



Charles Beauvais  
ConocoPhillips  
2208 W Main St  
Artesia, New Mexico 88210  
575-988-2043

December 12, 2022

New Mexico Energy, Minerals and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, NM 87505

Subject: **Canvasback 13 Federal #002H Release  
Unit Letter A, Section 13, Township 24 South, Range 31 East  
Eddy County, New Mexico  
Incident ID nAB1721951563  
2RP-4324**

Sir or Madam:

ConocoPhillips Company("COPC") entered into an Agreed Compliance Order ("ACO") with the New Mexico Oil Conservation Division ("NMOCD") on December 15, 2021, related to unresolved releases from COPC's predecessor-in-interest ("COG"). The ACO required COPC to submit characterization and/or remediation plans with proposed timeframes for the ongoing corrective actions or remediations identified to the NMOCD no later than March 31, 2022. As of March 11, 2022, COPC has submitted characterization and remediation plans for all of the properties identified and owned.

A Closure Request (dated May 2018) for the subject line 2RP-4324 (ID nAB1721951563)) release was drafted by TRC Environmental Corporation and previously submitted to the NMOCD on behalf of COPC. The document was uploaded and submitted to the NMOCD via CentreStack, a Secure Access & File Sharing platform, at the direction of Mr. Bradford Billings, NMOCD as a portion of the ACO submittals.

NMOCD has recently begun issuing determinations on ACO reports submitted via CentreStack, (referred to as Internal Manual Incident File Supporting Documentation (ENV) (IM-BNF)). This subject line incident was rejected by Ashley Maxwell, Projects Environmental Specialist – A. In the rejection, Ms. Maxwell notes that to close this incident, a new C-141 Closure form must be signed and submitted to the fee application portal along with the complete Closure Report.

Thus, enclosed is a copy of the amended Remediation Summary and Soil Closure Request for the subject line incident. The attached amended Closure Request with an executed C-141 will be submitted via the NMOCD Fee Application portal, as requested.

If you have any questions, please contact me at 575-988-2043.

Sincerely,

*Charles R. Beauvais II*

Charles Beauvais  
Senior Environmental Engineer | Environmental Operations | ConocoPhillips

cc: Site Files

Attachments: C-141 Incident ID nAB1721951563, Rejection, Remediation Summary and Soil Closure Request

|                |  |
|----------------|--|
| 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: Charles R. Beauvais II Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: Jocelyn Harimon Date: 12/16/2022

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: Ashley Maxwell Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

**Chavira, Lisbeth**

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**From:** OCDOnline@state.nm.us  
**Sent:** Thursday, November 10, 2022 9:38 AM  
**To:** Beauvais, Charles R  
**Subject:** [EXTERNAL]The Oil Conservation Division (OCD) has rejected the application, Application ID: 157602

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o Charles Beauvais for COG OPERATING LLC),

The OCD has rejected the submitted *Internal Manual Incident File Supporting Documentation (ENV)* (IM-BNF), for incident ID (n#) nAB1721951563, for the following reasons:

- **Final C-141 was the only document submitted. Closure report not submitted per approved work plan. Laboratory analytical results missing from excavation confirmation samples.**
- **Submit closure plan, as approved with conditions of approval dated May 2018, to OCD by February 10, 2023.**

The rejected IM-BNF can be found in the OCD Online: Permitting - Action Status, under the Application ID: 157602.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional IM-BNF.

Thank you,  
Ashley Maxwell  
Projects Environmental Specialist - A  
505-635-5000  
Ashley.Maxwell@emnrd.nm.gov

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 South St. Francis Drive  
Santa Fe, NM 87505

## REMEDIATION SUMMARY AND SOIL CLOSURE REQUEST

**COG Operating, LLC**  
**Canvasback 13 Federal #002H**  
**Eddy County, New Mexico**  
**Unit Letter "A", Section 13, Township 24 South, Range 31**  
**East Latitude 32.222781° North, Longitude 103.723086° West**  
**NMOCD Reference No. 2RP-4324**

Prepared For:

**COG Operating, LLC**  
600 W Illinois Avenue  
Midland, Texas 79701

Prepared By:

**TRC Environmental Corporation**  
10 Desta Drive, Suite 150E  
Midland, Texas 79705

**May 2018**



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Joel Lowry  
Senior Project Manager



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Curt Stanley  
Senior Project Manager

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## INTRODUCTION & BACKGROUND INFORMATION

TRC Environmental Corporation (TRC), on behalf of COG Operating, LLC (COG), has prepared this *Remediation Summary and Soil Closure Request* for the Site known as Canvasback 13 Federal #002H. The legal description of the Site is Unit Letter "A", Section 13, Township 24 South, Range 31 East, in Eddy County, New Mexico. The subject property is owned by the United State Department of the Interior and administered by the United States Bureau of Land Management (BLM). The GPS coordinates for the site are N 32.222781° W 103.723086°. A "Site Location Map" is provided as Figure 1.

On July 26, 2017, COG discovered a produced water release on a flowline near the Canvasback 13 Federal #002H well pad. The initial Release Notification and Corrective Action (Form C-141) indicated failure of a flowline resulted in the release of approximately eighteen (18) barrels (bbls) of produced water. During initial response activities, the flowline was repaired and approximately sixteen (16) bbls of produced water were recovered utilizing a vacuum truck. The release affected approximately three thousand (3,000) square feet (sq. ft.) of pasture land. A copy of the Form C-141 is provided in Appendix C.

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) did not identify any registered water wells in Section 13, Township 24 South, Range 31 East. A reference map utilized by the NMOCD indicates groundwater should be encountered between approximately three hundred fifty (350) feet (ft.) and three hundred seventy-five (375) ft. below ground surface (bgs). Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

No water wells were observed within one-thousand (1,000) feet of the Release Site. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

No surface water was observed within one-thousand (1,000) feet of the release. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion. Based on the NMOCD Site Classification criteria, the Release Site soil remediation levels are 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for benzene, toluene, ethylbenzene and xylenes (BTEX), and five thousand (5,000) mg/kg for total petroleum hydrocarbons (TPH). Per NMOCD request, chloride remediation levels for the Release Site will be six hundred (600) mg/kg.

On December 28, 2017, TRC conducted an initial investigation at the site. During the initial investigation, a series of hand-augered soil bores (SP #2 and SP #4) were advanced within the release margins in an effort to delineate the vertical extent of soil impact. During the advancement of the soil bores, eight (8) soil samples (SP #2 @ Surf., SP #2 @ 1', SP #2 @ 2', SP #2 @ 3', SP #4 @ Surf., SP #4 @ 1', SP #4 @ 2' and SP #4 @ 3') were collected and submitted to Xenco Laboratories in Midland, Texas for determination of chloride using Method 300/300.1. Laboratory analytical results indicated chloride concentrations ranged from 439 mg/kg for soil sample SP #4 @ 3' to less than the applicable laboratory reporting limit (RL) in soil samples SP #4 @ Surface and SP #4 @ 1'. Chloride concentrations were below the NMOCD RRAL in each of the submitted soil samples. Laboratory analytical results are summarized in Table 1 - Concentrations of Benzene,

BTEX, TPH and Chloride in Soil. Laboratory analytical reports are provided in Appendix A. A “Site & Sample Location Map” is provided as Figure 2.

Soil samples SP #2 @ Surf. and SP #4 @ Surf. were also analyzed for concentrations of TPH and BTEX using methods Method SW 846-8015M and Method SW 846-8021B, respectively. Laboratory analytical results indicated TPH and BTEX concentrations were less than the applicable laboratory RL in each of the submitted soil samples.

In addition, TRC collected four (4) soil samples (North @ 1’, South @ 1’, East @ 1’ and West @ 1’) from the edges of the inferred release margins and submitted the soil samples to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations were less than the applicable laboratory RL in each of the submitted soil samples, with the exception of soil sample East @ 1’, which exhibited a chloride concentration of 29.1 mg/kg. Chloride concentrations were below the NMOCD RRAL in each of the submitted soil samples.

On January 19, 2018, TRC revisited the site in an effort to determine the extent soil was affected above the NMOCD RRAL for chloride. During the site visit, a series of investigated hand-augered soil bores were advanced within the release margins. During the advancement of the investigative hand-augered soil bores, soil samples were collected and field screened for concentrations of chloride. Chloride field screen results indicated soil samples collected from one soil bore (SP-1) exhibited chloride concentrations above the NMOCD RRAL. Based on chloride field screen results, three (3) soil samples (SP-1 @ 1’, SP-1 @ 2’, and SP-1 @ 3’) were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 1,330 mg/kg in soil sample SP-1 @ 2’ to 153 mg/kg in soil sample SP-1 @ 3’. Chloride concentrations were below the NMOCD RRAL in each of the submitted soil samples, with the exception of soil samples SP-1 @ 1’ (603 mg/kg) and SP-1 @ 2’ (1,330 mg/kg).

## **SUMMARY OF SOIL REMEDIATION ACTIVITIES**

On April 3, 2018, remediation activities commenced at the Release Site. Impacted soil within the release margins in the area represented by sample point SP-1 was excavated and transported to an NMOCD-permitted facility for disposal. The floor and sidewalls of the excavated area were advanced until chloride field test results indicated chloride concentrations were below the NMOCD RRAL.

