CONCHO

April 22, 2021

Oil Conservation Division, District I
1625 N. French Dr.
Hobbs, NM 88240

Bureau of Land Management, CFO
620 E. Green St.
Carlsbad, NM 88220

**Re: Closure Request Report**
**King Tut Federal 001H (1.22.21)**
**Tracking # NAPP2103630209**
**GPS: 32.19428, -103.71959**
**Unit Letter D Section 30, Township 24 South, Range 32 East**
**Lea County, New Mexico**

To Whom it May Concern,

COG Operating, LLC (COG) is pleased to submit the following closure report in response to a release that occurred at the King Tut Federal 001H located in Unit Letter D Section 30, Township 24 South, Range 32 East in Lea County, New Mexico. The spill site coordinates are 32.19428, -103.71959.

**BACKGROUND**
The release was discovered on January 22, 2021 and a C-141 initial report was submitted and approved by the New Mexico Oil Conservation Division (NMOCD). The release was caused by a flow line rupture in the pasture. Approximately nineteen (19) barrels of produced water was released and no barrels of fluid were recovered. The initial C-141 is shown in Appendix A.

**GROUNDWATER AND REGULATORY**
According to the New Mexico Office of State Engineer (NMOSE) and the United States Geological Survey (USGS) website no water wells were found within one (1) mile of the release area.

A borehole was drilled within a ½ mile of the release to a depth of fifty-five (55) feet below surface and open for 72 hrs. After 72 hours, the borehole was gauged for presence of groundwater and no water was present. (Drilling log and map of location in Appendix B).

A risk-based evaluation and site determination was performed in accordance to the New Mexico Oil Conservation Division (NMOCD) Rule (Title 19 Chapter 15 Part 29) for releases on oil and gas development and production facilities in New Mexico (effective August 14, 2018). According to the site character evaluation, the release area is located in low karst. No other receptors (water wells, playas, water course, lake beds or ordinance boundaries) were located within each specific boundaries or distance from the site.

The groundwater data and the site characterization evaluation data is summarized in Appendix B. The delineation and closure criteria are listed below:

**General Site Characterization and Groundwater:**

| Site Characterization | Average Groundwater Depth (ft.) |
|---|---|
| Low Karst | 50-100 ft |

**Delineation and Closure Criteria:**

| Remedial Action Levels (RALs) | |
|---|---|
| Chlorides | 10,000 mg/kg |
| TPH (GRO and DRO and MRO) | 2,500mg/kg |
| Benzene | 10 mg/kg |
| Total BTEX | 50 mg/kg |

**INITIAL ASSESMENT**

- The remediation was done at risk. Excavation was guided by field screens.

**REMEDIAL ACTIONS**

- The impacted area was excavated to a depth of four (4) ft BGS.
- Table 1 shows the sample depths and analytical results.
- All the excavated material was hauled to an NMOCD approved solid waste disposal facility.
- Confirmation soil samples were taken from bottom and sidewalls of the excavation per NMAC 19.15.29.
- The site was backfilled with clean "like" material.
- The analytical data shown in Table 1 show that the release area meets NMOCD closure criteria (NMAC 19.15.29.12(E) Table I) and NMAC 19.15.29.13(D)(1).

## SAMPLING AND BACKFILLING

Once excavated, soil samples were collected from the sidewalls to confirm the removal of impacted soil greater than 600 mg/kg of chlorides. Composite bottom and sidewall samples were collected every 200 square feet, to be representative of the release area. The confirmation samples (CS-1 thru CS-14) and sidewall samples (SW-1 thru SW-7) results meet NMOCD closure criteria.

Once completed, the excavated area was backfilled with non-contaminated material with concentrations below 600 mg/kg of chlorides.

**REQUEST FOR CLOSURE**

COG Operating, LLC respectfully requests that the New Mexico Oil Conservation Division and the Bureau of Land Management grant closure approval for the King Tut Federal 001H release that occurred on January 22, 20201 (Tracking # NAPP2103630209). The Final C-141 is included in Appendix B.

Should you have any questions or concerns on the closure report, please do not hesitate to contact me.

Sincerely,

Jacqui Harris

Jacqui Harris
Environmental Coordinator
Jacqui.Harris@conocophillips.com

# Maps

# COG Operating LLC

King Tut Federal 001H (1.22.21)
Lea County, NM
NMOCD Tracking #NAPP2103630209

Site and Sample Map

# Table of Analytical Data

# Table 1
## COG Operating LLC.
## King Tut Federal 001H (1.22.21)
## Lea County, New Mexico

| Sample ID | Depth (ft) | Sample Date | Soil Status | | TPH (mg/kg) | | | | | | | Benzene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | In-Situ | Removed | GRO | DRO | MRO | *Total* | GRO | DRO | *Total* | | | |
| **Average Depth to Groundwater (ft) - 51'-100'** | | | | | **Low Karst** | | | | | | | | | |
| ***NMOCD RAL Limits (mg/kg)*** | | | | | **-** | **-** | **-** | ***1,000*** | **-** | **-** | ***1,000*** | ***10*** | ***50*** | ***10,000*** |
| **CS-1** | 4 | 3.17.21 | X | | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <0.00198 | <0.00198 | 2330 |
| **CS-2** | 4 | 3.17.21 | X | | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <0.00200 | <0.00200 | 3370 |
| **CS-3** | 4 | 3.17.21 | X | | 54.3 | <50.0 | <50.0 | 54.3 | 54.3 | <50.0 | 54.3 | <0.00198 | <0.00198 | 3640 |
| **CS-4** | 4 | 3.17.21 | X | | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <0.00199 | <0.00199 | 2980 |
| **CS-5** | 4 | 3.17.21 | X | | 67.8 | <49.9 | <49.9 | 67.8 | 67.8 | <49.9 | 67.8 | <0.00199 | <0.00199 | 2850 |
| **CS-6** | 4 | 3.17.21 | X | | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | 0.00262 | 0.00501 | 2590 |
| **CS-7** | 4 | 3.17.21 | X | | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <0.00199 | <0.00199 | 82.3 |
| **CS-8** | 4 | 3.17.21 | X | | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <0.00202 | <0.00202 | 45.7 |
| **CS-9** | 4 | 3.17.21 | X | | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <0.00200 | <0.00200 | 48.2 |
| **CS-10** | 4 | 3.17.21 | X | | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | <0.00200 | <0.00200 | 12.8 |
| **CS-11** | 4 | 3.17.21 | X | | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <0.00200 | <0.00200 | 51.4 |
| **CS-12** | 4 | 3.17.21 | X | | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <0.00198 | <0.00198 | 159 |
| **CS-13** | 4 | 3.17.21 | X | | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <0.00198 | <0.00198 | 294 |
| **CS-14** | 4 | 3.17.21 | X | | 164 | <50.0 | <50.0 | 164 | 164 | <50.0 | 164 | <0.00202 | <0.00202 | 77.6 |
| **SW-1** | 0-4 | 3.17.21 | X | | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | <0.00201 | <0.00201 | 396 |
| **SW-2** | 0-4 | 3.17.21 | X | | <50.1 | <50.1 | <50.1 | <50.1 | <50.1 | <50.1 | <50.1 | <0.00201 | <0.00201 | 330 |
| **SW-3** | 0-4 | 3.17.21 | X | | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | <0.00199 | <0.00199 | 197 |
| **SW-4** | 0-4 | 3.17.21 | X | | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <0.00200 | <0.00200 | 177 |
| **SW-5** | 0-4 | 3.17.21 | X | | <49.7 | <49.7 | <49.7 | <49.7 | <49.7 | <49.7 | <49.7 | <0.00199 | <0.00199 | 244 |
| **SW-6** | 0-4 | 3.17.21 | X | | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | <0.00198 | <0.00198 | 391 |
| **SW-7** | 0-4 | 3.17.21 | X | | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | <0.00199 | 0.147 | 272 |

# Photos


King Tut Federal 4' Excavated Area


King Tut Federal  001H Backfilled and completed.

# Appendix A

# 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 | |
| District RP | |
| Facility ID | |
| Application ID | |

# Release Notification

## Responsible Party

| | |
|---|---|
| Responsible Party | OGRID |
| Contact Name | Contact Telephone |
| Contact email | Incident # *(assigned by OCD)* |
| Contact mailing address | |

## Location of Release Source

Latitude _____ Longitude _____
*(NAD 83 in decimal degrees to 5 decimal places)*

| | |
|---|---|
| Site Name | Site Type |
| Date Release Discovered | API# *(if applicable)* |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| | | | | |

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) | Volume Recovered (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 | | |

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

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

| | |
|---|---|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br><br>☐ Yes ☐ No | If YES, for what reason(s) does the responsible party consider this a major release? |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? | |

## 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:

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 _____ Title: _____

Signature: __ _____ Date: _____

email: _____ Telephone: _____

**OCD Only**

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | |
| 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? | _____ (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 | |
| 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: _____ Title: _____

Signature: Jacqui Harris _____ Date: _____

email: _____ Telephone: _____

**OCD Only**

Received by: _____ Date: _____

| | |
|---|---|
| Incident ID | |
| 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: _____ Title: _____

