23 08:51* | *1* |
| *o-Terphenyl* | *134* | *S1+* | *70 - 130* | *12/14/23 07:59* | *12/14/23 08:51* | *1* |

**Lab Sample ID: LCS 880-69097/2-A**
**Matrix: Solid**
**Analysis Batch: 69042**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 69097**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1179 | | mg/Kg | | 118 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1128 | | mg/Kg | | 113 | 70 - 130 |

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# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: LCS 880-69097/2-A**
**Matrix: Solid**
**Analysis Batch: 69042**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 69097**

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 121 | | 70 - 130 |
| o-Terphenyl | 130 | | 70 - 130 |

**Lab Sample ID: LCSD 880-69097/3-A**
**Matrix: Solid**
**Analysis Batch: 69042**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 69097**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 1134 | | mg/Kg | | 113 | 70 - 130 | 4 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 1127 | | mg/Kg | | 113 | 70 - 130 | 0 | 20 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 107 | | 70 - 130 |
| o-Terphenyl | 100 | | 70 - 130 |

**Lab Sample ID: 890-5777-1 MS**
**Matrix: Solid**
**Analysis Batch: 69042**

**Client Sample ID: E - SW 08**
**Prep Type: Total/NA**
**Prep Batch: 69097**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 1000 | 956.2 | | mg/Kg | | 91 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | <50.3 | U F1 | 1000 | 1606 | F1 | mg/Kg | | 157 | 70 - 130 | | |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 39 | S1- | 70 - 130 |
| o-Terphenyl | 105 | | 70 - 130 |

**Lab Sample ID: 890-5777-1 MSD**
**Matrix: Solid**
**Analysis Batch: 69042**

**Client Sample ID: E - SW 08**
**Prep Type: Total/NA**
**Prep Batch: 69097**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.3 | U | 1000 | 973.5 | | mg/Kg | | 93 | 70 - 130 | 2 | 20 |
| Diesel Range Organics (Over C10-C28) | <50.3 | U F1 | 1000 | 1621 | F1 | mg/Kg | | 158 | 70 - 130 | 1 | 20 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| 1-Chlorooctane | 40 | S1- | 70 - 130 |
| o-Terphenyl | 104 | | 70 - 130 |

# QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-69085/1-A**
**Matrix: Solid**
**Analysis Batch: 69101**

**Client Sample ID: Method Blank**
**Prep Type: Soluble**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | <5.00 | U | 5.00 | | mg/Kg | | | 12/14/23 12:55 | 1 |

**Lab Sample ID: LCS 880-69085/2-A**
**Matrix: Solid**
**Analysis Batch: 69101**

**Client Sample ID: Lab Control Sample**
**Prep Type: Soluble**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 253.7 | | mg/Kg | | 101 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-69085/3-A**
**Matrix: Solid**
**Analysis Batch: 69101**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Soluble**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 252.5 | | mg/Kg | | 101 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 890-5777-1 MS**
**Matrix: Solid**
**Analysis Batch: 69101**

**Client Sample ID: E - SW 08**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 51.4 | | 253 | 302.0 | | mg/Kg | | 99 | 90 - 110 | | |

**Lab Sample ID: 890-5777-1 MSD**
**Matrix: Solid**
**Analysis Batch: 69101**

**Client Sample ID: E - SW 08**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 51.4 | | 253 | 301.3 | | mg/Kg | | 99 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 890-5777-11 MS**
**Matrix: Solid**
**Analysis Batch: 69101**

**Client Sample ID: FS 55**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 219 | | 251 | 462.2 | | mg/Kg | | 97 | 90 - 110 | | |

**Lab Sample ID: 890-5777-11 MSD**
**Matrix: Solid**
**Analysis Batch: 69101**

**Client Sample ID: FS 55**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 219 | | 251 | 465.5 | | mg/Kg | | 98 | 90 - 110 | 1 | 20 |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## GC VOA

### Analysis Batch: 69095

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5777-1 | E - SW 08 | Total/NA | Solid | 8021B | 69096 |
| 890-5777-2 | E - SW 09 | Total/NA | Solid | 8021B | 69096 |
| 890-5777-3 | FS 49 | Total/NA | Solid | 8021B | 69096 |
| 890-5777-4 | FS 50 | Total/NA | Solid | 8021B | 69096 |
| 890-5777-5 | FS 51 | Total/NA | Solid | 8021B | 69096 |
| 890-5777-6 | FS 52 | Total/NA | Solid | 8021B | 69096 |
| 890-5777-7 | FS 53 | Total/NA | Solid | 8021B | 69096 |
| 890-5777-8 | FS 54 | Total/NA | Solid | 8021B | 69096 |
| 890-5777-9 | S - SW 05 | Total/NA | Solid | 8021B | 69096 |
| 890-5777-10 | E - SW 10 | Total/NA | Solid | 8021B | 69096 |
| 890-5777-11 | FS 55 | Total/NA | Solid | 8021B | 69096 |
| MB 880-69096/5-A | Method Blank | Total/NA | Solid | 8021B | 69096 |
| LCS 880-69096/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 69096 |
| LCSD 880-69096/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 69096 |
| 890-5777-1 MS | E - SW 08 | Total/NA | Solid | 8021B | 69096 |
| 890-5777-1 MSD | E - SW 08 | Total/NA | Solid | 8021B | 69096 |