On April 4, 2018, TRC collected five (5) excavation confirmation soil samples (FL @ 3’, ESW, WSW, SSW and NSW) from the floor and sidewalls of the excavated area. The collected soil samples were submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations. Laboratory analytical results indicated BTEX and TPH concentrations were less than the applicable laboratory RL in each of the submitted soil samples. Analytical results indicated chloride concentrations ranged from 249 mg/kg in soil sample NSW to less than the applicable laboratory RL in soil sample NSW. BTEX, TPH and chloride concentrations were below the NMOCD RRAL in each of the submitted soil samples. Upon collecting the required confirmation soil samples, the excavated area was backfilled with locally-sourced, non-impacted material. Prior to backfilling, the final dimensions of the excavated area were approximately thirty-five (35) ft. in length, ten (10) ft. to twenty (20) ft. in width and three (3) ft. in depth

On April 5, 2018, approximately thirty-six (36) cubic yards (cy) of impacted soil was transported to R360's Halfway Bar Facility for disposal.

### **SITE CLOSURE REQUEST**

Laboratory analytical results from confirmation soil samples collected from the floor and sidewalls of the excavated areas indicated benzene, BTEX, TPH and/or chloride concentrations were below the NMOCD RRAL in each of the submitted soil samples. Upon collecting the required excavation confirmation soil samples, the excavated area was backfilled with locally-sourced, non-impacted material. Based on laboratory analytical results and field activities conducted to date, TRC recommends COG provide copies of this *Remediation Summary and Soil Closure Request* to the NMOCD and BLM and request closure status to the Canvasback 13 Federal #002H Site.

### **LIMITATIONS**

TRC has prepared this Remediation Summary and Soil Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

TRC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. TRC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. TRC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. TRC also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of COG Operating, LLC. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of TRC and/or COG Operating, LLC.

**DISTRIBUTION**

- Copy 1: Mike Bratcher  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division, District 2  
811 S. First Street  
Artesia, NM 88210
- Copy 2: Shelly Tucker  
Carlsbad Field Office  
United States Department of the Interior  
Bureau of Land Management  
620 E. Greene Street  
Carlsbad, New Mexico 88220
- Copy 3: Rebecca Haskell  
COG Operating, LLC  
600 W. Illinois Avenue  
Midland, Texas 79701
- Copy 4: TRC Environmental Corporation  
10 Desta Drive, Suite 150 E  
Midland, Texas 79705



Figure 1  
 Site Location Map  
 COG Operating, LLC  
 Canvasback 13 Federal #002H  
 Eddy County, New Mexico

|                                     |                |
|-------------------------------------|----------------|
| Scale 1" = ~5,000'                  |                |
| Drafted by: ZC                      | Checked by: JL |
| Draft: January 12, 2018             |                |
| Lat. N 32.222781 Long. W 103.723080 |                |
| UL "A", Sec. 13, T24S, R31E         |                |
| TRC Proj. No.: 293104               |                |



2057 Commerce Drive  
 Midland, Texas 79703  
 432.520.7720



**LEGEND:** ■ Initial Investigation Sample Location  
 ● Horizontal Delineation Sample Location  
 - - - Excavated Area

Figure 2  
 Site & Sample Location Map  
 COG Operating, LLC  
 Canvasback 13 Federal #002H  
 Eddy County, New Mexico

|                                     |                |
|-------------------------------------|----------------|
| Scale 1" = ~50'                     |                |
| Drafted by: ZC                      | Checked by: JL |
| Draft: January 16, 2018             |                |
| Lat. N 32.222781 Long. W 103.723080 |                |
| UL "A", Sec. 13, T24S, R31E         |                |
| TRC Proj. No.: 293104               |                |



2057 Commerce Drive  
 Midland, Texas 79703  
 432.520.7720

**TABLE 1**  
**CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL**

**COG OPERATING, LLC**  
**CANVASBACK 13 FEDERAL #002H (1RP-4324)**  
**EDDY COUNTY, NEW MEXICO**

*All concentrations are reported in mg/Kg*

| SAMPLE LOCATION                                    | SAMPLE DATE | SOIL STATUS | METHODS: SW 846-8021b |          |               |                |            |            | METHOD: SW 8015M                        |  |  |   | E 300.1    |              |
|--|-------------|-------------|-----------------------|----------|---------------|----------------|------------|------------|---|--|--|---|------------|--------------|
|  |             |             | BENZENE               | TOLUENE  | ETHYL-BENZENE | m, p - XYLENES | o - XYLENE | TOTAL BTEX | TPH GRO C <sub>6</sub> -C <sub>10</sub> | TPH DRO C <sub>10</sub> -C <sub>28</sub> | TPH ORO C <sub>28</sub> -C <sub>35</sub> | TOTAL TPH C <sub>6</sub> -C <sub>35</sub> | CHLORIDE   |              |
| SP #2 @ Surface                                    | 12/28/17    | In-Situ     | <0.00199              | <0.00199 | <0.00199      | <0.00398       | <0.00199   | <0.00398   | <15.0                                   | <15.0                                    | <15.0                                    | <15.0                                     | 40.1       |              |
| SP #2 @ 1'   | 12/28/17    | In-Situ     | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | 419        |              |
| SP #2 @ 2'   | 12/28/17    | In-Situ     | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | 422        |              |
| SP #2 @ 3'   | 12/28/17    | In-Situ     | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | 36.8       |              |
| North @ 1'   | 12/28/17    | In-Situ     | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | <4.96      |              |
| East @ 1'  | 12/28/17    | In-Situ     | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | 29.1       |              |
| South @ 1'   | 12/28/17    | In-Situ     | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | <4.96      |              |
| West @ 1'  | 12/28/17    | In-Situ     | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | <5.00      |              |
| SP #4 @ Surface                                    | 12/28/17    | In-Situ     | <0.00201              | <0.00201 | <0.00201      | <0.00402       | <0.00201   | <0.00402   | <15.0                                   | <15.0                                    | <15.0                                    | <15.0                                     | <4.93      |              |
| SP #4 @ 1'   | 12/28/17    | In-Situ     | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | <4.90      |              |
| SP #4 @ 2'   | 12/28/17    | In-Situ     | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | 19.8       |              |
| SP #4 @ 3'   | 12/28/17    | In-Situ     | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | 439        |              |
| <b>SP-1 @ 1'</b>                                   |             |             |                       |          |               |                |            |            |   |  |  |   |            |              |
| SP-1 @ 1'  | 01/19/18    | Excavated   | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | -          | <b>603</b>   |
| SP-1 @ 2'  | 01/19/18    | Excavated   | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | -          | <b>1,330</b> |
| SP-1 @ 3'  | 01/19/18    | In-Situ     | -                     | -        | -             | -              | -          | -          | -                                       | -  | -  | -   | -          | 153          |
| <b>FL @ 3'</b>                                     |             |             |                       |          |               |                |            |            |   |  |  |   |            |              |
| FL @ 3'  | 04/04/18    | In-Situ     | <0.0190               | <0.0190  | <0.0190       | <0.0381        | <0.0190    | <0.0190    | <3.81                                   | <25.2                                    | <25.2                                    | <25.2                                     | 170        |              |
| ESW  | 04/04/18    | In-Situ     | <0.0189               | <0.0189  | <0.0189       | <0.0377        | <0.0189    | <0.0189    | <3.77                                   | <25.0                                    | <25.0                                    | <25.0                                     | 101        |              |
| WSW  | 04/04/18    | In-Situ     | <0.0196               | <0.0196  | <0.0196       | <0.0393        | <0.0196    | <0.0196    | <3.93                                   | <25.0                                    | <25.0                                    | <25.0                                     | 124        |              |
| SSW  | 04/04/18    | In-Situ     | <0.0186               | <0.0186  | <0.0186       | <0.0372        | <0.0186    | <0.0186    | <3.72                                   | <24.9                                    | <24.9                                    | <24.9                                     | 249        |              |
| NSW  | 04/04/18    | In-Situ     | <0.0194               | <0.0194  | <0.0194       | <0.0388        | <0.0194    | <0.0194    | <3.88                                   | <25.0                                    | <25.0                                    | <25.0                                     | <25.0      |              |
| <b>NMOCD Recommended Remediation Action Levels</b> |             |             | <b>10</b>             |          |               |                |            | <b>50</b>  |   |  |  | <b>5,000</b>                              | <b>600</b> |              |