Signature: Jacqui Harris _____ Date: _____

email: _____ Telephone: _____

**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 B

# Site Assessment Data

CONCHO

# King Tut Fed 1-Karst Map

# National Flood Hazard Layer FIRMette

FEMA

103°43'29"W 32°11'55"N


103°42'52"W 32°11'25"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

**SPECIAL FLOOD HAZARD AREAS**
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

**OTHER AREAS**
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

**GENERAL STRUCTURES**
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

**OTHER FEATURES**
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

**MAP PANELS**
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

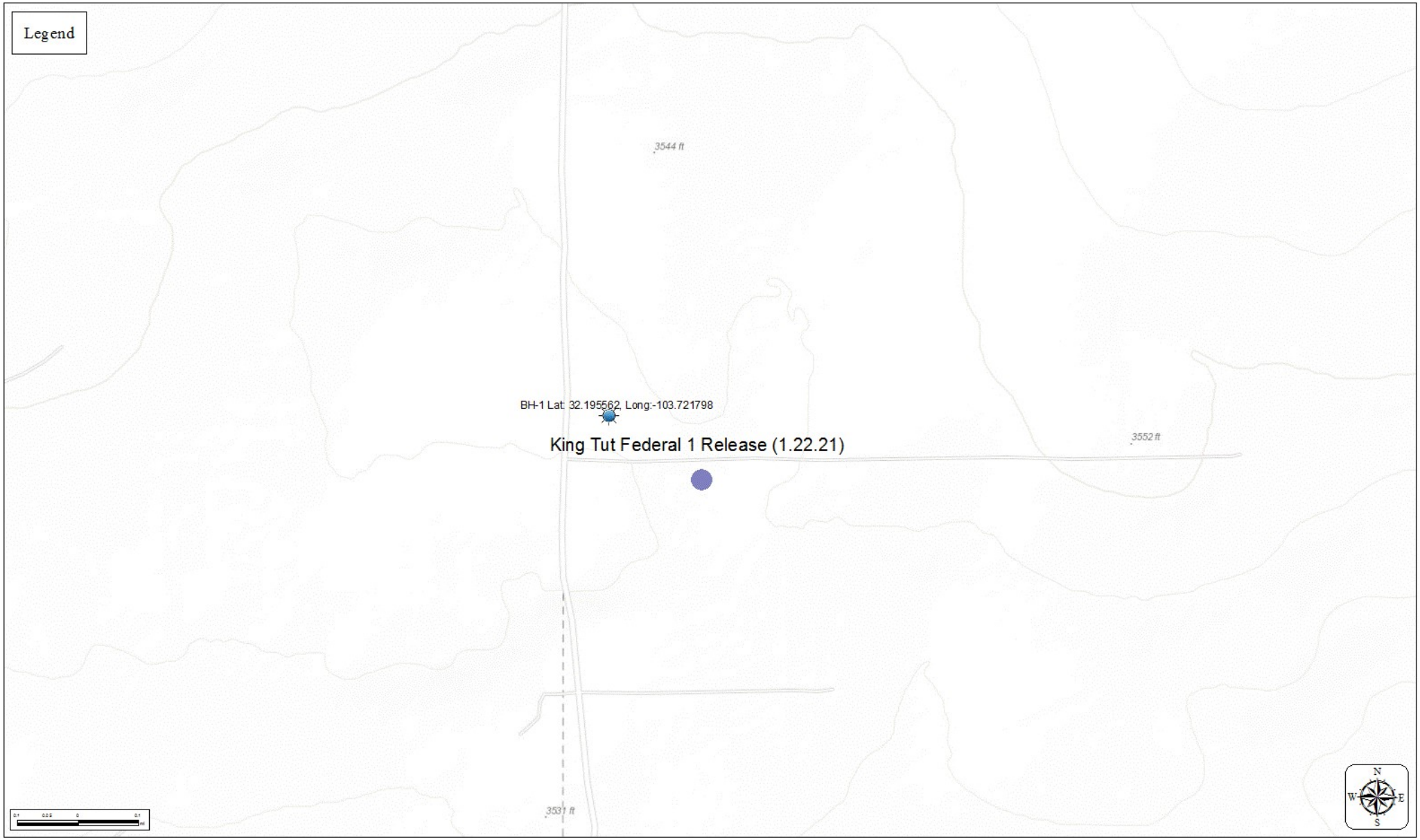
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/29/2021 at 3:57 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

CONCHO

King Tut Fed 1-DTGW



**SCARBOROUGH DRILLING, INC.**
*TEST HOLES • WATER WELLS*
P.O. Box 305 - Ph. 806-872-3285 or 872-9349
LAMESA, TEXAS 79331
2001 South Hwy. 87

*WELL LOG*

| From | To | FORMATION |
|---|---|---|
| 0 | 1 | Caliche Pad |
| 1 | 10 | Brown Loose Sand |
| 10 | 28 | Brown Sand w/ caliche |
| 28 | 43 | Dense Caliche |
| 43 | 55 | Red Shale |
| | | |
| | | BH-1 |
| | | COG - King Tut |
| | | Federal #1H |
| | | Plugged w/ Hole Plug |
| | | |
| | | 32.195562 -103.721798 |

Date 8-4-20 Driller Lee Scarbrough

GIBBS PRINTING CO.-LAMESA, TX

# Appendix C

# Analytical Reports

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-402-1
Laboratory Sample Delivery Group: Eddy NM
Client Project/Site: King Tut Fed 1H

For:
ConocoPhillips Co.
1401 Commerce Drive
Carlsbad, New Mexico 882200

Attn: Jacqui Harris

JKRAMER

*Authorized for release by:*
*3/31/2021 11:51:54 AM*

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Laboratory Job ID: 890-402-1
SDG: Eddy NM

# Table of Contents

Cover Page . . . . . 1
Table of Contents . . . . . 2
Definitions/Glossary . . . . . 3
Case Narrative . . . . . 4
Client Sample Results . . . . . 5
Surrogate Summary . . . . . 19
QC Sample Results . . . . . 21
QC Association Summary . . . . . 28
Lab Chronicle . . . . . 33
Certification Summary . . . . . 39
Method Summary . . . . . 40
Sample Summary . . . . . 41
Chain of Custody . . . . . 42
Receipt Checklists . . . . . 47

# Definitions/Glossary

Client: ConocoPhillips Co. Job ID: 890-402-1
Project/Site: King Tut Fed 1H SDG: Eddy NM

## Qualifiers

### GC VOA

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

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| *+ | LCS and/or LCSD is outside acceptance limits, high biased. |
| *1 | LCS/LCSD RPD exceeds control limits. |
| 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. |

### 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: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Job ID: 890-402-1

### Laboratory: Eurofins Xenco, Carlsbad

**Narrative**

**Job Narrative**
**890-402-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 3/19/2021 11:28 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 was 2.0º C.

**Receipt Exceptions**

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: CS-1 (890-402-1), CS-2 (890-402-2), CS-3 (890-402-3), CS-4 (890-402-4), CS-5 (890-402-5), CS-6 (890-402-6), CS-7 (890-402-7), CS-8 (890-402-8), CS-9 (890-402-9), CS-10 (890-402-10), CS-11 (890-402-11), CS-12 (890-402-12), CS-13 (890-402-13), CS-14 (890-402-14), SW-1 (890-402-15), SW-2 (890-402-16), SW-3 (890-402-17), SW-4 (890-402-18), SW-5 (890-402-19), SW-6 (890-402-20) and SW-7 (890-402-21).

**GC VOA**
Method 8021B: Surrogate recovery for the following samples were outside control limits: CS-7 (890-402-7), CS-9 (890-402-9), CS-14 (890-402-14) and SW-6 (890-402-20). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

**GC Semi VOA**
Method 8015B NM: The laboratory control sample (LCS) associated with preparation batch 880-908 and analytical batch 880-946 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015B NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-907 and analytical batch 880-939 recovered outside control limits for the following analytes: <AffectedAnalytes>.

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-1

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-1

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:06 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:06 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:06 | 1 |
| Total BTEX | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:06 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:06 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:06 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *84* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 21:06* | *1* |
| *1,4-Difluorobenzene (Surr)* | *102* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 21:06* | *1* |

### Method: 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 *1 F1 | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 12:27 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U F1 | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 12:27 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 12:27 | 1 |
| Total TPH | <49.9 | U F1 | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 12:27 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *18* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 12:27* | *1* |
| *o-Terphenyl* | *15* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 12:27* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **2330** | | 25.1 | | mg/Kg | | | 03/24/21 11:09 | 5 |

## Client Sample ID: CS-2

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-2

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:26 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:26 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:26 | 1 |
| Total BTEX | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:26 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:26 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:26 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 21:26* | *1* |
| *1,4-Difluorobenzene (Surr)* | *109* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 21:26* | *1* |

### Method: 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 *1 | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 13:31 | 1 |

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-2

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

**Lab Sample ID: 890-402-2**
**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 13:31 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 13:31 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 13:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *5* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 13:31* | *1* |
| *o-Terphenyl* | *0.08* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 13:31* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **3370** | | 24.9 | | mg/Kg | | | 03/24/21 11:14 | 5 |

## Client Sample ID: CS-3

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

**Lab Sample ID: 890-402-3**
**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:47 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:47 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:47 | 1 |
| Total BTEX | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:47 | 1 |
| Xylenes, Total | <0.00397 | U | 0.00397 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:47 | 1 |
| m-Xylene & p-Xylene | <0.00397 | U | 0.00397 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:47 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 21:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *95* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 21:47* | *1* |
| *1,4-Difluorobenzene (Surr)* | *106* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 21:47* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Organics (GRO)-C6-C10** | **54.3** | ***1** | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 13:53 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 13:53 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 13:53 | 1 |
| **Total TPH** | **54.3** | | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 13:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *14* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 13:53* | *1* |
| *o-Terphenyl* | *7* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 13:53* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **3640** | | 24.8 | | mg/Kg | | | 03/24/21 11:19 | 5 |

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-4

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-4

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:08 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:08 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:08 | 1 |
| Total BTEX | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:08 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:08 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:08 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 22:08* | *1* |
| *1,4-Difluorobenzene (Surr)* | *111* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 22:08* | *1* |