### Prep Batch: 69096

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5777-1 | E - SW 08 | Total/NA | Solid | 5035 | |
| 890-5777-2 | E - SW 09 | Total/NA | Solid | 5035 | |
| 890-5777-3 | FS 49 | Total/NA | Solid | 5035 | |
| 890-5777-4 | FS 50 | Total/NA | Solid | 5035 | |
| 890-5777-5 | FS 51 | Total/NA | Solid | 5035 | |
| 890-5777-6 | FS 52 | Total/NA | Solid | 5035 | |
| 890-5777-7 | FS 53 | Total/NA | Solid | 5035 | |
| 890-5777-8 | FS 54 | Total/NA | Solid | 5035 | |
| 890-5777-9 | S - SW 05 | Total/NA | Solid | 5035 | |
| 890-5777-10 | E - SW 10 | Total/NA | Solid | 5035 | |
| 890-5777-11 | FS 55 | Total/NA | Solid | 5035 | |
| MB 880-69096/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-69096/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-69096/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 890-5777-1 MS | E - SW 08 | Total/NA | Solid | 5035 | |
| 890-5777-1 MSD | E - SW 08 | Total/NA | Solid | 5035 | |

### Analysis Batch: 69222

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5777-1 | E - SW 08 | Total/NA | Solid | Total BTEX | |
| 890-5777-2 | E - SW 09 | Total/NA | Solid | Total BTEX | |
| 890-5777-3 | FS 49 | Total/NA | Solid | Total BTEX | |
| 890-5777-4 | FS 50 | Total/NA | Solid | Total BTEX | |
| 890-5777-5 | FS 51 | Total/NA | Solid | Total BTEX | |
| 890-5777-6 | FS 52 | Total/NA | Solid | Total BTEX | |
| 890-5777-7 | FS 53 | Total/NA | Solid | Total BTEX | |
| 890-5777-8 | FS 54 | Total/NA | Solid | Total BTEX | |
| 890-5777-9 | S - SW 05 | Total/NA | Solid | Total BTEX | |
| 890-5777-10 | E - SW 10 | Total/NA | Solid | Total BTEX | |
| 890-5777-11 | FS 55 | Total/NA | Solid | Total BTEX | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## GC Semi VOA

### Analysis Batch: 69042

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5777-1 | E - SW 08 | Total/NA | Solid | 8015B NM | 69097 |
| 890-5777-2 | E - SW 09 | Total/NA | Solid | 8015B NM | 69097 |
| 890-5777-3 | FS 49 | Total/NA | Solid | 8015B NM | 69097 |
| 890-5777-4 | FS 50 | Total/NA | Solid | 8015B NM | 69097 |
| 890-5777-5 | FS 51 | Total/NA | Solid | 8015B NM | 69097 |
| 890-5777-6 | FS 52 | Total/NA | Solid | 8015B NM | 69097 |
| 890-5777-7 | FS 53 | Total/NA | Solid | 8015B NM | 69097 |
| 890-5777-8 | FS 54 | Total/NA | Solid | 8015B NM | 69097 |
| 890-5777-9 | S - SW 05 | Total/NA | Solid | 8015B NM | 69097 |
| 890-5777-10 | E - SW 10 | Total/NA | Solid | 8015B NM | 69097 |
| 890-5777-11 | FS 55 | Total/NA | Solid | 8015B NM | 69097 |
| MB 880-69097/1-A | Method Blank | Total/NA | Solid | 8015B NM | 69097 |
| LCS 880-69097/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 69097 |
| LCSD 880-69097/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 69097 |
| 890-5777-1 MS | E - SW 08 | Total/NA | Solid | 8015B NM | 69097 |
| 890-5777-1 MSD | E - SW 08 | Total/NA | Solid | 8015B NM | 69097 |

### Prep Batch: 69097

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5777-1 | E - SW 08 | Total/NA | Solid | 8015NM Prep | |
| 890-5777-2 | E - SW 09 | Total/NA | Solid | 8015NM Prep | |
| 890-5777-3 | FS 49 | Total/NA | Solid | 8015NM Prep | |
| 890-5777-4 | FS 50 | Total/NA | Solid | 8015NM Prep | |
| 890-5777-5 | FS 51 | Total/NA | Solid | 8015NM Prep | |
| 890-5777-6 | FS 52 | Total/NA | Solid | 8015NM Prep | |
| 890-5777-7 | FS 53 | Total/NA | Solid | 8015NM Prep | |
| 890-5777-8 | FS 54 | Total/NA | Solid | 8015NM Prep | |
| 890-5777-9 | S - SW 05 | Total/NA | Solid | 8015NM Prep | |
| 890-5777-10 | E - SW 10 | Total/NA | Solid | 8015NM Prep | |
| 890-5777-11 | FS 55 | Total/NA | Solid | 8015NM Prep | |
| MB 880-69097/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-69097/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-69097/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 890-5777-1 MS | E - SW 08 | Total/NA | Solid | 8015NM Prep | |
| 890-5777-1 MSD | E - SW 08 | Total/NA | Solid | 8015NM Prep | |

### Analysis Batch: 69192

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5777-1 | E - SW 08 | Total/NA | Solid | 8015 NM | |
| 890-5777-2 | E - SW 09 | Total/NA | Solid | 8015 NM | |
| 890-5777-3 | FS 49 | Total/NA | Solid | 8015 NM | |
| 890-5777-4 | FS 50 | Total/NA | Solid | 8015 NM | |
| 890-5777-5 | FS 51 | Total/NA | Solid | 8015 NM | |
| 890-5777-6 | FS 52 | Total/NA | Solid | 8015 NM | |
| 890-5777-7 | FS 53 | Total/NA | Solid | 8015 NM | |
| 890-5777-8 | FS 54 | Total/NA | Solid | 8015 NM | |
| 890-5777-9 | S - SW 05 | Total/NA | Solid | 8015 NM | |
| 890-5777-10 | E - SW 10 | Total/NA | Solid | 8015 NM | |
| 890-5777-11 | FS 55 | Total/NA | Solid | 8015 NM | |

# QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## HPLC/IC

### Leach Batch: 69085

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5777-1 | E - SW 08 | Soluble | Solid | DI Leach | |
| 890-5777-2 | E - SW 09 | Soluble | Solid | DI Leach | |
| 890-5777-3 | FS 49 | Soluble | Solid | DI Leach | |
| 890-5777-4 | FS 50 | Soluble | Solid | DI Leach | |
| 890-5777-5 | FS 51 | Soluble | Solid | DI Leach | |
| 890-5777-6 | FS 52 | Soluble | Solid | DI Leach | |
| 890-5777-7 | FS 53 | Soluble | Solid | DI Leach | |
| 890-5777-8 | FS 54 | Soluble | Solid | DI Leach | |
| 890-5777-9 | S - SW 05 | Soluble | Solid | DI Leach | |
| 890-5777-10 | E - SW 10 | Soluble | Solid | DI Leach | |
| 890-5777-11 | FS 55 | Soluble | Solid | DI Leach | |
| MB 880-69085/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-69085/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-69085/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-5777-1 MS | E - SW 08 | Soluble | Solid | DI Leach | |
| 890-5777-1 MSD | E - SW 08 | Soluble | Solid | DI Leach | |
| 890-5777-11 MS | FS 55 | Soluble | Solid | DI Leach | |
| 890-5777-11 MSD | FS 55 | Soluble | Solid | DI Leach | |

### Analysis Batch: 69101

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-5777-1 | E - SW 08 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-2 | E - SW 09 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-3 | FS 49 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-4 | FS 50 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-5 | FS 51 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-6 | FS 52 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-7 | FS 53 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-8 | FS 54 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-9 | S - SW 05 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-10 | E - SW 10 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-11 | FS 55 | Soluble | Solid | 300.0 | 69085 |
| MB 880-69085/1-A | Method Blank | Soluble | Solid | 300.0 | 69085 |
| LCS 880-69085/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 69085 |
| LCSD 880-69085/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 69085 |
| 890-5777-1 MS | E - SW 08 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-1 MSD | E - SW 08 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-11 MS | FS 55 | Soluble | Solid | 300.0 | 69085 |
| 890-5777-11 MSD | FS 55 | Soluble | Solid | 300.0 | 69085 |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: E - SW 08

**Lab Sample ID: 890-5777-1**

**Date Collected: 12/12/23 09:38**
**Matrix: Solid**
**Date Received: 12/12/23 14:52**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 69096 | 12/14/23 11:50 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69095 | 12/14/23 15:12 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69222 | 12/14/23 15:12 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69192 | 12/14/23 13:26 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.95 g | 10 mL | 69097 | 12/14/23 12:00 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69042 | 12/14/23 13:26 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 69085 | 12/14/23 10:44 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69101 | 12/14/23 13:15 | CH | EET MID |

## Client Sample ID: E - SW 09

**Lab Sample ID: 890-5777-2**

**Date Collected: 12/12/23 09:40**
**Matrix: Solid**
**Date Received: 12/12/23 14:52**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 69096 | 12/14/23 11:50 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69095 | 12/14/23 15:33 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69222 | 12/14/23 15:33 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69192 | 12/14/23 14:31 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 69097 | 12/14/23 12:00 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69042 | 12/14/23 14:31 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 69085 | 12/14/23 10:44 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69101 | 12/14/23 13:35 | CH | EET MID |

## Client Sample ID: FS 49

**Lab Sample ID: 890-5777-3**

**Date Collected: 12/12/23 09:43**
**Matrix: Solid**
**Date Received: 12/12/23 14:52**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 69096 | 12/14/23 11:50 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69095 | 12/14/23 15:53 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69222 | 12/14/23 15:53 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69192 | 12/14/23 14:53 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.08 g | 10 mL | 69097 | 12/14/23 12:00 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69042 | 12/14/23 14:53 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 69085 | 12/14/23 10:44 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69101 | 12/14/23 13:41 | CH | EET MID |

## Client Sample ID: FS 50

**Lab Sample ID: 890-5777-4**

**Date Collected: 12/12/23 09:46**
**Matrix: Solid**
**Date Received: 12/12/23 14:52**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.98 g | 5 mL | 69096 | 12/14/23 11:50 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69095 | 12/14/23 16:14 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69222 | 12/14/23 16:14 | SM | EET MID |

Eurofins Carlsbad

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: FS 50

**Lab Sample ID: 890-5777-4**
**Matrix: Solid**
**Date Collected: 12/12/23 09:46**
**Date Received: 12/12/23 14:52**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8015 NM | | 1 | | | 69192 | 12/14/23 15:16 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 69097 | 12/14/23 12:00 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69042 | 12/14/23 15:16 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 69085 | 12/14/23 10:45 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69101 | 12/14/23 13:48 | CH | EET MID |

## Client Sample ID: FS 51

**Lab Sample ID: 890-5777-5**
**Matrix: Solid**
**Date Collected: 12/12/23 09:48**
**Date Received: 12/12/23 14:52**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 69096 | 12/14/23 11:50 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69095 | 12/14/23 16:34 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69222 | 12/14/23 16:34 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69192 | 12/14/23 15:38 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.09 g | 10 mL | 69097 | 12/14/23 12:00 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69042 | 12/14/23 15:38 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 69085 | 12/14/23 10:45 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69101 | 12/14/23 13:54 | CH | EET MID |