# Certificate of Analysis Summary 572383



TRC Solutions, Inc, Midland, TX

Project Name: Canvasback 13 Fed 2H

**Project Id:**  
**Contact:** Joel Lowry  
**Project Location:** Eddy Co, NM

**Date Received in Lab:** Fri Dec-29-17 12:45 pm  
**Report Date:** 09-JAN-18  
**Project Manager:** Kelsey Brooks

|                            |                   |                 |                 |  |  |  |
|----------------------------|-------------------|-----------------|-----------------|--|--|--|
| <b>Analysis Requested</b>  | <b>Lab Id:</b>    | 572383-001      | 572383-002      |  |  |  |
|                            | <b>Field Id:</b>  | SP #4 @ 2'      | SP #4 @ 3'      |  |  |  |
|                            | <b>Depth:</b>     | 2- ft           | 3- ft           |  |  |  |
|                            | <b>Matrix:</b>    | SOIL            | SOIL            |  |  |  |
|                            | <b>Sampled:</b>   | Dec-28-17 10:50 | Dec-28-17 10:55 |  |  |  |
| <b>Chloride by EPA 300</b> | <b>Extracted:</b> | Jan-03-18 11:00 | Jan-03-18 11:00 |  |  |  |
|                            | <b>Analyzed:</b>  | Jan-03-18 12:47 | Jan-03-18 13:15 |  |  |  |
|                            | <b>Units/RL:</b>  | mg/kg RL        | mg/kg RL        |  |  |  |
| Chloride                   |                   | 19.8 4.91       | 439 4.91        |  |  |  |

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks  
 Project Manager

# Analytical Report 572383

for  
**TRC Solutions, Inc**

**Project Manager: Joel Lowry**

**Canvasback 13 Fed 2H**

**09-JAN-18**

Collected By: Client



**1211 W. Florida Ave, Midland TX 79701**

Xenco-Houston (EPA Lab code: TX00122):  
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)  
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):  
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)  
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)  
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)  
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)  
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



09-JAN-18

Project Manager: **Joel Lowry**  
**TRC Solutions, Inc**  
2057 Commerce  
Midland, TX 79703

Reference: XENCO Report No(s): **572383**  
**Canvasback 13 Fed 2H**  
Project Address: Eddy Co, NM

**Joel Lowry:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 572383. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 572383 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

**Kelsey Brooks**

Project Manager

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# Sample Cross Reference 572383

TRC Solutions, Inc, Midland, TX

Canvasback 13 Fed 2H

| Sample Id  | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|------------|--------|----------------|--------------|---------------|
| SP #4 @ 2' | S      | 12-28-17 10:50 | 2 ft         | 572383-001    |
| SP #4 @ 3' | S      | 12-28-17 10:55 | 3 ft         | 572383-002    |



## CASE NARRATIVE

*Client Name: TRC Solutions, Inc*

*Project Name: Canvasback 13 Fed 2H*

Project ID:  
Work Order Number(s): 572383

Report Date: 09-JAN-18  
Date Received: 12/29/2017

---

### **Sample receipt non conformances and comments:**

---

### **Sample receipt non conformances and comments per sample:**

None



# Certificate of Analytical Results 572383



## TRC Solutions, Inc, Midland, TX

Canvasback 13 Fed 2H

Sample Id: **SP #4 @ 2'**

Matrix: Soil

Date Received: 12.29.17 12.45

Lab Sample Id: 572383-001

Date Collected: 12.28.17 10.50

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: LRI

% Moisture:

Analyst: LRI

Date Prep: 01.03.18 11.00

Basis: Wet Weight

Seq Number: 3037363

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | 19.8   | 4.91 | mg/kg | 01.03.18 12.47 |      | 1   |



# Certificate of Analytical Results 572383



## TRC Solutions, Inc, Midland, TX

Canvasback 13 Fed 2H

Sample Id: **SP #4 @ 3'**

Matrix: Soil

Date Received: 12.29.17 12.45

Lab Sample Id: 572383-002

Date Collected: 12.28.17 10.55

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: LRI

% Moisture:

Analyst: LRI

Date Prep: 01.03.18 11.00

Basis: Wet Weight

Seq Number: 3037363

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | 439    | 4.91 | mg/kg | 01.03.18 13.15 |      | 1   |



## Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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 5332 Blackberry Drive, San Antonio TX 78238  
 1211 W Florida Ave, Midland, TX 79701  
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

| Phone          | Fax            |
|----------------|----------------|
| (281) 240-4200 | (281) 240-4280 |
| (214) 902 0300 | (214) 351-9139 |
| (210) 509-3334 | (210) 509-3335 |
| (432) 563-1800 | (432) 563-1713 |
| (602) 437-0330 |                |



TRC Solutions, Inc  
Canvasback 13 Fed 2H

Analytical Method: Chloride by EPA 300

Seq Number: 3037363

MB Sample Id: 7636873-1-BLK

Matrix: Solid

LCS Sample Id: 7636873-1-BKS

Prep Method: E300P

Date Prep: 01.03.18

LCSD Sample Id: 7636873-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|----------------|------|
| Chloride  | <5.00     | 250          | 236        | 94       | 234         | 94        | 90-110 | 1    | 20        | mg/kg | 01.03.18 10:47 |      |

Analytical Method: Chloride by EPA 300

Seq Number: 3037363

Parent Sample Id: 572383-001

Matrix: Soil

MS Sample Id: 572383-001 S

Prep Method: E300P

Date Prep: 01.03.18

MSD Sample Id: 572383-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|----------------|------|
| Chloride  | 19.8          | 246          | 269       | 101     | 270        | 102      | 90-110 | 0    | 20        | mg/kg | 01.03.18 12:54 |      |

Analytical Method: Chloride by EPA 300

Seq Number: 3037363

Parent Sample Id: 572416-006

Matrix: Soil

MS Sample Id: 572416-006 S

Prep Method: E300P

Date Prep: 01.03.18

MSD Sample Id: 572416-006 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|----------------|------|
| Chloride  | <4.90         | 245          | 241       | 98      | 241        | 98       | 90-110 | 0    | 20        | mg/kg | 01.03.18 11:16 |      |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery

$$[D] = 100 * (C - A) / B$$

$$RPD = 200 * | (C - E) / (C + E) |$$

$$[D] = 100 * (C) / [B]$$

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



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 Midland, Texas (432-704-5251)  
[www.xenco.com](http://www.xenco.com)

Phoenix, Arizona (480-355-0900)

| Client / Reporting Information   |                                | Project Information   |            | Analytical Information   |        | Matrix Codes   |     |  |      |  |      |  |      |  |           |  |           |   |  |
|--|--------------------------------|---|------------|--|--------|--|-----|--|------|--|------|--|------|--|-----------|--|-----------|---|--|
| Company Name / Branch: TRC Environmental<br>Company Address: 2057 Commerce Drive Midland, TX 79703<br>Email: jlowry@trcsolutions.com<br>Project Contact: Joel Lowry<br>Samplers Name: Joel Lowry   |                                | Project Name/Number: Canvaback 13 Fed 2H<br>Project Location: Eddy County, New M<br>Invoice To: COG C/O Becky Haskell<br>Invoice: |            | Xenco Quote #<br>Xenco Job #   |        | S123383  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| No.  | Field ID / Point of Collection | Sample Depth  | Date       | Time   | Matrix | # of bottles   | HCI | NaOH/Zn Acetate  | HNO3 | H2SO4  | NaOH | NaHSO4   | MEOH | NONE   | TPH8015 M | CLORIDE E300   | BTEX 8021 | Notes   |  |
| 1  | SP #4 @ 2'                     | 2'  | 12/28/2017 | 10:50  | s      | 1  |     |  |      |  |      |  |      |  |           | X  |           |   |  |
| 2  | SP #4 @ 3'                     | 3'  | 12/28/2017 | 10:55  | s      | 1  |     |  |      |  |      |  |      |  |           | X  |           |   |  |
| 3  |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| 4  |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| 5  |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| 6  |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| 7  |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| 8  |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| 9  |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| 10   |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| Turnaround Time (Business days)  |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| Data Deliverable Information   |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| Notes:   |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| <input type="checkbox"/> Same Day TAT <input type="checkbox"/> 6 Day TAT<br><input type="checkbox"/> Next Day EMERGENCY <input type="checkbox"/> 7 Day TAT<br><input type="checkbox"/> 2 Day EMERGENCY <input checked="" type="checkbox"/> Contract TAT<br><input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> TRRP Checklist<br>TAT Starts Day received by Lab, if received by 5:00 pm  |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY  |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| Relinquished by Sampler: <i>[Signature]</i><br>Relinquished by: <i>[Signature]</i>   |                                | Date/Time: <i>12/28/17</i><br>Date/Time: <i>12/28/17</i>  |            | Received By: <i>1</i> <i>Anthony Cox</i><br>Received By: <i>2</i> <i>Becky Haskell</i> |        | Relinquished By: <i>3</i> <i>Becky Haskell</i><br>Relinquished By: <i>4</i> <i>Becky Haskell</i> |     | Date/Time: <i>12/28/17</i><br>Date/Time: <i>12/28/17</i> |      | Received By: <i>5</i> <i>Becky Haskell</i><br>Received By: <i>6</i> <i>Becky Haskell</i> |      | Date/Time: <i>12/28/17</i><br>Date/Time: <i>12/28/17</i> |      | Received By: <i>7</i> <i>Becky Haskell</i><br>Received By: <i>8</i> <i>Becky Haskell</i> |           | Date/Time: <i>12/28/17</i><br>Date/Time: <i>12/28/17</i> |           | Received By: <i>9</i> <i>Becky Haskell</i><br>Received By: <i>10</i> <i>Becky Haskell</i> |  |
| Relinquished by: _____ Date Time: _____<br>Relinquished by: _____ Date Time: _____  |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |
| Notice: Signatures of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract. |                                |   |            |  |        |  |     |  |      |  |      |  |      |  |           |  |           |   |  |