### Method: 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 *1 | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 14:15 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 14:15 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 14:15 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 14:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *3* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 14:15* | *1* |
| *o-Terphenyl* | *0.08* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 14:15* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **2980** | | 25.3 | | mg/Kg | | | 03/24/21 11:34 | 5 |

## Client Sample ID: CS-5

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-5

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:28 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:28 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:28 | 1 |
| Total BTEX | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:28 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:28 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:28 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *95* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 22:28* | *1* |
| *1,4-Difluorobenzene (Surr)* | *97* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 22:28* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Organics (GRO)-C6-C10** | **67.8** | ***1** | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 14:36 | 1 |

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-5

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-5

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 14:36 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 14:36 | 1 |
| **Total TPH** | **67.8** | | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 14:36 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *22* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 14:36* | *1* |
| *o-Terphenyl* | *14* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 14:36* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **2850** | | 24.9 | | mg/Kg | | | 03/24/21 11:39 | 5 |

## Client Sample ID: CS-6

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-6

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Benzene** | **0.00262** | | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:49 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:49 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:49 | 1 |
| **Total BTEX** | **0.00501** | | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:49 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:49 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:49 | 1 |
| **o-Xylene** | **0.00239** | | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 22:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 22:49* | *1* |
| *1,4-Difluorobenzene (Surr)* | *107* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 22:49* | *1* |

### Method: 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 *1 | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 14:57 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 14:57 | 1 |
| OII Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 14:57 | 1 |
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 14:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *37* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 14:57* | *1* |
| *o-Terphenyl* | *34* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 14:57* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **2590** | | 24.9 | | mg/Kg | | | 03/24/21 11:44 | 5 |

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-7

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-7

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:10 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:10 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:10 | 1 |
| Total BTEX | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:10 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:10 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:10 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *128* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 23:10* | *1* |
| *1,4-Difluorobenzene (Surr)* | *95* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 23:10* | *1* |

### Method: 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 *1 | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 15:19 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 15:19 | 1 |
| OII Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 15:19 | 1 |
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 15:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *20* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 15:19* | *1* |
| *o-Terphenyl* | *16* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 15:19* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **82.3** | | 4.95 | | mg/Kg | | | 03/24/21 11:49 | 1 |

## Client Sample ID: CS-8

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-8

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00202 | U | 0.00202 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:31 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:31 | 1 |
| Toluene | <0.00202 | U | 0.00202 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:31 | 1 |
| Total BTEX | <0.00202 | U | 0.00202 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:31 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:31 | 1 |
| m-Xylene & p-Xylene | <0.00403 | U | 0.00403 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:31 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *103* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 23:31* | *1* |
| *1,4-Difluorobenzene (Surr)* | *108* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 23:31* | *1* |

### Method: 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 *1 | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 15:40 | 1 |

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-8

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-8

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 15:40 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 15:40 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 15:40 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *82* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 15:40* | *1* |
| *o-Terphenyl* | *79* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 15:40* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **45.7** | | 5.00 | | mg/Kg | | | 03/24/21 11:54 | 1 |

## Client Sample ID: CS-9

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-9

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:51 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:51 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:51 | 1 |
| Total BTEX | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:51 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:51 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:51 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 23:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *108* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 23:51* | *1* |
| *1,4-Difluorobenzene (Surr)* | *100* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 23:51* | *1* |

### Method: 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 *1 | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 16:01 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 16:01 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 16:01 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 16:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *85* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 16:01* | *1* |
| *o-Terphenyl* | *83* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 16:01* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **48.2** | | 4.96 | | mg/Kg | | | 03/24/21 11:59 | 1 |

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-10

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-10

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 00:12 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 00:12 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 00:12 | 1 |
| Total BTEX | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 00:12 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 00:12 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 00:12 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 00:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 00:12* | *1* |
| *1,4-Difluorobenzene (Surr)* | *105* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 00:12* | *1* |

### Method: 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 *1 | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 16:22 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 16:22 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 16:22 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 16:22 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *91* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 16:22* | *1* |
| *o-Terphenyl* | *90* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 16:22* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **12.8** | | 5.04 | | mg/Kg | | | 03/24/21 12:14 | 1 |

## Client Sample ID: CS-11

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-11

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:36 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:36 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:36 | 1 |
| Total BTEX | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:36 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:36 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:36 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:36 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *94* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 01:36* | *1* |
| *1,4-Difluorobenzene (Surr)* | *103* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 01:36* | *1* |

### Method: 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 *1 | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 17:04 | 1 |

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-11

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-11

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 17:04 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 17:04 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 17:04 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *93* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 17:04* | *1* |
| *o-Terphenyl* | *91* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 17:04* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **51.4** | | 5.03 | | mg/Kg | | | 03/24/21 12:19 | 1 |

## Client Sample ID: CS-12

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-12

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:57 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:57 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:57 | 1 |
| Total BTEX | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:57 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:57 | 1 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.00396 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:57 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 01:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 01:57* | *1* |
| *1,4-Difluorobenzene (Surr)* | *111* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 01:57* | *1* |

### Method: 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 *1 | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 17:25 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 17:25 | 1 |
| OII Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 17:25 | 1 |
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 17:25 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *97* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 17:25* | *1* |
| *o-Terphenyl* | *95* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 17:25* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **159** | | 5.05 | | mg/Kg | | | 03/24/21 12:34 | 1 |

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-13
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-13
**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:18 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:18 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:18 | 1 |
| Total BTEX | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:18 | 1 |
| Xylenes, Total | <0.00397 | U | 0.00397 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:18 | 1 |
| m-Xylene & p-Xylene | <0.00397 | U | 0.00397 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:18 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *95* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 02:18* | *1* |
| *1,4-Difluorobenzene (Surr)* | *110* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 02:18* | *1* |

### Method: 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 *1 | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 17:46 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 17:46 | 1 |
| OII Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 17:46 | 1 |
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 17:46 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *103* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 17:46* | *1* |
| *o-Terphenyl* | *100* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 17:46* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **294** | | 5.05 | | mg/Kg | | | 03/24/21 12:39 | 1 |

## Client Sample ID: CS-14
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-14
**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00202 | U | 0.00202 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:38 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:38 | 1 |
| Toluene | <0.00202 | U | 0.00202 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:38 | 1 |
| Total BTEX | <0.00202 | U | 0.00202 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:38 | 1 |
| Xylenes, Total | <0.00404 | U | 0.00404 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:38 | 1 |
| m-Xylene & p-Xylene | <0.00404 | U | 0.00404 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:38 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *102* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 02:38* | *1* |
| *1,4-Difluorobenzene (Surr)* | *95* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 02:38* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Gasoline Range Organics (GRO)-C6-C10** | **164** | ***1** | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 18:07 | 1 |

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-14

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-14

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 18:07 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 18:07 | 1 |
| **Total TPH** | **164** | | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 18:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *79* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 18:07* | *1* |
| *o-Terphenyl* | *81* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 18:07* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **77.6** | | 5.00 | | mg/Kg | | | 03/24/21 12:44 | 1 |

## Client Sample ID: SW-1

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-15

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:59 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:59 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:59 | 1 |
| Total BTEX | <0.00201 | U | 0.00201 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:59 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:59 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:59 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 02:59 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 02:59* | *1* |
| *1,4-Difluorobenzene (Surr)* | *106* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 02:59* | *1* |

### Method: 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 *1 | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 18:28 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 18:28 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 18:28 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 18:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *83* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 18:28* | *1* |
| *o-Terphenyl* | *77* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 18:28* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **396** | | 4.98 | | mg/Kg | | | 03/24/21 12:49 | 1 |

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: SW-2

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

**Lab Sample ID: 890-402-16**
**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00201 | U | 0.00201 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:20 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:20 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:20 | 1 |
| Total BTEX | <0.00201 | U | 0.00201 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:20 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:20 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:20 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:20 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *103* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 03:20* | *1* |
| *1,4-Difluorobenzene (Surr)* | *121* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 03:20* | *1* |

### Method: 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 *1 | 50.1 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 18:49 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.1 | U | 50.1 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 18:49 | 1 |
| OII Range Organics (Over C28-C36) | <50.1 | U | 50.1 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 18:49 | 1 |
| Total TPH | <50.1 | U | 50.1 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 18:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *65* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 18:49* | *1* |
| *o-Terphenyl* | *61* | *S1-* | *70 - 130* | *03/26/21 13:48* | *03/27/21 18:49* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **330** | | 4.97 | | mg/Kg | | | 03/24/21 12:54 | 1 |

## Client Sample ID: SW-3

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

**Lab Sample ID: 890-402-17**
**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:40 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:40 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:40 | 1 |
| Total BTEX | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:40 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:40 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:40 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 03:40 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 03:40* | *1* |
| *1,4-Difluorobenzene (Surr)* | *106* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 03:40* | *1* |

### Method: 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 *1 | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 19:10 | 1 |

Eurofins Xenco, Carlsbad

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: SW-3

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-17

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 19:10 | 1 |
| OII Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 19:10 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 19:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *79* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 19:10* | *1* |
| *o-Terphenyl* | *74* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 19:10* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **197** | | 4.95 | | mg/Kg | | | 03/24/21 12:59 | 1 |

## Client Sample ID: SW-4

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-18

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:01 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:01 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:01 | 1 |
| Total BTEX | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:01 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:01 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:01 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *95* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 04:01* | *1* |
| *1,4-Difluorobenzene (Surr)* | *106* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 04:01* | *1* |

### Method: 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 *1 | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 19:31 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 19:31 | 1 |
| OII Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 19:31 | 1 |
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 19:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *78* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 19:31* | *1* |
| *o-Terphenyl* | *72* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 19:31* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **177** | | 5.00 | | mg/Kg | | | 03/24/21 13:04 | 1 |