## Client Sample ID: FS 52

**Lab Sample ID: 890-5777-6**
**Matrix: Solid**
**Date Collected: 12/12/23 09:50**
**Date Received: 12/12/23 14:52**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.05 g | 5 mL | 69096 | 12/14/23 11:50 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69095 | 12/14/23 16:55 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69222 | 12/14/23 16:55 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69192 | 12/14/23 16:00 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.94 g | 10 mL | 69097 | 12/14/23 12:00 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69042 | 12/14/23 16:00 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 69085 | 12/14/23 10:45 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69101 | 12/14/23 14:14 | CH | EET MID |

## Client Sample ID: FS 53

**Lab Sample ID: 890-5777-7**
**Matrix: Solid**
**Date Collected: 12/12/23 09:52**
**Date Received: 12/12/23 14:52**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 69096 | 12/14/23 11:50 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69095 | 12/14/23 17:15 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69222 | 12/14/23 17:15 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69192 | 12/14/23 16:22 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.90 g | 10 mL | 69097 | 12/14/23 12:00 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69042 | 12/14/23 16:22 | SM | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: FS 53
**Date Collected: 12/12/23 09:52**
**Date Received: 12/12/23 14:52**

**Lab Sample ID: 890-5777-7**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 69085 | 12/14/23 10:45 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69101 | 12/14/23 14:21 | CH | EET MID |

## Client Sample ID: FS 54
**Date Collected: 12/12/23 09:53**
**Date Received: 12/12/23 14:52**

**Lab Sample ID: 890-5777-8**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 69096 | 12/14/23 11:50 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69095 | 12/14/23 17:36 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69222 | 12/14/23 17:36 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69192 | 12/14/23 16:44 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 69097 | 12/14/23 12:00 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69042 | 12/14/23 16:44 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 69085 | 12/14/23 10:45 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69101 | 12/14/23 14:27 | CH | EET MID |

## Client Sample ID: S - SW 05
**Date Collected: 12/12/23 10:02**
**Date Received: 12/12/23 14:52**

**Lab Sample ID: 890-5777-9**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.97 g | 5 mL | 69096 | 12/14/23 11:50 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69095 | 12/14/23 17:56 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69222 | 12/14/23 17:56 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69192 | 12/14/23 17:06 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 69097 | 12/14/23 12:00 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69042 | 12/14/23 17:06 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 69085 | 12/14/23 10:45 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69101 | 12/14/23 14:34 | CH | EET MID |

## Client Sample ID: E - SW 10
**Date Collected: 12/12/23 10:03**
**Date Received: 12/12/23 14:52**

**Lab Sample ID: 890-5777-10**
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4.95 g | 5 mL | 69096 | 12/14/23 11:50 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69095 | 12/14/23 18:17 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69222 | 12/14/23 18:17 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69192 | 12/14/23 17:29 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 10.07 g | 10 mL | 69097 | 12/14/23 12:00 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69042 | 12/14/23 17:29 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 69085 | 12/14/23 10:45 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69101 | 12/14/23 14:40 | CH | EET MID |

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Client Sample ID: FS 55

**Date Collected: 12/12/23 10:13**
**Date Received: 12/12/23 14:52**

## Lab Sample ID: 890-5777-11

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 69096 | 12/14/23 11:50 | MNR | EET MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 69095 | 12/14/23 20:07 | MNR | EET MID |
| Total/NA | Analysis | Total BTEX | | 1 | | | 69222 | 12/14/23 20:07 | SM | EET MID |
| Total/NA | Analysis | 8015 NM | | 1 | | | 69192 | 12/14/23 18:12 | SM | EET MID |
| Total/NA | Prep | 8015NM Prep | | | 9.98 g | 10 mL | 69097 | 12/14/23 12:00 | TKC | EET MID |
| Total/NA | Analysis | 8015B NM | | 1 | 1 uL | 1 uL | 69042 | 12/14/23 18:12 | SM | EET MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 69085 | 12/14/23 10:45 | SA | EET MID |
| Soluble | Analysis | 300.0 | | 1 | | | 69101 | 12/14/23 14:47 | CH | EET MID |

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

## Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Texas | NELAP | T104704400-23-26 | 06-30-24 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 8015 NM | | Solid | Total TPH |
| Total BTEX | | Solid | Total BTEX |

# Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (GC) | SW846 | EET MID |
| Total BTEX | Total BTEX Calculation | TAL SOP | EET MID |
| 8015 NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 8015B NM | Diesel Range Organics (DRO) (GC) | SW846 | EET MID |
| 300.0 | Anions, Ion Chromatography | EPA | EET MID |
| 5035 | Closed System Purge and Trap | SW846 | EET MID |
| 8015NM Prep | Microextraction | SW846 | EET MID |
| DI Leach | Deionized Water Leaching Procedure | ASTM | EET MID |