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| Client / Reporting Information   |            | Project Information  |         | Analytical Information                          |   | Matrix Codes  |  |
|--|------------|--|---------|---|---|---|--|
| Company Name / Branch: TRC Environmental<br>Company Address: 2057 Commerce Drive Midland, TX 79703<br>Email: jlowry@trcsolutions.com<br>Project Contact: Joel Lowry<br>Samplers Name: Joel Lowry |            | Project Name/Number: Canvasback 13 Fed 2H<br>Project Location: Eddy County, New M<br>Invoice To: COG C/O Becky Haskell<br>Invoice:                           |         | Xenco Quote #<br>Xenco Job #                    |   | Matrix Codes  |  |
| No. Field ID / Point of Collection   |            | Collection Date Time Matrix # of bottles HCl NaOH/Zn Acetate HNO3 H2SO4 NaOH NaHSO4 MECH NONE  |         | TPH8015 M<br>CLORIDE E300<br>BTEX 8021          |   | W = Water<br>S = Soil/Sed/Solid<br>GW = Ground Water<br>DW = Drinking Water<br>P = Product<br>SW = Surface water<br>SL = Sludge<br>OW = Ocean/Sea Water<br>O = Oil<br>WW = Waste Water<br>A = Air |  |
| 1  | SP #4 @ 2' | 12/28/2017   | 10:50 s | 1   | X |   |  |
| 2  | SP #4 @ 3' | 12/28/2017   | 10:55 s | 1   | X |   |  |
| 3  |            |  |         |   |   |   |  |
| 4  |            |  |         |   |   |   |  |
| 5  |            |  |         |   |   |   |  |
| 6  |            |  |         |   |   |   |  |
| 7  |            |  |         |   |   |   |  |
| 8  |            |  |         |   |   |   |  |
| 9  |            |  |         |   |   |   |  |
| 10   |            |  |         |   |   |   |  |
| <input type="checkbox"/> Same Day TAT<br><input type="checkbox"/> Next Day EMERGENCY<br><input type="checkbox"/> 2 Day EMERGENCY<br><input checked="" type="checkbox"/> 3 Day EMERGENCY          |            | <input type="checkbox"/> 6 Day TAT<br><input type="checkbox"/> 7 Day TAT<br><input type="checkbox"/> Contract TAT<br><input type="checkbox"/> TRRP Checklist |         | Data Deliverable Information                    |   | Notes:<br>email: R-Haskell@concho.com jlowry@trcsolutions.com<br>Temp: 2.5 IR ID:R-8<br>CF:(0-6: -0.2°C)<br>(6-23: +0.2°C)<br>Corrected Temp: 2.3   |  |
| TAT Starts Day received by Lab, if received by 5:00 pm   |            | Date/Time: 12/28/17<br>Received By: BRITTONY COX   |         | Date/Time: 12-28-17<br>Received By: [Signature] |   | Date/Time: 1-02-17<br>Received By: [Signature]  |  |
| Relinquished by: [Signature]   |            | Relinquished By: [Signature]   |         | Relinquished By: [Signature]                    |   | Relinquished By: [Signature]  |  |
| Date Time: 12/28/17  |            | Date Time: 12-28-17  |         | Date Time: 1-02-17                              |   | Date Time: 12:00  |  |
| Relinquished by: [Signature]   |            | Received By: [Signature]   |         | Received By: [Signature]                        |   | Received By: [Signature]  |  |
| Date Time: 12/28/17  |            | Date Time: 12-28-17  |         | Date Time: 1-02-17                              |   | Date Time: 12:00  |  |
| Relinquished by: [Signature]   |            | Received By: [Signature]   |         | Received By: [Signature]                        |   | Received By: [Signature]  |  |
| Date Time: 12/28/17  |            | Date Time: 12-28-17  |         | Date Time: 1-02-17                              |   | Date Time: 12:00  |  |

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$9 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.



# XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 12/29/2017 12:45:00 PM

Work Order #: 572383

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

### Sample Receipt Checklist

### Comments

|   |     |
|---|-----|
| #1 *Temperature of cooler(s)?                           | .7  |
| #2 *Shipping container in good condition?               | Yes |
| #3 *Samples received on ice?                            | Yes |
| #4 *Custody Seals intact on shipping container/ cooler? | Yes |
| #5 Custody Seals intact on sample bottles?              | Yes |
| #6*Custody Seals Signed and dated?                      | Yes |
| #7 *Chain of Custody present?                           | Yes |
| #8 Any missing/extra samples?                           | No  |
| #9 Chain of Custody signed when relinquished/ received? | Yes |
| #10 Chain of Custody agrees with sample labels/matrix?  | Yes |
| #11 Container label(s) legible and intact?              | Yes |
| #12 Samples in proper container/ bottle?                | Yes |
| #13 Samples properly preserved?                         | Yes |
| #14 Sample container(s) intact?                         | Yes |
| #15 Sufficient sample amount for indicated test(s)?     | Yes |
| #16 All samples received within hold time?              | Yes |
| #17 Subcontract of sample(s)?                           | No  |
| #18 Water VOC samples have zero headspace?              | N/A |

\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by: Shawnee Smith  
Shawnee Smith

Date: 01/02/2018

Checklist reviewed by: Kelsey Brooks  
Kelsey Brooks

Date: 01/02/2018



# Certificate of Analysis Summary 572384



TRC Solutions, Inc, Midland, TX

Project Name: Canvasback 13 FED 2H

**Project Id:**  
**Contact:** Joel Lowry  
**Project Location:** Eddy Co, NM

**Date Received in Lab:** Fri Dec-29-17 12:45 pm  
**Report Date:** 10-JAN-18  
**Project Manager:** Kelsey Brooks

| <i>Analysis Requested</i>         | <i>Lab Id:</i>    | 572384-001       | 572384-002      | 572384-003      | 572384-004      | 572384-005      | 572384-006      |
|-----------------------------------|-------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                   | <i>Field Id:</i>  | SP #2 @ SUR      | SP #2 @ 1'      | SP #2 @ 2'      | SP #2 @ 3'      | North @ 1'      | East @ 1'       |
|                                   | <i>Depth:</i>     | 0- In            | 1- ft           |
|                                   | <i>Matrix:</i>    | SOIL             | SOIL            | SOIL            | SOIL            | SOIL            | SOIL            |
|                                   | <i>Sampled:</i>   | Dec-28-17 10:00  | Dec-28-17 10:05 | Dec-28-17 10:10 | Dec-28-17 10:15 | Dec-28-17 10:20 | Dec-28-17 10:25 |
| <b>BTEX by EPA 8021B</b>          | <i>Extracted:</i> | Jan-02-18 16:00  |                 |                 |                 |                 |                 |
|                                   | <i>Analyzed:</i>  | Jan-03-18 12:17  |                 |                 |                 |                 |                 |
|                                   | <i>Units/RL:</i>  | mg/kg RL         |                 |                 |                 |                 |                 |
| Benzene                           |                   | <0.00199 0.00199 |                 |                 |                 |                 |                 |
| Toluene                           |                   | <0.00199 0.00199 |                 |                 |                 |                 |                 |
| Ethylbenzene                      |                   | <0.00199 0.00199 |                 |                 |                 |                 |                 |
| m,p-Xylenes                       |                   | <0.00398 0.00398 |                 |                 |                 |                 |                 |
| o-Xylene                          |                   | <0.00199 0.00199 |                 |                 |                 |                 |                 |
| Total Xylenes                     |                   | <0.00199 0.00199 |                 |                 |                 |                 |                 |
| Total BTEX                        |                   | <0.00199 0.00199 |                 |                 |                 |                 |                 |
| <b>Chloride by EPA 300</b>        | <i>Extracted:</i> | Jan-02-18 16:30  | Jan-02-18 16:30 | Jan-02-18 16:30 | Jan-02-18 16:30 | Jan-02-18 16:30 | Jan-02-18 16:30 |
|                                   | <i>Analyzed:</i>  | Jan-02-18 21:58  | Jan-02-18 22:19 | Jan-02-18 22:26 | Jan-02-18 22:47 | Jan-02-18 22:54 | Jan-02-18 23:01 |
|                                   | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL        | mg/kg RL        | mg/kg RL        | mg/kg RL        | mg/kg RL        |
| Chloride                          |                   | 40.1 4.99        | 419 4.98        | 422 4.97        | 36.8 4.97       | <4.96 4.96      | 29.1 4.99       |
| <b>TPH by SW8015 Mod</b>          | <i>Extracted:</i> | Jan-08-18 12:00  |                 |                 |                 |                 |                 |
|                                   | <i>Analyzed:</i>  | Jan-09-18 00:14  |                 |                 |                 |                 |                 |
|                                   | <i>Units/RL:</i>  | mg/kg RL         |                 |                 |                 |                 |                 |
| Gasoline Range Hydrocarbons (GRO) |                   | <15.0 15.0       |                 |                 |                 |                 |                 |
| Diesel Range Organics (DRO)       |                   | <15.0 15.0       |                 |                 |                 |                 |                 |
| Oil Range Hydrocarbons (ORO)      |                   | <15.0 15.0       |                 |                 |                 |                 |                 |
| Total TPH                         |                   | <15 15           |                 |                 |                 |                 |                 |