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: SW-5

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-19

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:22 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:22 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:22 | 1 |
| Total BTEX | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:22 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:22 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:22 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:22 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 04:22* | *1* |
| *1,4-Difluorobenzene (Surr)* | *109* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 04:22* | *1* |

### Method: 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 *1 | 49.7 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 19:52 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 19:52 | 1 |
| OII Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 19:52 | 1 |
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 19:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *78* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 19:52* | *1* |
| *o-Terphenyl* | *73* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 19:52* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **244** | | 5.05 | | mg/Kg | | | 03/29/21 14:29 | 1 |

## Client Sample ID: SW-6

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-20

**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:43 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:43 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:43 | 1 |
| Total BTEX | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:43 | 1 |
| Xylenes, Total | <0.00397 | U | 0.00397 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:43 | 1 |
| m-Xylene & p-Xylene | <0.00397 | U | 0.00397 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:43 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 03/30/21 15:36 | 03/31/21 04:43 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *118* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 04:43* | *1* |
| *1,4-Difluorobenzene (Surr)* | *94* | | *70 - 130* | *03/30/21 15:36* | *03/31/21 04:43* | *1* |

### Method: 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 *1 | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 20:13 | 1 |

# Client Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: SW-6

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

**Lab Sample ID: 890-402-20**
**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 20:13 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 20:13 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 20:13 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *75* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 20:13* | *1* |
| *o-Terphenyl* | *71* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 20:13* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **391** | | 4.98 | | mg/Kg | | | 03/29/21 14:34 | 1 |

## Client Sample ID: SW-7

**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

**Lab Sample ID: 890-402-21**
**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 15:27 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 15:27 | 1 |
| **Toluene** | **0.00420** | | 0.00199 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 15:27 | 1 |
| **Total BTEX** | **0.147** | | 0.00199 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 15:27 | 1 |
| **Xylenes, Total** | **0.143** | | 0.00398 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 15:27 | 1 |
| **m-Xylene & p-Xylene** | **0.00414** | | 0.00398 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 15:27 | 1 |
| **o-Xylene** | **0.139** | | 0.00199 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 15:27 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *117* | | *70 - 130* | *03/30/21 09:18* | *03/30/21 15:27* | *1* |
| *1,4-Difluorobenzene (Surr)* | *101* | | *70 - 130* | *03/30/21 09:18* | *03/30/21 15:27* | *1* |

### Method: 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 | | 03/26/21 14:06 | 03/27/21 22:32 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 14:06 | 03/27/21 22:32 | 1 |
| OII Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 14:06 | 03/27/21 22:32 | 1 |
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | 03/26/21 14:06 | 03/27/21 22:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *96* | | *70 - 130* | *03/26/21 14:06* | *03/27/21 22:32* | *1* |
| *o-Terphenyl* | *90* | | *70 - 130* | *03/26/21 14:06* | *03/27/21 22:32* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **272** | | 5.04 | | mg/Kg | | | 03/29/21 14:49 | 1 |

# Surrogate Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## 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) |
| 890-402-1 | CS-1 | 84 | 102 |
| 890-402-1 MS | CS-1 | 92 | 107 |
| 890-402-1 MSD | CS-1 | 89 | 104 |
| 890-402-2 | CS-2 | 99 | 109 |
| 890-402-3 | CS-3 | 95 | 106 |
| 890-402-4 | CS-4 | 104 | 111 |
| 890-402-5 | CS-5 | 95 | 97 |
| 890-402-6 | CS-6 | 96 | 107 |
| 890-402-7 | CS-7 | 128 | 95 |
| 890-402-8 | CS-8 | 103 | 108 |
| 890-402-9 | CS-9 | 108 | 100 |
| 890-402-10 | CS-10 | 96 | 105 |
| 890-402-11 | CS-11 | 94 | 103 |
| 890-402-12 | CS-12 | 100 | 111 |
| 890-402-13 | CS-13 | 95 | 110 |
| 890-402-14 | CS-14 | 102 | 95 |
| 890-402-15 | SW-1 | 100 | 106 |
| 890-402-16 | SW-2 | 103 | 121 |
| 890-402-17 | SW-3 | 98 | 106 |
| 890-402-18 | SW-4 | 95 | 106 |
| 890-402-19 | SW-5 | 100 | 109 |
| 890-402-20 | SW-6 | 118 | 94 |
| 890-402-21 | SW-7 | 117 | 101 |
| LCS 880-1052/1-A | Lab Control Sample | 97 | 206 S1+ |
| LCS 880-1075/1-A | Lab Control Sample | 86 | 108 |
| LCSD 880-1052/2-A | Lab Control Sample Dup | 99 | 103 |
| LCSD 880-1075/2-A | Lab Control Sample Dup | 88 | 105 |
| MB 880-1052/5-A | Method Blank | 100 | 101 |
| MB 880-1075/5-A | Method Blank | 121 | 107 |

**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) |
| 890-402-1 | CS-1 | 18 S1- | 15 S1- |
| 890-402-1 MS | CS-1 | 24 S1- | 19 S1- |
| 890-402-1 MSD | CS-1 | 22 S1- | 15 S1- |
| 890-402-2 | CS-2 | 5 S1- | 0.08 S1- |
| 890-402-3 | CS-3 | 14 S1- | 7 S1- |
| 890-402-4 | CS-4 | 3 S1- | 0.08 S1- |
| 890-402-5 | CS-5 | 22 S1- | 14 S1- |
| 890-402-6 | CS-6 | 37 S1- | 34 S1- |
| 890-402-7 | CS-7 | 20 S1- | 16 S1- |
| 890-402-8 | CS-8 | 82 | 79 |

# Surrogate Summary

Client: ConocoPhillips Co. Job ID: 890-402-1
Project/Site: King Tut Fed 1H SDG: Eddy NM

## 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) | | | | | | | | |
| 890-402-9 | CS-9 | 85 | 83 | | | | | | | | |
| 890-402-10 | CS-10 | 91 | 90 | | | | | | | | |
| 890-402-11 | CS-11 | 93 | 91 | | | | | | | | |
| 890-402-12 | CS-12 | 97 | 95 | | | | | | | | |
| 890-402-13 | CS-13 | 103 | 100 | | | | | | | | |
| 890-402-14 | CS-14 | 79 | 81 | | | | | | | | |
| 890-402-15 | SW-1 | 83 | 77 | | | | | | | | |
| 890-402-16 | SW-2 | 65 S1- | 61 S1- | | | | | | | | |
| 890-402-17 | SW-3 | 79 | 74 | | | | | | | | |
| 890-402-18 | SW-4 | 78 | 72 | | | | | | | | |
| 890-402-19 | SW-5 | 78 | 73 | | | | | | | | |
| 890-402-20 | SW-6 | 75 | 71 | | | | | | | | |
| 890-402-21 | SW-7 | 96 | 90 | | | | | | | | |
| LCS 880-907/2-A | Lab Control Sample | 99 | 89 | | | | | | | | |
| LCS 880-908/2-A | Lab Control Sample | 98 | 85 | | | | | | | | |
| LCSD 880-907/3-A | Lab Control Sample Dup | 85 | 74 | | | | | | | | |
| LCSD 880-908/3-A | Lab Control Sample Dup | 101 | 85 | | | | | | | | |
| MB 880-907/1-A | Method Blank | 89 | 91 | | | | | | | | |
| MB 880-908/1-A | Method Blank | 84 | 81 | | | | | | | | |

**Surrogate Legend**

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

# QC Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

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

**Lab Sample ID: MB 880-1052/5-A**
**Matrix: Solid**
**Analysis Batch: 1053**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 1052**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 13:44 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 13:44 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 13:44 | 1 |
| Total BTEX | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 13:44 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 13:44 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 13:44 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 09:18 | 03/30/21 13:44 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | *03/30/21 09:18* | *03/30/21 13:44* | *1* |
| *1,4-Difluorobenzene (Surr)* | *101* | | *70 - 130* | *03/30/21 09:18* | *03/30/21 13:44* | *1* |

**Lab Sample ID: LCS 880-1052/1-A**
**Matrix: Solid**
**Analysis Batch: 1053**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 1052**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.07624 | | mg/Kg | | 76 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.07393 | | mg/Kg | | 74 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.07294 | | mg/Kg | | 73 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.1479 | | mg/Kg | | 74 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.07621 | | mg/Kg | | 76 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *97* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *206* | *S1+* | *70 - 130* |

**Lab Sample ID: LCSD 880-1052/2-A**
**Matrix: Solid**
**Analysis Batch: 1053**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 1052**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.08614 | | mg/Kg | | 86 | 70 - 130 | 12 | 35 |
| Ethylbenzene | | | 0.100 | 0.08574 | | mg/Kg | | 86 | 70 - 130 | 15 | 35 |
| Toluene | | | 0.100 | 0.08256 | | mg/Kg | | 83 | 70 - 130 | 12 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1714 | | mg/Kg | | 86 | 70 - 130 | 15 | 35 |
| o-Xylene | | | 0.100 | 0.08727 | | mg/Kg | | 87 | 70 - 130 | 14 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *103* | | *70 - 130* |

**Lab Sample ID: MB 880-1075/5-A**
**Matrix: Solid**
**Analysis Batch: 1080**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 1075**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 20:44 | 1 |

# QC Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

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

**Lab Sample ID: MB 880-1075/5-A**
**Matrix: Solid**
**Analysis Batch: 1080**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 1075**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 20:44 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 20:44 | 1 |
| Total BTEX | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 20:44 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 20:44 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 20:44 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 03/30/21 15:36 | 03/30/21 20:44 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *121* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 20:44* | *1* |
| *1,4-Difluorobenzene (Surr)* | *107* | | *70 - 130* | *03/30/21 15:36* | *03/30/21 20:44* | *1* |