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: CURLY SWD

Job ID: 890-5777-1
SDG: KH237051

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Depth |
|---|---|---|---|---|---|
| 890-5777-1 | E - SW 08 | Solid | 12/12/23 09:38 | 12/12/23 14:52 | 0-2' |
| 890-5777-2 | E - SW 09 | Solid | 12/12/23 09:40 | 12/12/23 14:52 | 0-2' |
| 890-5777-3 | FS 49 | Solid | 12/12/23 09:43 | 12/12/23 14:52 | 2' |
| 890-5777-4 | FS 50 | Solid | 12/12/23 09:46 | 12/12/23 14:52 | 2' |
| 890-5777-5 | FS 51 | Solid | 12/12/23 09:48 | 12/12/23 14:52 | 2' |
| 890-5777-6 | FS 52 | Solid | 12/12/23 09:50 | 12/12/23 14:52 | 2' |
| 890-5777-7 | FS 53 | Solid | 12/12/23 09:52 | 12/12/23 14:52 | 2' |
| 890-5777-8 | FS 54 | Solid | 12/12/23 09:53 | 12/12/23 14:52 | 2' |
| 890-5777-9 | S - SW 05 | Solid | 12/12/23 10:02 | 12/12/23 14:52 | 0-2' |
| 890-5777-10 | E - SW 10 | Solid | 12/12/23 10:03 | 12/12/23 14:52 | 0-2' |
| 890-5777-11 | FS 55 | Solid | 12/12/23 10:13 | 12/12/23 14:52 | 2' |

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

eurofins | Environment Testing Xenco

# Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

890-5777 Chain of Custody

www.xenco.com Page 1 of 2

| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (if different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☒ Rush |
| Project Number: | KH237051 | Due Date: | 48 hr |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes No | Wet Ice: | Yes No |
| Samples Received Intact: | Yes No | Thermometer ID: | TNM007 |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | -0.2 |
| Sample Custody Seals: | Yes No N/A | Temperature Reading: | 0.2 |
| Total Containers: | | Corrected Temperature: | 0 |

**Preservative Codes**

None: NO; DI Water: $H_2O$; Cool: Cool; MeOH: Me; HCL: HC; $HNO_3$: HN; $H_2SO_4$: $H_2$; NaOH: Na; $H_3PO_4$: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| E-SW08 | Soil | 12/12 | 9:38 | 0-2 | C | 1 | X | X | X | |
| E-SW09 | Soil | | 9:40 | 0-2 | C | 1 | X | X | X | |
| FS 49 | Soil | | 9:43 | 2' | C | 1 | X | X | X | |
| FS 50 | Soil | | 9:46 | 2' | C | 1 | X | X | X | |
| FS 51 | Soil | | 9:48 | 2' | C | 1 | X | X | X | |
| FS 52 | Soil | | 9:50 | 2' | C | 1 | X | X | X | |
| FS 53 | Soil | | 9:52 | 2' | C | 1 | X | X | X | |
| FS 54 | Soil | | 9:53 | 2' | C | 1 | X | X | X | |
| S-SW05 | Soil | | 10:02 | 0-2 | C | 1 | X | X | X | |
| E-SW10 | Soil | | 10:03 | 0-2 | C | 1 | X | X | X | |

ANALYSIS REQUEST

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | 1 | 12/12 1452 | 2 | | |
| | | | 4 | | |
| | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

12/15/2023

Released to Imaging: 5/3/2024 11:19:07 AM
Received by OCD: 2/26/2024 10:02:59 AM

# Chain of Custody

eurofins | Environment Testing Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 2 of 2

| | | | |
|---|---|---|---|
| Project Manager: | Joseph Guesnier | Bill to: (If different) | Kathy Purvis |
| Company Name: | Terracon | Company Name: | Spur Energy Partners |
| Address: | 4526 W. Pierce St | Address: | 9655 Katy Fwy Suite 500 |
| City, State ZIP: | Carlsbad NM, 88220 | City, State ZIP: | Houston, TX 77024 |
| Phone: | (806)-300-0140 | Email: | Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com |

**Work Order Comments**

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

| | | | |
|---|---|---|---|
| Project Name: | Curly SWD | Turn Around | ☐ Routine ☒ Rush |
| Project Number: | KH237051 | Due Date: | 48 hrs |
| Project Location: | Lea | TAT starts the day received by the lab, if received by 4:30pm | |
| Sampler's Name: | Gus Sanchez & Becky Sue | | |
| PO #: | | | |

| SAMPLE RECEIPT | | | |
|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | Yes No |
| Samples Received Intact: | (Yes) No | Thermometer ID: | TWM00 |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | 0.2 |
| Sample Custody Seals: | Yes No (N/A) | Temperature Reading: | 0.2 |
| Total Containers: | | Corrected Temperature: | 0 |

**Preservative Codes**

None: NO | DI Water: $H_2O$
Cool: Cool | MeOH: Me
HCL: HC | $HNO_3$: HN
$H_2SO_4$: $H_2$ | NaOH: Na
$H_3PO_4$: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Grab/ Comp | # of Cont | Chloride (EPA 300) | BTEX (8021 B) | TPH (8015) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| FS 55 | Soil | 12/12 | 10:13 | 2' | C | 1 | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |
| | Soil | | | | | | X | X | X | |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag $SiO_2$ Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | 1 | 12/12 1452 | 4 | | |
| | | | 6 | | |

Revised Date: 08/25/2020 Rev. 2020.2

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 890-5777-1
SDG Number: KH237051

**Login Number: 5777**
**List Number: 1**
**Creator: Bruns, Shannon**

**List Source: Eurofins Carlsbad**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | N/A | Refer to Job Narrative for details. |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |

# Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 890-5777-1
SDG Number: KH237051

**Login Number: 5777**
**List Number: 2**
**Creator: Rodriguez, Leticia**

**List Source: Eurofins Midland**
**List Creation: 12/13/23 11:31 AM**

| Question | Answer | Comment |
|---|---|---|
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |

# APPENDIX E – INITIAL C-141 AND FINAL C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

| | |
|---|---|
| Incident ID | nAPP2321152013 |
| District RP | |
| Facility ID | |
| Application ID | |