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Kelsey Brooks  
Project Manager



# Certificate of Analysis Summary 572384



TRC Solutions, Inc, Midland, TX

Project Name: Canvasback 13 FED 2H

**Project Id:**  
**Contact:** Joel Lowry  
**Project Location:** Eddy Co, NM

**Date Received in Lab:** Fri Dec-29-17 12:45 pm  
**Report Date:** 10-JAN-18  
**Project Manager:** Kelsey Brooks

| <i>Analysis Requested</i>         | <i>Lab Id:</i>    | 572384-007      | 572384-008      | 572384-009       | 572384-010      |  |  |
|-----------------------------------|-------------------|-----------------|-----------------|------------------|-----------------|--|--|
|                                   | <i>Field Id:</i>  | South @ 1'      | West @ 1'       | SP #4 @ SUR      | SP #4 @1'       |  |  |
|                                   | <i>Depth:</i>     | 1- ft           | 1- ft           | 1- ft            | 1- ft           |  |  |
|                                   | <i>Matrix:</i>    | SOIL            | SOIL            | SOIL             | SOIL            |  |  |
|                                   | <i>Sampled:</i>   | Dec-28-17 10:30 | Dec-28-17 10:35 | Dec-28-17 10:40  | Dec-28-17 10:45 |  |  |
| <b>BTEX by EPA 8021B</b>          | <i>Extracted:</i> |                 |                 | Jan-02-18 16:00  |                 |  |  |
|                                   | <i>Analyzed:</i>  |                 |                 | Jan-03-18 12:36  |                 |  |  |
|                                   | <i>Units/RL:</i>  |                 |                 | mg/kg RL         |                 |  |  |
| Benzene                           |                   |                 |                 | <0.00201 0.00201 |                 |  |  |
| Toluene                           |                   |                 |                 | <0.00201 0.00201 |                 |  |  |
| Ethylbenzene                      |                   |                 |                 | <0.00201 0.00201 |                 |  |  |
| m,p-Xylenes                       |                   |                 |                 | <0.00402 0.00402 |                 |  |  |
| o-Xylene                          |                   |                 |                 | <0.00201 0.00201 |                 |  |  |
| Total Xylenes                     |                   |                 |                 | <0.00201 0.00201 |                 |  |  |
| Total BTEX                        |                   |                 |                 | <0.00201 0.00201 |                 |  |  |
| <b>Chloride by EPA 300</b>        | <i>Extracted:</i> | Jan-02-18 16:30 | Jan-02-18 16:30 | Jan-02-18 16:30  | Jan-02-18 16:30 |  |  |
|                                   | <i>Analyzed:</i>  | Jan-02-18 23:08 | Jan-02-18 23:15 | Jan-02-18 23:22  | Jan-02-18 23:29 |  |  |
|                                   | <i>Units/RL:</i>  | mg/kg RL        | mg/kg RL        | mg/kg RL         | mg/kg RL        |  |  |
| Chloride                          |                   | <4.96 4.96      | <5.00 5.00      | <4.93 4.93       | <4.90 4.90      |  |  |
| <b>TPH by SW8015 Mod</b>          | <i>Extracted:</i> |                 |                 | Jan-03-18 10:00  |                 |  |  |
|                                   | <i>Analyzed:</i>  |                 |                 | Jan-04-18 00:37  |                 |  |  |
|                                   | <i>Units/RL:</i>  |                 |                 | mg/kg RL         |                 |  |  |
| Gasoline Range Hydrocarbons (GRO) |                   |                 |                 | <15.0 15.0       |                 |  |  |
| Diesel Range Organics (DRO)       |                   |                 |                 | <15.0 15.0       |                 |  |  |
| Oil Range Hydrocarbons (ORO)      |                   |                 |                 | <15.0 15.0       |                 |  |  |
| Total TPH                         |                   |                 |                 | <15 15           |                 |  |  |

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks  
Project Manager

# Analytical Report 572384

for  
**TRC Solutions, Inc**

**Project Manager: Joel Lowry**

**Canvasback 13 FED 2H**

**10-JAN-18**

Collected By: Client



**1211 W. Florida Ave, Midland TX 79701**

Xenco-Houston (EPA Lab code: TX00122):  
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)  
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):  
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)  
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)  
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)  
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)  
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



10-JAN-18

Project Manager: **Joel Lowry**  
**TRC Solutions, Inc**  
2057 Commerce  
Midland, TX 79703

Reference: XENCO Report No(s): **572384**  
**Canvasback 13 FED 2H**  
Project Address: Eddy Co, NM

**Joel Lowry:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 572384. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 572384 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

**Kelsey Brooks**

Project Manager

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*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



# Sample Cross Reference 572384

TRC Solutions, Inc, Midland, TX

Canvasback 13 FED 2H

| Sample Id   | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-------------|--------|----------------|--------------|---------------|
| SP #2 @ SUR | S      | 12-28-17 10:00 | 0 In         | 572384-001    |
| SP #2 @ 1'  | S      | 12-28-17 10:05 | 1 ft         | 572384-002    |
| SP #2 @ 2'  | S      | 12-28-17 10:10 | 1 ft         | 572384-003    |
| SP #2 @ 3'  | S      | 12-28-17 10:15 | 1 ft         | 572384-004    |
| North @ 1'  | S      | 12-28-17 10:20 | 1 ft         | 572384-005    |
| East @ 1'   | S      | 12-28-17 10:25 | 1 ft         | 572384-006    |
| South @ 1'  | S      | 12-28-17 10:30 | 1 ft         | 572384-007    |
| West @ 1'   | S      | 12-28-17 10:35 | 1 ft         | 572384-008    |
| SP #4 @ SUR | S      | 12-28-17 10:40 | 1 ft         | 572384-009    |
| SP #4 @ 1'  | S      | 12-28-17 10:45 | 1 ft         | 572384-010    |



## CASE NARRATIVE

*Client Name: TRC Solutions, Inc*

*Project Name: Canvasback 13 FED 2H*

Project ID:  
Work Order Number(s): 572384

Report Date: 10-JAN-18  
Date Received: 12/29/2017

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### **Sample receipt non conformances and comments:**

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### **Sample receipt non conformances and comments per sample:**

None

### **Analytical non conformances and comments:**

Batch: LBA-3037402 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



# Certificate of Analytical Results 572384



## TRC Solutions, Inc, Midland, TX

Canvasback 13 FED 2H

Sample Id: **SP #2 @ SUR**

Matrix: Soil

Date Received: 12.29.17 12.45

Lab Sample Id: 572384-001

Date Collected: 12.28.17 10.00

Sample Depth: 0 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.02.18 16.30

Basis: Wet Weight

Seq Number: 3037498

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | 40.1   | 4.99 | mg/kg | 01.02.18 21.58 |      | 1   |

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.08.18 12.00

Basis: Wet Weight

Seq Number: 3037897

| Parameter                         | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------------------------------|------------|--------|------|-------|----------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610     | <15.0  | 15.0 | mg/kg | 01.09.18 00.14 | U    | 1   |
| Diesel Range Organics (DRO)       | C10C28DRO  | <15.0  | 15.0 | mg/kg | 01.09.18 00.14 | U    | 1   |
| Oil Range Hydrocarbons (ORO)      | PHCG2835   | <15.0  | 15.0 | mg/kg | 01.09.18 00.14 | U    | 1   |
| Total TPH                         | PHC635     | <15    | 15   | mg/kg | 01.09.18 00.14 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date  | Flag |
|----------------|------------|------------|-------|--------|----------------|------|
| 1-Chlorooctane | 111-85-3   | 106        | %     | 70-135 | 01.09.18 00.14 |      |
| o-Terphenyl    | 84-15-1    | 106        | %     | 70-135 | 01.09.18 00.14 |      |



# Certificate of Analytical Results 572384

## TRC Solutions, Inc, Midland, TX Canvasback 13 FED 2H

|                                      |                                |                               |
|--------------------------------------|--------------------------------|-------------------------------|
| Sample Id: <b>SP #2 @ SUR</b>        | Matrix: Soil                   | Date Received: 12.29.17 12.45 |
| Lab Sample Id: 572384-001            | Date Collected: 12.28.17 10.00 | Sample Depth: 0 In            |
| Analytical Method: BTEX by EPA 8021B |                                | Prep Method: SW5030B          |
| Tech: ALJ                            |                                | % Moisture:                   |
| Analyst: ALJ                         | Date Prep: 01.02.18 16.00      | Basis: Wet Weight             |
| Seq Number: 3037402                  |                                |                               |

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 01.03.18 12.17       | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 01.03.18 12.17       | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 01.03.18 12.17       | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 01.03.18 12.17       | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 01.03.18 12.17       | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 01.03.18 12.17       | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 01.03.18 12.17       | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 103               | %            | 80-120        | 01.03.18 12.17       |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 80-120        | 01.03.18 12.17       |             |     |