**Lab Sample ID: LCS 880-1075/1-A**
**Matrix: Solid**
**Analysis Batch: 1080**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 1075**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.09794 | | mg/Kg | | 98 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.08914 | | mg/Kg | | 89 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.09261 | | mg/Kg | | 93 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.1760 | | mg/Kg | | 88 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.08882 | | mg/Kg | | 89 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *86* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *108* | | *70 - 130* |

**Lab Sample ID: LCSD 880-1075/2-A**
**Matrix: Solid**
**Analysis Batch: 1080**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 1075**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.09370 | | mg/Kg | | 94 | 70 - 130 | 4 | 35 |
| Ethylbenzene | | | 0.100 | 0.08673 | | mg/Kg | | 87 | 70 - 130 | 3 | 35 |
| Toluene | | | 0.100 | 0.09149 | | mg/Kg | | 91 | 70 - 130 | 1 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1711 | | mg/Kg | | 86 | 70 - 130 | 3 | 35 |
| o-Xylene | | | 0.100 | 0.08706 | | mg/Kg | | 87 | 70 - 130 | 2 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *88* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *105* | | *70 - 130* |

**Lab Sample ID: 890-402-1 MS**
**Matrix: Solid**
**Analysis Batch: 1080**

**Client Sample ID: CS-1**
**Prep Type: Total/NA**
**Prep Batch: 1075**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.0990 | 0.09983 | | mg/Kg | | 99 | 70 - 130 | | |
| Ethylbenzene | <0.00198 | U | 0.0990 | 0.08844 | | mg/Kg | | 89 | 70 - 130 | | |

# QC Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

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

**Lab Sample ID: 890-402-1 MS**
**Matrix: Solid**
**Analysis Batch: 1080**

**Client Sample ID: CS-1**
**Prep Type: Total/NA**
**Prep Batch: 1075**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | <0.00198 | U | 0.0990 | 0.09661 | | mg/Kg | | 98 | 70 - 130 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.198 | 0.1788 | | mg/Kg | | 89 | 70 - 130 |
| o-Xylene | <0.00198 | U | 0.0990 | 0.08696 | | mg/Kg | | 87 | 70 - 130 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *92* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *107* | | *70 - 130* |

**Lab Sample ID: 890-402-1 MSD**
**Matrix: Solid**
**Analysis Batch: 1080**

**Client Sample ID: CS-1**
**Prep Type: Total/NA**
**Prep Batch: 1075**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.0992 | 0.09405 | | mg/Kg | | 93 | 70 - 130 | 6 | 35 |
| Ethylbenzene | <0.00198 | U | 0.0992 | 0.08213 | | mg/Kg | | 83 | 70 - 130 | 7 | 35 |
| Toluene | <0.00198 | U | 0.0992 | 0.09068 | | mg/Kg | | 91 | 70 - 130 | 6 | 35 |
| m-Xylene & p-Xylene | <0.00396 | U | 0.198 | 0.1656 | | mg/Kg | | 82 | 70 - 130 | 8 | 35 |
| o-Xylene | <0.00198 | U | 0.0992 | 0.08081 | | mg/Kg | | 81 | 70 - 130 | 7 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *89* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *104* | | *70 - 130* |

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

**Lab Sample ID: MB 880-907/1-A**
**Matrix: Solid**
**Analysis Batch: 939**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 907**

| 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 | | 03/26/21 13:48 | 03/27/21 11:22 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 11:22 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 11:22 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 13:48 | 03/27/21 11:22 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *89* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 11:22* | *1* |
| *o-Terphenyl* | *91* | | *70 - 130* | *03/26/21 13:48* | *03/27/21 11:22* | *1* |

**Lab Sample ID: LCS 880-907/2-A**
**Matrix: Solid**
**Analysis Batch: 939**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 907**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1288 | | mg/Kg | | 129 | 70 - 130 |

# QC Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

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

**Lab Sample ID: LCS 880-907/2-A**
**Matrix: Solid**
**Analysis Batch: 939**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 907**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (Over C10-C28) | | | 1000 | 978.2 | | mg/Kg | | 98 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *99* | | *70 - 130* |
| *o-Terphenyl* | *89* | | *70 - 130* |

**Lab Sample ID: LCSD 880-907/3-A**
**Matrix: Solid**
**Analysis Batch: 939**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 907**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 1001 | *1 | mg/Kg | | 100 | 70 - 130 | 25 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 845.6 | | mg/Kg | | 85 | 70 - 130 | 15 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *85* | | *70 - 130* |
| *o-Terphenyl* | *74* | | *70 - 130* |

**Lab Sample ID: 890-402-1 MS**
**Matrix: Solid**
**Analysis Batch: 939**

**Client Sample ID: CS-1**
**Prep Type: Total/NA**
**Prep Batch: 907**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U *1 F1 | 1000 | 273.5 | F1 | mg/Kg | | 27 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | <49.9 | U F1 | 1000 | 215.6 | F1 | mg/Kg | | 22 | 70 - 130 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *24* | *S1-* | *70 - 130* |
| *o-Terphenyl* | *19* | *S1-* | *70 - 130* |

**Lab Sample ID: 890-402-1 MSD**
**Matrix: Solid**
**Analysis Batch: 939**

**Client Sample ID: CS-1**
**Prep Type: Total/NA**
**Prep Batch: 907**

| 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 | <49.9 | U *1 F1 | 997 | 304.6 | F1 | mg/Kg | | 31 | 70 - 130 | 11 | 20 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U F1 | 997 | 177.5 | F1 | mg/Kg | | 18 | 70 - 130 | 19 | 20 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *22* | *S1-* | *70 - 130* |
| *o-Terphenyl* | *15* | *S1-* | *70 - 130* |

# QC Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

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

**Lab Sample ID: MB 880-908/1-A**
**Matrix: Solid**
**Analysis Batch: 946**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 908**

| 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 | | 03/26/21 14:06 | 03/27/21 13:23 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 14:06 | 03/27/21 13:23 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 14:06 | 03/27/21 13:23 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 03/26/21 14:06 | 03/27/21 13:23 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *84* | | *70 - 130* | *03/26/21 14:06* | *03/27/21 13:23* | *1* |
| *o-Terphenyl* | *81* | | *70 - 130* | *03/26/21 14:06* | *03/27/21 13:23* | *1* |

**Lab Sample ID: LCS 880-908/2-A**
**Matrix: Solid**
**Analysis Batch: 946**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 908**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 1264 | | mg/Kg | | 126 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 833.5 | | mg/Kg | | 83 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *98* | | *70 - 130* |
| *o-Terphenyl* | *85* | | *70 - 130* |

**Lab Sample ID: LCSD 880-908/3-A**
**Matrix: Solid**
**Analysis Batch: 946**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 908**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 1393 | *+ | mg/Kg | | 139 | 70 - 130 | 10 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 856.0 | | mg/Kg | | 86 | 70 - 130 | 3 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *101* | | *70 - 130* |
| *o-Terphenyl* | *85* | | *70 - 130* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-796/1-A**
**Matrix: Solid**
**Analysis Batch: 800**

**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 | | | 03/24/21 10:34 | 1 |

# QC Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

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

**Lab Sample ID: LCS 880-796/2-A**
**Matrix: Solid**
**Analysis Batch: 800**

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

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 270.0 | | mg/Kg | | 108 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-796/3-A**
**Matrix: Solid**
**Analysis Batch: 800**

**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 | 270.5 | | mg/Kg | | 108 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 890-402-9 MS**
**Matrix: Solid**
**Analysis Batch: 800**

**Client Sample ID: CS-9**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 48.2 | | 248 | 316.4 | | mg/Kg | | 108 | 90 - 110 | | |

**Lab Sample ID: 890-402-9 MSD**
**Matrix: Solid**
**Analysis Batch: 800**

**Client Sample ID: CS-9**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 48.2 | | 248 | 316.5 | | mg/Kg | | 108 | 90 - 110 | 0 | 20 |

**Lab Sample ID: MB 880-990/1-A**
**Matrix: Solid**
**Analysis Batch: 991**

**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 | | | 03/29/21 13:09 | 1 |

**Lab Sample ID: LCS 880-990/2-A**
**Matrix: Solid**
**Analysis Batch: 991**

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

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 273.0 | | mg/Kg | | 109 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-990/3-A**
**Matrix: Solid**
**Analysis Batch: 991**

**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 | 274.2 | | mg/Kg | | 110 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 890-402-20 MS**
**Matrix: Solid**
**Analysis Batch: 991**

**Client Sample ID: SW-6**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 391 | | 249 | 651.7 | | mg/Kg | | 105 | 90 - 110 | | |

# QC Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: 890-402-20 MSD**
**Matrix: Solid**
**Analysis Batch: 991**

**Client Sample ID: SW-6**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 391 | | 249 | 652.9 | | mg/Kg | | 105 | 90 - 110 | 0 | 20 |

# QC Association Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## GC VOA

### Prep Batch: 1052

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-21 | SW-7 | Total/NA | Solid | 5035 | |
| MB 880-1052/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-1052/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-1052/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |

### Analysis Batch: 1053

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-21 | SW-7 | Total/NA | Solid | 8021B | 1052 |
| MB 880-1052/5-A | Method Blank | Total/NA | Solid | 8021B | 1052 |
| LCS 880-1052/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 1052 |
| LCSD 880-1052/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 1052 |