# Release Notification

## Responsible Party

| | | | |
|---|---|---|---|
| Responsible Party | Spur Energy Partners LLC | OGRID | 328947 |
| Contact Name | Katherine Purvis | Contact Telephone | (575) 441-8619 |
| Contact email | katherine.purvis@spurenergy.com | Incident # *(assigned by OCD)* | nAPP2321152013 |
| Contact mailing address | 9655 Katy Freeway; Houston, TX 77024 | | |

## Location of Release Source

Latitude 32.78833 Longitude -103.74687
*(NAD 83 in decimal degrees to 5 decimal places)*

| | | | |
|---|---|---|---|
| Site Name | CURLY FEDERAL #1 SWD | Site Type | SWD |
| Date Release Discovered | 07/29/2023 | API# *(if applicable)* | 30-025-38442 |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| I | 34 | 17S | 32E | LEA |

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

## Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

| | | |
|---|---|---|
| ☐ Crude Oil | Volume Released (bbls) | Volume Recovered (bbls) |
| ☒ Produced Water | Volume Released (bbls) 3000 BBLS | Volume Recovered (bbls) 2975 BBLS |
| | Is the concentration of dissolved chloride in the produced water >10,000 mg/l? | ☐ Yes ☒ No |
| ☐ Condensate | Volume Released (bbls) | Volume Recovered (bbls) |
| ☐ Natural Gas | Volume Released (Mcf) | Volume Recovered (Mcf) |
| ☐ Other (describe) | Volume/Weight Released (provide units) | Volume/Weight Recovered (provide units) |

Cause of Release

6" FIBERGLASS PARTED UNDERNEATH A 90 ON THE MAIN LINE COMING IN THE FACILITY RELEASING PRODUCED WATER INTO CONTAINMENT, ONTO THE PAD, AND INTO THE PASTURE

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2321152013 |
| District RP | |
| Facility ID | |
| Application ID | |

| | |
|---|---|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br>☒ Yes ☐ No | If YES, for what reason(s) does the responsible party consider this a major release?<br>THE RELEASE IS GREATER THAN 25 BBLS. |

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

YES BY KATHY PURVIS OF SPUR ENERGY TO NMOCD VIA NOR SUBMISSION TO THE PERMITTING PORTAL ON 07/30/2023

## Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

N/A

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Katherine Purvis  Title: EHS Coordinator

Signature: Katherine Purvis  Date: 07/31/2023

email: katherine.purvis@spurenergy.com  Telephone: (575) 441-8619

**OCD Only**

Received by: Shelly Wells  Date: 7/31/2023

**District I**
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
**District II**
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
**District III**
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
**District IV**
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
# 1220 S. St Francis Dr.
# Santa Fe, NM 87505

CONDITIONS

Action 245909

## CONDITIONS

| | |
|---|---|
| Operator:<br>Spur Energy Partners LLC<br>9655 Katy Freeway<br>Houston, TX 77024 | OGRID:<br>328947 |
| | Action Number:<br>245909 |
| | Action Type:<br>[C-141] Release Corrective Action (C-141) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| scwells | None | 7/31/2023 |

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2321152013 |
| District RP | |
| Facility ID | |
| Application ID | |

# Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

| | |
|---|---|
| What is the shallowest depth to groundwater beneath the area affected by the release? | >66 (ft bgs) |
| Did this release impact groundwater or surface water? | ☐ Yes ☑ No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? | ☐ Yes ☑ No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? | ☐ Yes ☑ No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? | ☐ Yes ☑ No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | ☐ Yes ☑ No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? | ☐ Yes ☑ No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? | ☐ Yes ☑ No |
| Are the lateral extents of the release within 300 feet of a wetland? | ☐ Yes ☑ No |
| Are the lateral extents of the release overlying a subsurface mine? | ☐ Yes ☑ No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | ☐ Yes ☑ No |
| Are the lateral extents of the release within a 100-year floodplain? | ☐ Yes ☑ No |
| Did the release impact areas **not** on an exploration, development, production, or storage site? | ☑ Yes ☐ No |

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

**Characterization Report Checklist**: ***Each of the following items must be included in the report.***

- ☑ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☑ Field data
- ☑ Data table of soil contaminant concentration data
- ☑ Depth to water determination
- ☑ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☑ Boring or excavation logs
- ☑ Photographs including date and GIS information
- ☑ Topographic/Aerial maps
- ☑ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2321152013 |
| District RP | |
| Facility ID | |
| Application ID | |

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Katherine Purvis Title: EHS Coordinator

Signature: _____ Date: _____

email: katherine.purvis@spurenergy.com Telephone: (575) 441-8619

**OCD Only**

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2321152013 |
| District RP | |
| Facility ID | |
| Application ID | |

# Remediation Plan

**Remediation Plan Checklist**: ***Each of the following items must be included in the plan.***

- [X] Detailed description of proposed remediation technique
- [X] Scaled sitemap with GPS coordinates showing delineation points
- [X] Estimated volume of material to be remediated
- [X] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [X] Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only**: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- [ ] Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- [ ] Extents of contamination must be fully delineated.
- [ ] Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Katherine Purvis  Title: EHS Coordinator

Signature: _____  Date: _____

email: katherine.purvis@spurenergy.com  Telephone: (575) 441-8619

**OCD Only**

Received by: _____  Date: _____

- [ ] Approved
- [ ] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: _____  Date: _____

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2321152013 |
| District RP | |
| Facility ID | |
| Application ID | |

# Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist**: ***Each of the following items must be included in the closure report.***

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☑ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Katherine Purvis Title: EHS Coordinator

Signature: _____ Date: _____

email: katherine.purvis@spurenergy.com Telephone: (575) 441-8619

**OCD Only**

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

# APPENDIX F – TERRACON STANDARD OF CARE, LIMITATION, AND RELIANCE

## Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These services were performed in accordance with the scope of work agreed with you, Durango Midstream LLC, as reflected in our proposal (PKH227021).