# Certificate of Analytical Results 572384



## TRC Solutions, Inc, Midland, TX

Canvasback 13 FED 2H

Sample Id: **SP #2 @ 1'**

Matrix: Soil

Date Received: 12.29.17 12.45

Lab Sample Id: 572384-002

Date Collected: 12.28.17 10.05

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.02.18 16.30

Basis: Wet Weight

Seq Number: 3037498

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | 419    | 4.98 | mg/kg | 01.02.18 22.19 |      | 1   |



# Certificate of Analytical Results 572384



## TRC Solutions, Inc, Midland, TX

Canvasback 13 FED 2H

Sample Id: **SP #2 @ 2'**

Matrix: Soil

Date Received: 12.29.17 12.45

Lab Sample Id: 572384-003

Date Collected: 12.28.17 10.10

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.02.18 16.30

Basis: Wet Weight

Seq Number: 3037498

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | 422    | 4.97 | mg/kg | 01.02.18 22.26 |      | 1   |



# Certificate of Analytical Results 572384



## TRC Solutions, Inc, Midland, TX

Canvasback 13 FED 2H

Sample Id: **SP #2 @ 3'**

Matrix: Soil

Date Received: 12.29.17 12.45

Lab Sample Id: 572384-004

Date Collected: 12.28.17 10.15

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.02.18 16.30

Basis: Wet Weight

Seq Number: 3037498

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | 36.8   | 4.97 | mg/kg | 01.02.18 22.47 |      | 1   |



# Certificate of Analytical Results 572384



## TRC Solutions, Inc, Midland, TX

Canvasback 13 FED 2H

Sample Id: **North @ 1'**

Matrix: Soil

Date Received: 12.29.17 12.45

Lab Sample Id: 572384-005

Date Collected: 12.28.17 10.20

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.02.18 16.30

Basis: Wet Weight

Seq Number: 3037498

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | <4.96  | 4.96 | mg/kg | 01.02.18 22.54 | U    | 1   |



# Certificate of Analytical Results 572384



## TRC Solutions, Inc, Midland, TX

Canvasback 13 FED 2H

Sample Id: **East @ 1'**  
Lab Sample Id: 572384-006

Matrix: Soil  
Date Collected: 12.28.17 10.25

Date Received: 12.29.17 12.45  
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.02.18 16.30

Basis: Wet Weight

Seq Number: 3037498

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | 29.1   | 4.99 | mg/kg | 01.02.18 23.01 |      | 1   |



# Certificate of Analytical Results 572384



## TRC Solutions, Inc, Midland, TX

Canvasback 13 FED 2H

Sample Id: **South @ 1'**

Matrix: Soil

Date Received: 12.29.17 12.45

Lab Sample Id: 572384-007

Date Collected: 12.28.17 10.30

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.02.18 16.30

Basis: Wet Weight

Seq Number: 3037498

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | <4.96  | 4.96 | mg/kg | 01.02.18 23.08 | U    | 1   |



# Certificate of Analytical Results 572384



## TRC Solutions, Inc, Midland, TX

Canvasback 13 FED 2H

Sample Id: West @ 1'

Matrix: Soil

Date Received: 12.29.17 12.45

Lab Sample Id: 572384-008

Date Collected: 12.28.17 10.35

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.02.18 16.30

Basis: Wet Weight

Seq Number: 3037498

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | <5.00  | 5.00 | mg/kg | 01.02.18 23.15 | U    | 1   |



# Certificate of Analytical Results 572384



## TRC Solutions, Inc, Midland, TX Canvasback 13 FED 2H

Sample Id: **SP #4 @ SUR** Matrix: Soil Date Received: 12.29.17 12.45  
 Lab Sample Id: 572384-009 Date Collected: 12.28.17 10.40 Sample Depth: 1 ft  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: OJS % Moisture:  
 Analyst: OJS Date Prep: 01.02.18 16.30 Basis: Wet Weight  
 Seq Number: 3037498

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | <4.93  | 4.93 | mg/kg | 01.02.18 23.22 | U    | 1   |

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P  
 Tech: JUM % Moisture:  
 Analyst: JUM Date Prep: 01.03.18 10.00 Basis: Wet Weight  
 Seq Number: 3037559

| Parameter                         | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------------------------------|------------|--------|------|-------|----------------|------|-----|
| Gasoline Range Hydrocarbons (GRO) | PHC610     | <15.0  | 15.0 | mg/kg | 01.04.18 00.37 | U    | 1   |
| Diesel Range Organics (DRO)       | C10C28DRO  | <15.0  | 15.0 | mg/kg | 01.04.18 00.37 | U    | 1   |
| Oil Range Hydrocarbons (ORO)      | PHCG2835   | <15.0  | 15.0 | mg/kg | 01.04.18 00.37 | U    | 1   |
| Total TPH                         | PHC635     | <15    | 15   | mg/kg | 01.04.18 00.37 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date  | Flag |
|----------------|------------|------------|-------|--------|----------------|------|
| 1-Chlorooctane | 111-85-3   | 93         | %     | 70-135 | 01.04.18 00.37 |      |
| o-Terphenyl    | 84-15-1    | 95         | %     | 70-135 | 01.04.18 00.37 |      |



# Certificate of Analytical Results 572384

## TRC Solutions, Inc, Midland, TX Canvasback 13 FED 2H

|                                      |                                |                               |
|--------------------------------------|--------------------------------|-------------------------------|
| Sample Id: <b>SP #4 @ SUR</b>        | Matrix: Soil                   | Date Received: 12.29.17 12.45 |
| Lab Sample Id: 572384-009            | Date Collected: 12.28.17 10.40 | Sample Depth: 1 ft            |
| Analytical Method: BTEX by EPA 8021B |                                | Prep Method: SW5030B          |
| Tech: ALJ                            |                                | % Moisture:                   |
| Analyst: ALJ                         | Date Prep: 01.02.18 16.00      | Basis: Wet Weight             |
| Seq Number: 3037402                  |                                |                               |

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 01.03.18 12.36       | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 01.03.18 12.36       | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 01.03.18 12.36       | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 01.03.18 12.36       | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 01.03.18 12.36       | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00201          | 0.00201      | mg/kg         | 01.03.18 12.36       | U           | 1   |
| Total BTEX           |                   | <0.00201          | 0.00201      | mg/kg         | 01.03.18 12.36       | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 93                | %            | 80-120        | 01.03.18 12.36       |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 93                | %            | 80-120        | 01.03.18 12.36       |             |     |



# Certificate of Analytical Results 572384



## TRC Solutions, Inc, Midland, TX

Canvasback 13 FED 2H

Sample Id: **SP #4 @1'**

Matrix: Soil

Date Received: 12.29.17 12.45

Lab Sample Id: 572384-010

Date Collected: 12.28.17 10.45

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.02.18 16.30

Basis: Wet Weight

Seq Number: 3037498

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | <4.90  | 4.90 | mg/kg | 01.02.18 23.29 | U    | 1   |



# Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

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|  |                |                |
|--|----------------|----------------|
| 4147 Greenbriar Dr, Stafford, TX 77477             | Phone          | Fax            |
| 9701 Harry Hines Blvd , Dallas, TX 75220           | (281) 240-4200 | (281) 240-4280 |
| 5332 Blackberry Drive, San Antonio TX 78238        | (214) 902 0300 | (214) 351-9139 |
| 1211 W Florida Ave, Midland, TX 79701              | (210) 509-3334 | (210) 509-3335 |
| 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282 | (432) 563-1800 | (432) 563-1713 |
|  | (602) 437-0330 |                |



TRC Solutions, Inc  
Canvasback 13 FED 2H

**Analytical Method: Chloride by EPA 300**

Seq Number: 3037498

MB Sample Id: 7636857-1-BLK

Matrix: Solid

LCS Sample Id: 7636857-1-BKS

Prep Method: E300P

Date Prep: 01.02.18

LCSD Sample Id: 7636857-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|----------------|------|
| Chloride  | <5.00     | 250          | 241        | 96       | 247         | 99        | 90-110 | 2    | 20        | mg/kg | 01.02.18 20:07 |      |

**Analytical Method: Chloride by EPA 300**

Seq Number: 3037498

Parent Sample Id: 572348-016

Matrix: Soil

MS Sample Id: 572348-016 S

Prep Method: E300P

Date Prep: 01.02.18

MSD Sample Id: 572348-016 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|----------------|------|
| Chloride  | 54.9          | 249          | 297       | 97      | 316        | 105      | 90-110 | 6    | 20        | mg/kg | 01.02.18 20:28 |      |

**Analytical Method: Chloride by EPA 300**

Seq Number: 3037498

Parent Sample Id: 572384-001

Matrix: Soil

MS Sample Id: 572384-001 S

Prep Method: E300P

Date Prep: 01.02.18

MSD Sample Id: 572384-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|----------------|------|
| Chloride  | 40.1          | 250          | 302       | 105     | 293        | 101      | 90-110 | 3    | 20        | mg/kg | 01.02.18 22:05 |      |