### Prep Batch: 1075

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-1 | CS-1 | Total/NA | Solid | 5035 | |
| 890-402-2 | CS-2 | Total/NA | Solid | 5035 | |
| 890-402-3 | CS-3 | Total/NA | Solid | 5035 | |
| 890-402-4 | CS-4 | Total/NA | Solid | 5035 | |
| 890-402-5 | CS-5 | Total/NA | Solid | 5035 | |
| 890-402-6 | CS-6 | Total/NA | Solid | 5035 | |
| 890-402-7 | CS-7 | Total/NA | Solid | 5035 | |
| 890-402-8 | CS-8 | Total/NA | Solid | 5035 | |
| 890-402-9 | CS-9 | Total/NA | Solid | 5035 | |
| 890-402-10 | CS-10 | Total/NA | Solid | 5035 | |
| 890-402-11 | CS-11 | Total/NA | Solid | 5035 | |
| 890-402-12 | CS-12 | Total/NA | Solid | 5035 | |
| 890-402-13 | CS-13 | Total/NA | Solid | 5035 | |
| 890-402-14 | CS-14 | Total/NA | Solid | 5035 | |
| 890-402-15 | SW-1 | Total/NA | Solid | 5035 | |
| 890-402-16 | SW-2 | Total/NA | Solid | 5035 | |
| 890-402-17 | SW-3 | Total/NA | Solid | 5035 | |
| 890-402-18 | SW-4 | Total/NA | Solid | 5035 | |
| 890-402-19 | SW-5 | Total/NA | Solid | 5035 | |
| 890-402-20 | SW-6 | Total/NA | Solid | 5035 | |
| MB 880-1075/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-1075/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-1075/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 890-402-1 MS | CS-1 | Total/NA | Solid | 5035 | |
| 890-402-1 MSD | CS-1 | Total/NA | Solid | 5035 | |

### Analysis Batch: 1080

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-1 | CS-1 | Total/NA | Solid | 8021B | 1075 |
| 890-402-2 | CS-2 | Total/NA | Solid | 8021B | 1075 |
| 890-402-3 | CS-3 | Total/NA | Solid | 8021B | 1075 |
| 890-402-4 | CS-4 | Total/NA | Solid | 8021B | 1075 |
| 890-402-5 | CS-5 | Total/NA | Solid | 8021B | 1075 |
| 890-402-6 | CS-6 | Total/NA | Solid | 8021B | 1075 |
| 890-402-7 | CS-7 | Total/NA | Solid | 8021B | 1075 |
| 890-402-8 | CS-8 | Total/NA | Solid | 8021B | 1075 |
| 890-402-9 | CS-9 | Total/NA | Solid | 8021B | 1075 |

# QC Association Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## GC VOA (Continued)

### Analysis Batch: 1080 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-10 | CS-10 | Total/NA | Solid | 8021B | 1075 |
| 890-402-11 | CS-11 | Total/NA | Solid | 8021B | 1075 |
| 890-402-12 | CS-12 | Total/NA | Solid | 8021B | 1075 |
| 890-402-13 | CS-13 | Total/NA | Solid | 8021B | 1075 |
| 890-402-14 | CS-14 | Total/NA | Solid | 8021B | 1075 |
| 890-402-15 | SW-1 | Total/NA | Solid | 8021B | 1075 |
| 890-402-16 | SW-2 | Total/NA | Solid | 8021B | 1075 |
| 890-402-17 | SW-3 | Total/NA | Solid | 8021B | 1075 |
| 890-402-18 | SW-4 | Total/NA | Solid | 8021B | 1075 |
| 890-402-19 | SW-5 | Total/NA | Solid | 8021B | 1075 |
| 890-402-20 | SW-6 | Total/NA | Solid | 8021B | 1075 |
| MB 880-1075/5-A | Method Blank | Total/NA | Solid | 8021B | 1075 |
| LCS 880-1075/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 1075 |
| LCSD 880-1075/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 1075 |
| 890-402-1 MS | CS-1 | Total/NA | Solid | 8021B | 1075 |
| 890-402-1 MSD | CS-1 | Total/NA | Solid | 8021B | 1075 |

## GC Semi VOA

### Prep Batch: 907

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-1 | CS-1 | Total/NA | Solid | 8015NM Prep | |
| 890-402-2 | CS-2 | Total/NA | Solid | 8015NM Prep | |
| 890-402-3 | CS-3 | Total/NA | Solid | 8015NM Prep | |
| 890-402-4 | CS-4 | Total/NA | Solid | 8015NM Prep | |
| 890-402-5 | CS-5 | Total/NA | Solid | 8015NM Prep | |
| 890-402-6 | CS-6 | Total/NA | Solid | 8015NM Prep | |
| 890-402-7 | CS-7 | Total/NA | Solid | 8015NM Prep | |
| 890-402-8 | CS-8 | Total/NA | Solid | 8015NM Prep | |
| 890-402-9 | CS-9 | Total/NA | Solid | 8015NM Prep | |
| 890-402-10 | CS-10 | Total/NA | Solid | 8015NM Prep | |
| 890-402-11 | CS-11 | Total/NA | Solid | 8015NM Prep | |
| 890-402-12 | CS-12 | Total/NA | Solid | 8015NM Prep | |
| 890-402-13 | CS-13 | Total/NA | Solid | 8015NM Prep | |
| 890-402-14 | CS-14 | Total/NA | Solid | 8015NM Prep | |
| 890-402-15 | SW-1 | Total/NA | Solid | 8015NM Prep | |
| 890-402-16 | SW-2 | Total/NA | Solid | 8015NM Prep | |
| 890-402-17 | SW-3 | Total/NA | Solid | 8015NM Prep | |
| 890-402-18 | SW-4 | Total/NA | Solid | 8015NM Prep | |
| 890-402-19 | SW-5 | Total/NA | Solid | 8015NM Prep | |
| 890-402-20 | SW-6 | Total/NA | Solid | 8015NM Prep | |
| MB 880-907/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-907/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-907/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 890-402-1 MS | CS-1 | Total/NA | Solid | 8015NM Prep | |
| 890-402-1 MSD | CS-1 | Total/NA | Solid | 8015NM Prep | |

### Prep Batch: 908

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-21 | SW-7 | Total/NA | Solid | 8015NM Prep | |
| MB 880-908/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |

# QC Association Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## GC Semi VOA (Continued)

### Prep Batch: 908 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 880-908/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-908/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

### Analysis Batch: 939

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-1 | CS-1 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-2 | CS-2 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-3 | CS-3 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-4 | CS-4 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-5 | CS-5 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-6 | CS-6 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-7 | CS-7 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-8 | CS-8 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-9 | CS-9 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-10 | CS-10 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-11 | CS-11 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-12 | CS-12 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-13 | CS-13 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-14 | CS-14 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-15 | SW-1 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-16 | SW-2 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-17 | SW-3 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-18 | SW-4 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-19 | SW-5 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-20 | SW-6 | Total/NA | Solid | 8015B NM | 907 |
| MB 880-907/1-A | Method Blank | Total/NA | Solid | 8015B NM | 907 |
| LCS 880-907/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 907 |
| LCSD 880-907/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 907 |
| 890-402-1 MS | CS-1 | Total/NA | Solid | 8015B NM | 907 |
| 890-402-1 MSD | CS-1 | Total/NA | Solid | 8015B NM | 907 |

### Analysis Batch: 946

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-21 | SW-7 | Total/NA | Solid | 8015B NM | 908 |
| MB 880-908/1-A | Method Blank | Total/NA | Solid | 8015B NM | 908 |
| LCS 880-908/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 908 |
| LCSD 880-908/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 908 |

## HPLC/IC

### Leach Batch: 796

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-1 | CS-1 | Soluble | Solid | DI Leach | |
| 890-402-2 | CS-2 | Soluble | Solid | DI Leach | |
| 890-402-3 | CS-3 | Soluble | Solid | DI Leach | |
| 890-402-4 | CS-4 | Soluble | Solid | DI Leach | |
| 890-402-5 | CS-5 | Soluble | Solid | DI Leach | |
| 890-402-6 | CS-6 | Soluble | Solid | DI Leach | |
| 890-402-7 | CS-7 | Soluble | Solid | DI Leach | |
| 890-402-8 | CS-8 | Soluble | Solid | DI Leach | |
| 890-402-9 | CS-9 | Soluble | Solid | DI Leach | |

# QC Association Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## HPLC/IC (Continued)

### Leach Batch: 796 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-10 | CS-10 | Soluble | Solid | DI Leach | |
| 890-402-11 | CS-11 | Soluble | Solid | DI Leach | |
| 890-402-12 | CS-12 | Soluble | Solid | DI Leach | |
| 890-402-13 | CS-13 | Soluble | Solid | DI Leach | |
| 890-402-14 | CS-14 | Soluble | Solid | DI Leach | |
| 890-402-15 | SW-1 | Soluble | Solid | DI Leach | |
| 890-402-16 | SW-2 | Soluble | Solid | DI Leach | |
| 890-402-17 | SW-3 | Soluble | Solid | DI Leach | |
| 890-402-18 | SW-4 | Soluble | Solid | DI Leach | |
| MB 880-796/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-796/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-796/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-402-9 MS | CS-9 | Soluble | Solid | DI Leach | |
| 890-402-9 MSD | CS-9 | Soluble | Solid | DI Leach | |