## Additional Scope Limitations

The development of this Amended RAP is based upon information provided by the Client and Terracon's remediation and construction services line. Such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable, or not present during these services. We cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those by information provided by the Client. The data, interpretations, findings, and recommendations are based solely upon reformation executed within the scope of these services.

## Reliance

This report has been prepared for the exclusive use of Durango Midstream LLC, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Durango Midstream LLC and Terracon. Any unauthorized distribution or reuse is at Durango Midstream LLC sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal and Durango Midstream LLC and Terracon's Master Services Agreement. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to Durango Midstream LLC and all relying parties unless otherwise agreed in writing.

**District I**
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
**District II**
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
**District III**
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
**District IV**
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
# 1220 S. St Francis Dr.
# Santa Fe, NM 87505

QUESTIONS

Action 317388

## QUESTIONS

| | |
|---|---|
| Operator:<br>Spur Energy Partners LLC<br>9655 Katy Freeway<br>Houston, TX 77024 | OGRID:<br>328947 |
| | Action Number:<br>317388 |
| | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

| **Prerequisites** | |
|---|---|
| Incident ID (n#) | **nAPP2321152013** |
| Incident Name | **NAPP2321152013 CURLY FEDERAL #2 SWD @ 30-025-38442** |
| Incident Type | **Produced Water Release** |
| Incident Status | **Remediation Closure Report Received** |
| Incident Well | **[30-025-38442] CURLY FEDERAL #002** |

| **Location of Release Source** | |
|---|---|
| *Please answer all the questions in this group.* | |
| Site Name | CURLY FEDERAL #2 SWD |
| Date Release Discovered | 07/29/2023 |
| Surface Owner | Federal |

| **Incident Details** | |
|---|---|
| *Please answer all the questions in this group.* | |
| Incident Type | Produced Water Release |
| Did this release result in a fire or is the result of a fire | No |
| Did this release result in any injuries | No |
| Has this release reached or does it have a reasonable probability of reaching a watercourse | No |
| Has this release endangered or does it have a reasonable probability of endangering public health | No |
| Has this release substantially damaged or will it substantially damage property or the environment | No |
| Is this release of a volume that is or may with reasonable probability be detrimental to fresh water | No |

| **Nature and Volume of Release** | |
|---|---|
| *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.* | |
| Crude Oil Released (bbls) Details | *Not answered.* |
| Produced Water Released (bbls) Details | Cause: Equipment Failure \| Pipeline (Any) \| Produced Water \| Released: 3,000 BBL \| Recovered: 2,975 BBL \| Lost: 25 BBL. |
| Is the concentration of chloride in the produced water >10,000 mg/l | No |
| Condensate Released (bbls) Details | *Not answered.* |
| Natural Gas Vented (Mcf) Details | *Not answered.* |
| Natural Gas Flared (Mcf) Details | *Not answered.* |
| Other Released Details | *Not answered.* |
| Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts) | 6" fiberglass parted underneath a 90 on the main line coming into the facility releasing produced water into containment, onto the pad, and into the pasture |

**District I**
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Phone:(575) 393-6161 Fax:(575) 393-0720
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**District IV**
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
# 1220 S. St Francis Dr.
# Santa Fe, NM 87505



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>Spur Energy Partners LLC<br>9655 Katy Freeway<br>Houston, TX 77024 | OGRID:<br>328947 |
| | Action Number:<br>317388 |
| | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

| **Nature and Volume of Release (continued)** | |
|---|---|
| Is this a gas only submission (i.e. only significant Mcf values reported) | **No, according to supplied volumes this does not appear to be a "gas only" report.** |
| Was this a major release as defined by Subsection A of 19.15.29.7 NMAC | **Yes** |
| Reasons why this would be considered a submission for a notification of a major release | **From paragraph A. "Major release" determine using:**<br>**(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.** |
| *With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.* | |

| **Initial Response** | |
|---|---|
| *The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.* | |
| The source of the release has been stopped | True |
| The impacted area has been secured to protect human health and the environment | True |
| Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices | True |
| All free liquids and recoverable materials have been removed and managed appropriately | True |
| If all the actions described above have not been undertaken, explain why | n/a |
| *Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.* | |

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | |
|---|---|
| I hereby agree and sign off to the above statement | Name: Katherine Purvis<br>Title: EHS Coordinator<br>Email: katherine.purvis@spurenergy.com<br>Date: 02/26/2024 |

**District I**
1625 N. French Dr., Hobbs, NM 88240
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# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
# 1220 S. St Francis Dr.
# Santa Fe, NM 87505