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3037559

MB Sample Id: 7637042-1-BLK

Matrix: Solid

LCS Sample Id: 7637042-1-BKS

Prep Method: TX1005P

Date Prep: 01.03.18

LCSD Sample Id: 7637042-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|----------------|------|
| Gasoline Range Hydrocarbons (GRO) | <15.0     | 1000         | 1020       | 102      | 942         | 94        | 70-135 | 8    | 35        | mg/kg | 01.03.18 20:12 |      |
| Diesel Range Organics (DRO)       | <15.0     | 1000         | 1040       | 104      | 1000        | 100       | 70-135 | 4    | 35        | mg/kg | 01.03.18 20:12 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date  |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|----------------|
| 1-Chlorooctane | 106     |         | 114      |          | 102       |           | 70-135 | %     | 01.03.18 20:12 |
| o-Terphenyl    | 110     |         | 116      |          | 88        |           | 70-135 | %     | 01.03.18 20:12 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



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Canvasback 13 FED 2H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3037897

MB Sample Id: 7637141-1-BLK

Matrix: Solid

LCS Sample Id: 7637141-1-BKS

Prep Method: TX1005P

Date Prep: 01.08.18

LCSD Sample Id: 7637141-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|----------------|------|
| Gasoline Range Hydrocarbons (GRO) | <15.0     | 999          | 832        | 83       | 794         | 79        | 70-135 | 5    | 35        | mg/kg | 01.08.18 15:52 |      |
| Diesel Range Organics (DRO)       | <15.0     | 999          | 866        | 87       | 823         | 82        | 70-135 | 5    | 35        | mg/kg | 01.08.18 15:52 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date  |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|----------------|
| 1-Chlorooctane | 82      |         | 86       |          | 82        |           | 70-135 | %     | 01.08.18 15:52 |
| o-Terphenyl    | 84      |         | 77       |          | 90        |           | 70-135 | %     | 01.08.18 15:52 |

Analytical Method: TPH by SW8015 Mod

Seq Number: 3037559

Parent Sample Id: 572348-021

Matrix: Soil

MS Sample Id: 572348-021 S

Prep Method: TX1005P

Date Prep: 01.03.18

MSD Sample Id: 572348-021 SD

| Parameter                         | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------------------------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|----------------|------|
| Gasoline Range Hydrocarbons (GRO) | <15.0         | 1000         | 773       | 77      | 784        | 78       | 70-135 | 1    | 35        | mg/kg | 01.03.18 21:10 |      |
| Diesel Range Organics (DRO)       | 31.4          | 1000         | 832       | 80      | 836        | 80       | 70-135 | 0    | 35        | mg/kg | 01.03.18 21:10 |      |

| Surrogate      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date  |
|----------------|---------|---------|----------|----------|--------|-------|----------------|
| 1-Chlorooctane | 109     |         | 110      |          | 70-135 | %     | 01.03.18 21:10 |
| o-Terphenyl    | 108     |         | 111      |          | 70-135 | %     | 01.03.18 21:10 |

Analytical Method: TPH by SW8015 Mod

Seq Number: 3037897

Parent Sample Id: 572801-001

Matrix: Soil

MS Sample Id: 572801-001 S

Prep Method: TX1005P

Date Prep: 01.08.18

MSD Sample Id: 572801-001 SD

| Parameter                         | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------------------------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|----------------|------|
| Gasoline Range Hydrocarbons (GRO) | <15.0         | 998          | 585       | 59      | 591        | 59       | 70-135 | 1    | 35        | mg/kg | 01.08.18 16:56 | X    |
| Diesel Range Organics (DRO)       | <15.0         | 998          | 646       | 65      | 610        | 61       | 70-135 | 6    | 35        | mg/kg | 01.08.18 16:56 | X    |

| Surrogate      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date  |
|----------------|---------|---------|----------|----------|--------|-------|----------------|
| 1-Chlorooctane | 77      |         | 77       |          | 70-135 | %     | 01.08.18 16:56 |
| o-Terphenyl    | 77      |         | 75       |          | 70-135 | %     | 01.08.18 16:56 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery

$[D] = 100 * (C-A) / B$   
 $RPD = 200 * |(C-E) / (C+E)|$   
 $[D] = 100 * (C) / [B]$

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



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Analytical Method: BTEX by EPA 8021B

Seq Number: 3037402

MB Sample Id: 7636912-1-BLK

Matrix: Solid

LCS Sample Id: 7636912-1-BKS

Prep Method: SW5030B

Date Prep: 01.02.18

LCSD Sample Id: 7636912-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|----------------|------|
| Benzene      | <0.00200  | 0.100        | 0.0760     | 76       | 0.0750      | 75        | 70-130 | 1    | 35        | mg/kg | 01.02.18 22:59 |      |
| Toluene      | <0.00200  | 0.100        | 0.0755     | 76       | 0.0763      | 76        | 70-130 | 1    | 35        | mg/kg | 01.02.18 22:59 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0895     | 90       | 0.0882      | 88        | 71-129 | 1    | 35        | mg/kg | 01.02.18 22:59 |      |
| m,p-Xylenes  | <0.00401  | 0.200        | 0.174      | 87       | 0.171       | 86        | 70-135 | 2    | 35        | mg/kg | 01.02.18 22:59 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0863     | 86       | 0.0851      | 85        | 71-133 | 1    | 35        | mg/kg | 01.02.18 22:59 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date  |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|----------------|
| 1,4-Difluorobenzene  | 92      |         | 116      |          | 115       |           | 80-120 | %     | 01.02.18 22:59 |
| 4-Bromofluorobenzene | 85      |         | 120      |          | 109       |           | 80-120 | %     | 01.02.18 22:59 |

Analytical Method: BTEX by EPA 8021B

Seq Number: 3037402

Parent Sample Id: 572348-015

Matrix: Soil

MS Sample Id: 572348-015 S

Prep Method: SW5030B

Date Prep: 01.02.18

MSD Sample Id: 572348-015 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|----------------|------|
| Benzene      | <0.00199      | 0.0996       | 0.0450    | 45      | 0.0464     | 46       | 70-130 | 3    | 35        | mg/kg | 01.02.18 23:37 | X    |
| Toluene      | <0.00199      | 0.0996       | 0.0439    | 44      | 0.0433     | 43       | 70-130 | 1    | 35        | mg/kg | 01.02.18 23:37 | X    |
| Ethylbenzene | <0.00199      | 0.0996       | 0.0515    | 52      | 0.0492     | 49       | 71-129 | 5    | 35        | mg/kg | 01.02.18 23:37 | X    |
| m,p-Xylenes  | <0.00398      | 0.199        | 0.101     | 51      | 0.0936     | 47       | 70-135 | 8    | 35        | mg/kg | 01.02.18 23:37 | X    |
| o-Xylene     | <0.00199      | 0.0996       | 0.0502    | 50      | 0.0484     | 48       | 71-133 | 4    | 35        | mg/kg | 01.02.18 23:37 | X    |

| Surrogate            | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date  |
|----------------------|---------|---------|----------|----------|--------|-------|----------------|
| 1,4-Difluorobenzene  | 97      |         | 102      |          | 80-120 | %     | 01.02.18 23:37 |
| 4-Bromofluorobenzene | 93      |         | 98       |          | 80-120 | %     | 01.02.18 23:37 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



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 Dallas, Texas (214-902-0300)

# CHAIN OF CUSTODY

Page 1 Of 1

San Antonio, Texas (210-509-3334)  
 Midland, Texas (432-704-5251)

www.xenco.com

Phoenix, Arizona (480-355-0900)