### Analysis Batch: 800

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-1 | CS-1 | Soluble | Solid | 300.0 | 796 |
| 890-402-2 | CS-2 | Soluble | Solid | 300.0 | 796 |
| 890-402-3 | CS-3 | Soluble | Solid | 300.0 | 796 |
| 890-402-4 | CS-4 | Soluble | Solid | 300.0 | 796 |
| 890-402-5 | CS-5 | Soluble | Solid | 300.0 | 796 |
| 890-402-6 | CS-6 | Soluble | Solid | 300.0 | 796 |
| 890-402-7 | CS-7 | Soluble | Solid | 300.0 | 796 |
| 890-402-8 | CS-8 | Soluble | Solid | 300.0 | 796 |
| 890-402-9 | CS-9 | Soluble | Solid | 300.0 | 796 |
| 890-402-10 | CS-10 | Soluble | Solid | 300.0 | 796 |
| 890-402-11 | CS-11 | Soluble | Solid | 300.0 | 796 |
| 890-402-12 | CS-12 | Soluble | Solid | 300.0 | 796 |
| 890-402-13 | CS-13 | Soluble | Solid | 300.0 | 796 |
| 890-402-14 | CS-14 | Soluble | Solid | 300.0 | 796 |
| 890-402-15 | SW-1 | Soluble | Solid | 300.0 | 796 |
| 890-402-16 | SW-2 | Soluble | Solid | 300.0 | 796 |
| 890-402-17 | SW-3 | Soluble | Solid | 300.0 | 796 |
| 890-402-18 | SW-4 | Soluble | Solid | 300.0 | 796 |
| MB 880-796/1-A | Method Blank | Soluble | Solid | 300.0 | 796 |
| LCS 880-796/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 796 |
| LCSD 880-796/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 796 |
| 890-402-9 MS | CS-9 | Soluble | Solid | 300.0 | 796 |
| 890-402-9 MSD | CS-9 | Soluble | Solid | 300.0 | 796 |

### Leach Batch: 990

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-19 | SW-5 | Soluble | Solid | DI Leach | |
| 890-402-20 | SW-6 | Soluble | Solid | DI Leach | |
| 890-402-21 | SW-7 | Soluble | Solid | DI Leach | |
| MB 880-990/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-990/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-990/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-402-20 MS | SW-6 | Soluble | Solid | DI Leach | |
| 890-402-20 MSD | SW-6 | Soluble | Solid | DI Leach | |

# QC Association Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## HPLC/IC

### Analysis Batch: 991

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-402-19 | SW-5 | Soluble | Solid | 300.0 | 990 |
| 890-402-20 | SW-6 | Soluble | Solid | 300.0 | 990 |
| 890-402-21 | SW-7 | Soluble | Solid | 300.0 | 990 |
| MB 880-990/1-A | Method Blank | Soluble | Solid | 300.0 | 990 |
| LCS 880-990/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 990 |
| LCSD 880-990/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 990 |
| 890-402-20 MS | SW-6 | Soluble | Solid | 300.0 | 990 |
| 890-402-20 MSD | SW-6 | Soluble | Solid | 300.0 | 990 |

# Lab Chronicle

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-1
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-1
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/30/21 21:06 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 12:27 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 5 | 800 | 03/24/21 11:09 | CH | XM |

## Client Sample ID: CS-2
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-2
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/30/21 21:26 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 13:31 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 5 | 800 | 03/24/21 11:14 | CH | XM |

## Client Sample ID: CS-3
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-3
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/30/21 21:47 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 13:53 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 5 | 800 | 03/24/21 11:19 | CH | XM |

## Client Sample ID: CS-4
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-4
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/30/21 22:08 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 14:15 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 5 | 800 | 03/24/21 11:34 | CH | XM |

# Lab Chronicle

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-5
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-5
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/30/21 22:28 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 14:36 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 5 | 800 | 03/24/21 11:39 | CH | XM |

## Client Sample ID: CS-6
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-6
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/30/21 22:49 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 14:57 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 5 | 800 | 03/24/21 11:44 | CH | XM |

## Client Sample ID: CS-7
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-7
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/30/21 23:10 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 15:19 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 800 | 03/24/21 11:49 | CH | XM |

## Client Sample ID: CS-8
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-8
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/30/21 23:31 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 15:40 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 800 | 03/24/21 11:54 | CH | XM |

# Lab Chronicle

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-9
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-9
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/30/21 23:51 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 16:01 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 800 | 03/24/21 11:59 | CH | XM |

## Client Sample ID: CS-10
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-10
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/31/21 00:12 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 16:22 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 800 | 03/24/21 12:14 | CH | XM |

## Client Sample ID: CS-11
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-11
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/31/21 01:36 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 17:04 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 800 | 03/24/21 12:19 | CH | XM |

## Client Sample ID: CS-12
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-12
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/31/21 01:57 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 17:25 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 800 | 03/24/21 12:34 | CH | XM |

# Lab Chronicle

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: CS-13
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-13
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/31/21 02:18 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 17:46 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 800 | 03/24/21 12:39 | CH | XM |

## Client Sample ID: CS-14
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-14
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/31/21 02:38 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 18:07 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 800 | 03/24/21 12:44 | CH | XM |

## Client Sample ID: SW-1
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-15
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/31/21 02:59 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 18:28 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 800 | 03/24/21 12:49 | CH | XM |

## Client Sample ID: SW-2
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-16
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/31/21 03:20 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 18:49 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 800 | 03/24/21 12:54 | CH | XM |

# Lab Chronicle

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: SW-3
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-17
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/31/21 03:40 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 19:10 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 800 | 03/24/21 12:59 | CH | XM |

## Client Sample ID: SW-4
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-18
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/31/21 04:01 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 19:31 | AJ | XM |
| Soluble | Leach | DI Leach | | | 796 | 03/24/21 08:52 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 800 | 03/24/21 13:04 | CH | XM |

## Client Sample ID: SW-5
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-19
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/31/21 04:22 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 19:52 | AJ | XM |
| Soluble | Leach | DI Leach | | | 990 | 03/29/21 10:13 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 991 | 03/29/21 14:29 | CH | XM |

## Client Sample ID: SW-6
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-20
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1075 | 03/30/21 15:36 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1080 | 03/31/21 04:43 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 907 | 03/26/21 13:48 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 939 | 03/27/21 20:13 | AJ | XM |
| Soluble | Leach | DI Leach | | | 990 | 03/29/21 10:13 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 991 | 03/29/21 14:34 | CH | XM |

# Lab Chronicle

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Client Sample ID: SW-7
**Date Collected: 03/17/21 00:00**
**Date Received: 03/19/21 11:28**

## Lab Sample ID: 890-402-21
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 1052 | 03/30/21 09:18 | KL | XM |
| Total/NA | Analysis | 8021B | | 1 | 1053 | 03/30/21 15:27 | KL | XM |
| Total/NA | Prep | 8015NM Prep | | | 908 | 03/26/21 14:06 | DM | XM |
| Total/NA | Analysis | 8015B NM | | 1 | 946 | 03/27/21 22:32 | AJ | XM |
| Soluble | Leach | DI Leach | | | 990 | 03/29/21 10:13 | CH | XM |
| Soluble | Analysis | 300.0 | | 1 | 991 | 03/29/21 14:49 | CH | XM |

**Laboratory References:**
XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# Accreditation/Certification Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

## Laboratory: Eurofins Xenco, Midland

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

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Texas | NELAP | T104704400-20-21 | 06-30-21 |

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 |
|---|---|---|---|
| 8015B NM | 8015NM Prep | Solid | Total TPH |
| 8021B | 5035 | Solid | Total BTEX |

# Method Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

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

**Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

**Laboratory References:**

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

# Sample Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Fed 1H

Job ID: 890-402-1
SDG: Eddy NM

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 890-402-1 | CS-1 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-2 | CS-2 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-3 | CS-3 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-4 | CS-4 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-5 | CS-5 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-6 | CS-6 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-7 | CS-7 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-8 | CS-8 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-9 | CS-9 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-10 | CS-10 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-11 | CS-11 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-12 | CS-12 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-13 | CS-13 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-14 | CS-14 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-15 | SW-1 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-16 | SW-2 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-17 | SW-3 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-18 | SW-4 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-19 | SW-5 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-20 | SW-6 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |
| 890-402-21 | SW-7 | Solid | 03/17/21 00:00 | 03/19/21 11:28 | |

# Analysis Request of Chain of Custody Record

Page 1 of 1

3/31/2021

CONCHO

One Concho Center/600/Illinois Avenue/Midland, Texas

Tel (432) 683-7443

| | |
|---|---|
| Client Name: COG | Site Manager: Jacqui Harris |
| Project Name: King Tut Fed 1H | |
| Project Location: (county, state) Eddy, NM | Project #: |
| Invoice to: Jacqui Harris | |
| Receiving Laboratory: | Sampler Name: Jacqui Harris |
| Comments: | |

## ANALYSIS REQUEST

(Circle or Specify Method No.)