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>Spur Energy Partners LLC<br>9655 Katy Freeway<br>Houston, TX 77024 | OGRID:<br>328947 |
| | Action Number:<br>317388 |
| | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

| **Site Characterization** | |
|---|---|
| *Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | |
| What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs) | Between 51 and 75 (ft.) |
| What method was used to determine the depth to ground water | NM OSE iWaters Database Search |
| Did this release impact groundwater or surface water | No |
| **What is the minimum distance, between the closest lateral extents of the release and the following surface areas:** | |
| A continuously flowing watercourse or any other significant watercourse | Between 1 and 5 (mi.) |
| Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) | Between 1 and 5 (mi.) |
| An occupied permanent residence, school, hospital, institution, or church | Between 1 and 5 (mi.) |
| A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes | Between 1 and 5 (mi.) |
| Any other fresh water well or spring | Between 1 and 5 (mi.) |
| Incorporated municipal boundaries or a defined municipal fresh water well field | Between 1 and 5 (mi.) |
| A wetland | Between 1 and 5 (mi.) |
| A subsurface mine | Between 1 and 5 (mi.) |
| An (non-karst) unstable area | Between 1 and 5 (mi.) |
| Categorize the risk of this well / site being in a karst geology | Low |
| A 100-year floodplain | Between 1 and 5 (mi.) |
| Did the release impact areas not on an exploration, development, production, or storage site | Yes |

| **Remediation Plan** | |
|---|---|
| *Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | |
| Requesting a remediation plan approval with this submission | Yes |
| *Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.* | |
| Have the lateral and vertical extents of contamination been fully delineated | Yes |
| Was this release entirely contained within a lined containment area | No |
| **Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.) | |
| Chloride (EPA 300.0 or SM4500 Cl B) | 1310 |
| TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M) | 63.8 |
| GRO+DRO (EPA SW-846 Method 8015M) | 63.8 |
| BTEX (EPA SW-846 Method 8021B or 8260B) | 0 |
| Benzene (EPA SW-846 Method 8021B or 8260B) | 0 |
| | |
| *Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.* | |
| On what estimated date will the remediation commence | 12/04/2023 |
| On what date will (or did) the final sampling or liner inspection occur | 12/04/2023 |
| On what date will (or was) the remediation complete(d) | 12/18/2023 |
| What is the estimated surface area (in square feet) that will be reclaimed | 14000 |
| What is the estimated volume (in cubic yards) that will be reclaimed | 1500 |
| What is the estimated surface area (in square feet) that will be remediated | 14000 |
| What is the estimated volume (in cubic yards) that will be remediated | 1500 |
| *These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.* | |
| *The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.* | |

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# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
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# Santa Fe, NM 87505



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>Spur Energy Partners LLC<br>9655 Katy Freeway<br>Houston, TX 77024 | OGRID:<br>328947 |
| | Action Number:<br>317388 |
| | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**QUESTIONS**

| | |
|---|---|
| **Remediation Plan (continued)** | |
| *Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | |
| **This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:** | |
| *(Select all answers below that apply.)* | |
| (Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.) | Yes |
| Which OCD approved facility will be used for **off-site** disposal | LEA LAND LANDFILL [fEEM0112342028] |
| **OR** which OCD approved well (API) will be used for **off-site** disposal | *Not answered.* |
| **OR** is the **off-site** disposal site, to be used, out-of-state | *Not answered.* |
| **OR** is the **off-site** disposal site, to be used, an NMED facility | *Not answered.* |
| (Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms) | *Not answered.* |
| (In Situ) Soil Vapor Extraction | *Not answered.* |
| (In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.) | *Not answered.* |
| (In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.) | *Not answered.* |
| (In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.) | *Not answered.* |
| Ground Water Abatement pursuant to 19.15.30 NMAC | *Not answered.* |
| OTHER (Non-listed remedial process) | *Not answered.* |
| *Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.* | |
| | |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. | |
| I hereby agree and sign off to the above statement | Name: Katherine Purvis<br>Title: EHS Coordinator<br>Email: katherine.purvis@spurenergy.com<br>Date: 02/26/2024 |
| *The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.* | |

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## QUESTIONS (continued)

| | |
|---|---|
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**QUESTIONS**

| **Deferral Requests Only** | |
|---|---|
| *Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.* | |
| Requesting a deferral of the remediation closure due date with the approval of this submission | No |

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## QUESTIONS (continued)

| | |
|---|---|
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**QUESTIONS**

| **Sampling Event Information** | |
|---|---|
| Last sampling notification (C-141N) recorded | **295480** |
| Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC | **12/18/2023** |
| What was the (estimated) number of samples that were to be gathered | **110** |
| What was the sampling surface area in square feet | **12200** |

| **Remediation Closure Request** | |
|---|---|
| *Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.* | |
| Requesting a remediation closure approval with this submission | Yes |
| Have the lateral and vertical extents of contamination been fully delineated | **Yes** |
| Was this release entirely contained within a lined containment area | **No** |
| All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion | Yes |
| What was the total surface area (in square feet) remediated | 14000 |
| What was the total volume (cubic yards) remediated | 1500 |
| All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene | Yes |
| What was the total surface area (in square feet) reclaimed | 14000 |
| What was the total volume (in cubic yards) reclaimed | 1500 |
| Summarize any additional remediation activities not included by answers (above) | n/a |

*The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

| | |
|---|---|
| I hereby agree and sign off to the above statement | Name: Katherine Purvis<br>Title: EHS Coordinator<br>Email: katherine.purvis@spurenergy.com<br>Date: 02/26/2024 |

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## QUESTIONS (continued)

| | |
|---|---|
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**QUESTIONS**

| **Reclamation Report** | |
|---|---|
| *Only answer the questions in this group if all reclamation steps have been completed.* | |
| Requesting a reclamation approval with this submission | No |

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CONDITIONS

Action 317388

## CONDITIONS

| Operator: | OGRID: |
|---|---|
| Spur Energy Partners LLC<br>9655 Katy Freeway<br>Houston, TX 77024 | 328947 |
| | Action Number:<br>317388 |
| | Action Type:<br>[C-141] Remediation Closure Request C-141 (C-141-v-Closure) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| scott.rodgers | This Remediation Closure Report is approved. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. A report for reclamation and revegetation will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete". | 5/3/2024 |
| scott.rodgers | The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan. | 5/3/2024 |