890-402 Chain of Custody

| LAB # (LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING DATE | SAMPLING TIME | MATRIX: WATER | MATRIX: SOIL | PRESERVATIVE METHOD: HCL | PRESERVATIVE METHOD: $HNO_3$ | PRESERVATIVE METHOD: ICE | # CONTAINERS | (C)omposite/(G)rab | TPH 8015M ( GRO - DRO - MRO) | BTEX 8021B | Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CS-1 | 3/17/21 | | | X | | | X | | | X | X | X |
| | CS-2 | | | | | | | | | | | | |
| | CS-3 | | | | | | | | | | | | |
| | CS-4 | | | | | | | | | | | | |
| | CS-5 | | | | | | | | | | | | |
| | CS-6 | | | | | | | | | | | | |
| | CS-7 | | | | | | | | | | | | |
| | CS-8 | | | | | | | | | | | | |
| | CS-9 | | | | | | | | | | | | |
| | CS-10 | | | | | | | | | | | | |

Page 42 of 48

Hold

| Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
|---|---|---|---|---|---|
| | 3/19/21 | 11:27 | Cloe Cuttis | 3.19.21 | 1128 |
| Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
| Relinquished by: | Date: | Time: | Received by: | Date: | Time: |

LAB USE ONLY

Sample Temperature 2.2/2.0

REMARKS: Standard 5 day

- RUSH: Same Day 24 hr 48 hr 72 hr
- Rush Charges Authorized
- Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

# Analysis Request of Chain of Custody Record





CONCHO

One Concho Center/600/Illinois Avenue/Midland, Texas

Tel (432) 683-7443

Client Name: COG

Site Manager: Jacqui Harris

Project Name: King Tut Fed 1H

Project Location: (county, state) Eddy, NM

Project #:

Invoice to: Jacqui Harris

Receiving Laboratory:

Sampler Name: Jacqui Harris

Comments:

## ANALYSIS REQUEST

(Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING YEAR: DATE | SAMPLING TIME | MATRIX WATER | MATRIX SOIL | PRESERVATIVE METHOD HCL | PRESERVATIVE METHOD $HNO_3$ | PRESERVATIVE METHOD ICE | # CONTAINERS | (C)omposite/(G)rab |
|---|---|---|---|---|---|---|---|---|---|---|
| | CS-11 | 3/17/21 | | | | | | | | |
| | CS-12 | | | | | | | | | |
| | CS-13 | | | | | | | | | |
| | CS-14 | | | | | | | | | |
| | SW-1 | | | | | | | | | |
| | SW-2 | | | | | | | | | |
| | SW-3 | | | | | | | | | |
| | SW-4 | | | | | | | | | |
| | SW-5 | | | | | | | | | |
| | SW-6 | | | | | | | | | |

TPH 8015M ( GRO - DRO - MRO)

BTEX 8021B

Chloride

Hold



| Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
|---|---|---|---|---|---|
| | 3/19/21 | 11:27 | Clear Cut | 3.19.21 | 1128 |
| Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
| Relinquished by: | Date: | Time: | Received by: | Date: | Time: |

LAB USE ONLY

Sample Temperature See Pg 1

REMARKS: Standard 5 day

☐ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

# Analysis Request of Chain of Custody Record

Page 3 of 4

CONCHO
One Concho Center/600/Illinois Avenue/Midland, Texas
Tel (432) 683-7443

| | |
|---|---|
| Client Name: COG | Site Manager: Jacqui Harris |
| Project Name: King Tut Fed 1H | |
| Project Location: (county, state) Eddy, NM | Project #: |
| Invoice to: Jacqui Harris | |
| Receiving Laboratory: | Sampler Name: Jacqui Harris |
| Comments: | |

**ANALYSIS REQUEST** (Circle or Specify Method No.)

| LAB # (LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING DATE | SAMPLING TIME | MATRIX: WATER | MATRIX: SOIL | PRESERVATIVE METHOD: HCL | PRESERVATIVE METHOD: $HNO_3$ | PRESERVATIVE METHOD: ICE | # CONTAINERS | (C)omposite/(G)rab | TPH 8015M ( GRO - DRO - MRO) | BTEX 8021B | Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SW-7 | 3/17/21 | | | X | | | X | 1 | | X | X | X |

Page 44 of 48

Hold

| | | | |
|---|---|---|---|
| Relinquished by: | Date: 3/19/21 | Time: 11:20 | Received by: Date: 3-19-21 Time: 1128 |
| Relinquished by: | Date: | Time: | Received by: Date: Time: |
| Relinquished by: | Date: | Time: | Received by: Date: Time: |

LAB USE ONLY

Sample Temperature: See Pg 1

REMARKS: Standard 5 day

- ☐ RUSH: Same Day 24 hr 48 hr 72 hr
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

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

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Kramer, Jessica | Carrier Tracking No(s): | COC No: 890-120 1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: jessica kramer@eurofinset com | State of Origin: New Mexico | Page: Page 1 of 3 |
| Company: Eurofins Xenco | | Accreditations Required (See note): NELAP - Texas | | Job #: 890-402-1 |
| Address: 1211 W Florida Ave , | Due Date Requested: 3/26/2021 | | | |
| City: Midland | TAT Requested (days): | | | |
| State, Zip: TX, 79701 | PO #: | | | |
| Phone: 432-704-5440(Tel) | WO #: | | | |
| Email | | | | |
| Project Name: King Tut Fed 1H | Project #: 88000130 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes**

| | | | |
|---|---|---|---|
| A | HCL | M | Hexane |
| B | NaOH | N | None |
| C | Zn Acetate | O | AsNaO2 |
| D | Nitric Acid | P | Na2O4S |
| E | NaHSO4 | Q | Na2SO3 |
| F | MeOH | R | Na2S2O3 |
| G | Amchlor | S | H2SO4 |
| H | Ascorbic Acid | T | TSP Dodecahydrate |
| I | Ice | U | Acetone |
| J | DI Water | V | MCAA |
| K | EDTA | W | pH 4-5 |
| L | EDA | 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) | 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH | 300_ORGFM_28D/DI_LEACH Chloride | 8021B/5035FP_Calc BTEX - LL | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | |
| CS-1 (890-402-1) | 3/17/21 | Mountain | | Solid | | | X | X | X | 1 | |
| CS-2 (890-402-2) | 3/17/21 | Mountain | | Solid | | | X | X | X | 1 | |
| CS-3 (890-402-3) | 3/17/21 | Mountain | | Solid | | | X | X | X | 1 | |
| CS-4 (890-402-4) | 3/17/21 | Mountain | | Solid | | | X | X | X | 1 | |
| CS-5 (890-402-5) | 3/17/21 | Mountain | | Solid | | | X | X | X | 1 | |
| CS-6 (890-402-6) | 3/17/21 | Mountain | | Solid | | | X | X | X | 1 | |
| CS-7 (890-402-7) | 3/17/21 | Mountain | | Solid | | | X | X | X | 1 | |
| CS-8 (890-402-8) | 3/17/21 | Mountain | | Solid | | | X | X | X | 1 | |
| CS-9 (890-402-9) | 3/17/21 | Mountain | | Solid | | | X | X | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out 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 Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco 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: Clue Cuter 3.19.21 | Date/Time: | Company | Received by: | Date/Time: 3/22/21 11:40am | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

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

Ver: 11/01/2020

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

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler | Lab PM: Kramer Jessica | Carrier Tracking No(s) | COC No: 890-120 2 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone | E-Mail: jessica.kramer@eurofinset.com | State of Origin: New Mexico | Page: Page 2 of 3 |
| Company: Eurofins Xenco | | Accreditations Required (See note): NELAP - Texas | | Job #: 890-402-1 |
| Address: 1211 W Florida Ave | Due Date Requested: 3/26/2021 | | | |
| City: Midland | TAT Requested (days): | | | |
| State, Zip: TX, 79701 | | | | |
| Phone: 432-704-5440(Tel) | PO #: | | | |
| Email | WO #: | | | |
| Project Name: King Tut Fed 1H | Project #: 88000130 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes**

| | | | |
|---|---|---|---|
| A | HCL | M | Hexane |
| B | NaOH | N | None |
| C | Zn Acetate | O | AsNaO2 |
| D | Nitric Acid | P | Na2O4S |
| E | NaHSO4 | Q | Na2SO3 |
| F | MeOH | R | Na2S2O3 |
| G | Amchlor | S | H2SO4 |
| H | Ascorbic Acid | T | TSP Dodecahydrate |
| I | Ice | U | Acetone |
| J | DI Water | V | MCAA |
| K | EDTA | W | pH 4-5 |
| L | EDA | 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) | Preservation Code: | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH | 300_ORGFM_28D/DI_LEACH Chloride | 8021B/5035FP_Calc BTEX - LL | Total Number of containers | Special Instructions/Note. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~CS-10 (890-402-10)~~ | ~~3/17/21~~ | ~~Mountain~~ | | ~~Solid~~ | | | | ~~X~~ | ~~X~~ | ~~X~~ | ~~1~~ | |
| CS-11 (890-402-11) | 3/17/21 | Mountain | | Solid | | | | X | X | X | 1 | |
| CS-12 (890-402-12) | 3/17/21 | Mountain | | Solid | | | | X | X | X | 1 | |
| CS-13 (890-402-13) | 3/17/21 | Mountain | | Solid | | | | X | X | X | 1 | |
| CS-14 (890-402-14) | 3/17/21 | Mountain | | Solid | | | | X | X | X | 1 | |
| SW-1 (890-402-15) | 3/17/21 | Mountain | | Solid | | | | X | X | X | 1 | |
| SW-2 (890-402-16) | 3/17/21 | Mountain | | Solid | | | | X | X | X | 1 | |
| SW-3 (890-402-17) | 3/17/21 | Mountain | | Solid | | | | X | X | X | 1 | |
| SW-4 (890-402-18) | 3/17/21 | Mountain | | Solid | | | | X | X | X | 1 | |

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out 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 Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco 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: Joe Cato 3.19.21 | Date/Time: | Company | Received by: | Date/Time: 3/22/21 11:00am | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

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

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: ConocoPhillips Co.

Job Number: 890-402-1
SDG Number: Eddy NM

**Login Number: 402**
**List Number: 1**
**Creator: Clifton, Cloe**

**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. | 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 | |

# Login Sample Receipt Checklist

Client: ConocoPhillips Co.

Job Number: 890-402-1
SDG Number: Eddy NM

**Login Number: 402**
**List Number: 2**
**Creator: Copeland, Tatiana**

**List Source: Eurofins Midland**
**List Creation: 03/22/21 11:13 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 | |

**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: | OGRID: |
|---|---|
| COG OPERATING LLC<br>600 W Illinois Ave<br>Midland, TX 79701 | 229137 |
| | Action Number:<br>25292 |
| | Action Type:<br>[C-141] Release Corrective Action (C-141) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| ceads | None | 7/8/2021 |