Xenco Quote #

Xenco Job #

572384

| Client / Reporting Information   |                                     | Project Information                       |                            | Analytical Information   |                           | Matrix Codes               |                            |                 |        |              |                      |        |      |      |   |
|--|-------------------------------------|---|----------------------------|--------------------------|---------------------------|----------------------------|----------------------------|-----------------|--------|--------------|----------------------|--------|------|------|---|
| Company Name / Branch: TRC Environmental   |                                     | Project Name/Number: Canvassack 13 Fed 2H |                            |                          |                           |                            |                            |                 |        |              |                      |        |      |      |   |
| Company Address: 2057 Commerce Drive Midland, TX 79703   |                                     | Project Location: Eddy County, New Mexico |                            |                          |                           |                            |                            |                 |        |              |                      |        |      |      |   |
| Email: jlowry@trcsolutions.com   |                                     | Invoice To: COG % Becky Haskell           |                            |                          |                           |                            |                            |                 |        |              |                      |        |      |      |   |
| Project Contact: Joel Lowry  |                                     | Invoice:                                  |                            |                          |                           |                            |                            |                 |        |              |                      |        |      |      |   |
| Sampler's Name: Joel Lowry   |                                     |   |                            |                          |                           |                            |                            |                 |        |              |                      |        |      |      |   |
| No.  | Field ID / Point of Collection      | Sample Depth                              | Date                       | Time                     | Matrix                    | # of bottles               | HCl                        | NaOH/Zn Acetate | HNO3   | H2SO4        | NaOH                 | NaHSO4 | MEOH | NONE | Notes   |
| 1  | SP #2 @ SUR                         | 0   | 12/28/2017                 | 10:00                    | S                         | 1                          |                            |                 |        |              |                      |        |      |      | X CLORIDE E300<br>X TPH @015 m Ext<br>X BTEX 8021 |
| 2  | SP #2 @ 1'                          | 1'  | 12/28/2017                 | 10:05                    | S                         | 1                          |                            |                 |        |              |                      |        |      |      |   |
| 3  | SP #2 @ 2'                          | 2'  | 12/28/2017                 | 10:10                    | S                         | 1                          |                            |                 |        |              |                      |        |      |      |   |
| 4  | SP #2 @ 3'                          | 3'  | 12/28/2017                 | 10:15                    | S                         | 1                          |                            |                 |        |              |                      |        |      |      |   |
| 5  | NORTH @ 1'                          | 1'  | 12/28/2017                 | 10:20                    | S                         | 1                          |                            |                 |        |              |                      |        |      |      |   |
| 6  | EAST @ 1'                           | 1'  | 12/28/2017                 | 10:25                    | S                         | 1                          |                            |                 |        |              |                      |        |      |      |   |
| 7  | SOUTH @ 1'                          | 1'  | 12/28/2017                 | 10:30                    | S                         | 1                          |                            |                 |        |              |                      |        |      |      |   |
| 8  | WEST @ 1'                           | 1'  | 12/28/2017                 | 10:35                    | S                         | 1                          |                            |                 |        |              |                      |        |      |      |   |
| 9  | SP #4 @ SUR                         | 0   | 12/28/2017                 | 10:40                    | S                         | 1                          |                            |                 |        |              |                      |        |      |      | X   |
| 10   | SP #4 @ 1'                          | 1'  | 12/28/2017                 | 10:45                    | S                         | 1                          |                            |                 |        |              |                      |        |      |      | X   |
| Turnaround Time (Business days) _____ Data Deliverable Information _____   |                                     |   |                            |                          |                           |                            |                            |                 |        |              |                      |        |      |      |   |
| <input type="checkbox"/> Same Day TAT <input type="checkbox"/> 5 Day TAT <input type="checkbox"/> Level II Std QC <input type="checkbox"/> Level IV (Full Data Pkg raw data) |                                     |   |                            |                          |                           |                            |                            |                 |        |              |                      |        |      |      |   |
| <input type="checkbox"/> Next Day EMERGENCY <input type="checkbox"/> 7 Day TAT <input type="checkbox"/> Level III Std QC+ Forms <input type="checkbox"/> TRRP Level IV       |                                     |   |                            |                          |                           |                            |                            |                 |        |              |                      |        |      |      |   |
| <input type="checkbox"/> 2 Day EMERGENCY <input checked="" type="checkbox"/> Contract TAT <input type="checkbox"/> Level 3 (CLP Forms) <input type="checkbox"/> UST / RG-411 |                                     |   |                            |                          |                           |                            |                            |                 |        |              |                      |        |      |      |   |
| <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> TRRP Checklist   |                                     |   |                            |                          |                           |                            |                            |                 |        |              |                      |        |      |      |   |
| TAT Starts Day received by Lab, if received by 5:00 pm   |                                     |   |                            |                          |                           |                            |                            |                 |        |              |                      |        |      |      |   |
| SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY  |                                     |   |                            |                          |                           |                            |                            |                 |        |              |                      |        |      |      |   |
| 1  | Relinquished by: <i>[Signature]</i> | Date Time: 12/28/17 4:55                  | Received By: 1 Britton Cox | Relinquished By: 2 B Cox | Date Time: 12/28/17 12:45 | Received By: 2 [Signature] | Preserved where applicable |                 | On Ice | Cooler Temp. | Thermo. Corr. Factor |        |      |      |   |
| 3  | Relinquished by:                    | Date Time:                                | Received By:               | Relinquished By:         | Date Time:                | Received By:               | Custody Seal #             |                 |        |              |                      |        |      |      |   |
| 5  | Relinquished by:                    | Date Time:                                | Received By:               | Relinquished By:         | Date Time:                | Received By:               | Custody Seal #             |                 |        |              |                      |        |      |      |   |

- W = Water
- S = Soil/Sed/Solid
- GW = Ground Water
- DW = Drinking Water
- P = Product
- SW = Surface water
- SL = Sludge
- OW = Ocean/Sea Water
- WI = Wipe
- O = Oil
- MW = Waste Water
- A = Air

Temp: 2.5 IR ID: R-8  
 CF: (0-6: -0.2°C)  
 (6-23: +0.2°C)  
 Corrected Temp: 2.3



# XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 12/29/2017 12:45:00 PM

Work Order #: 572384

Acceptable Temperature Range: 0 - 6 degC  
Air and Metal samples Acceptable Range: Ambient  
Temperature Measuring device used : R8

| Sample Receipt Checklist                                | Comments |
|---|----------|
| #1 *Temperature of cooler(s)?                           | .7       |
| #2 *Shipping container in good condition?               | Yes      |
| #3 *Samples received on ice?                            | Yes      |
| #4 *Custody Seals intact on shipping container/ cooler? | Yes      |
| #5 Custody Seals intact on sample bottles?              | Yes      |
| #6*Custody Seals Signed and dated?                      | Yes      |
| #7 *Chain of Custody present?                           | Yes      |
| #8 Any missing/extra samples?                           | No       |
| #9 Chain of Custody signed when relinquished/ received? | Yes      |
| #10 Chain of Custody agrees with sample labels/matrix?  | Yes      |
| #11 Container label(s) legible and intact?              | Yes      |
| #12 Samples in proper container/ bottle?                | Yes      |
| #13 Samples properly preserved?                         | Yes      |
| #14 Sample container(s) intact?                         | Yes      |
| #15 Sufficient sample amount for indicated test(s)?     | Yes      |
| #16 All samples received within hold time?              | Yes      |
| #17 Subcontract of sample(s)?                           | Yes      |
| #18 Water VOC samples have zero headspace?              | N/A      |

\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:   
Kelsey Brooks

Date: 01/02/2018

Checklist reviewed by: \_\_\_\_\_

Date: \_\_\_\_\_



# Certificate of Analysis Summary 574261

TRC Solutions, Inc, Midland, TX

Project Name: Canvasback 13 Federal #002H



**Project Id:**  
**Contact:** Joel Lowry  
**Project Location:** Lea Co, NM

**Date Received in Lab:** Mon Jan-22-18 03:45 pm  
**Report Date:** 29-JAN-18  
**Project Manager:** Kelsey Brooks

|                            |                   |                 |                 |                 |  |  |  |
|----------------------------|-------------------|-----------------|-----------------|-----------------|--|--|--|
| <b>Analysis Requested</b>  | <b>Lab Id:</b>    | 574261-001      | 574261-002      | 574261-003      |  |  |  |
|                            | <b>Field Id:</b>  | SP-1 @ 1'       | SP-1 @ 2'       | SP-1 @ 3'       |  |  |  |
|                            | <b>Depth:</b>     | 1'-             | 2'-             | 3'-             |  |  |  |
|                            | <b>Matrix:</b>    | SOIL            | SOIL            | SOIL            |  |  |  |
|                            | <b>Sampled:</b>   | Jan-19-18 11:00 | Jan-19-18 11:05 | Jan-19-18 11:10 |  |  |  |
| <b>Chloride by EPA 300</b> | <b>Extracted:</b> | Jan-25-18 15:00 | Jan-25-18 15:00 | Jan-25-18 15:00 |  |  |  |
|                            | <b>Analyzed:</b>  | Jan-26-18 17:53 | Jan-26-18 18:00 | Jan-26-18 18:07 |  |  |  |
|                            | <b>Units/RL:</b>  | mg/kg RL        | mg/kg RL        | mg/kg RL        |  |  |  |
| Chloride                   |                   | 603 5.00        | 1330 25.0       | 153 4.98        |  |  |  |

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks  
 Project Manager

# Analytical Report 574261

for  
**TRC Solutions, Inc**

**Project Manager: Joel Lowry**  
**Canvasback 13 Federal #002H**

**29-JAN-18**

Collected By: Client



**1211 W. Florida Ave, Midland TX 79701**

Xenco-Houston (EPA Lab code: TX00122):  
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)  
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):  
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)  
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)  
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)  
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)  
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



29-JAN-18

Project Manager: **Joel Lowry**  
**TRC Solutions, Inc**  
2057 Commerce  
Midland, TX 79703

Reference: XENCO Report No(s): **574261**  
**Canvasback 13 Federal #002H**  
Project Address: Lea Co, NM

**Joel Lowry:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 574261. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 574261 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

**Kelsey Brooks**

Project Manager

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# Sample Cross Reference 574261

TRC Solutions, Inc, Midland, TX

Canvasback 13 Federal #002H

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|----------------|--------------|---------------|
| SP-1 @ 1' | S      | 01-19-18 11:00 | 1'           | 574261-001    |
| SP-1 @ 2' | S      | 01-19-18 11:05 | 2'           | 574261-002    |
| SP-1 @ 3' | S      | 01-19-18 11:10 | 3'           | 574261-003    |



## CASE NARRATIVE

*Client Name: TRC Solutions, Inc*

*Project Name: Canvasback 13 Federal #002H*

Project ID:  
Work Order Number(s): 574261

Report Date: 29-JAN-18  
Date Received: 01/22/2018

---

**Sample receipt non conformances and comments:**

---

**Sample receipt non conformances and comments per sample:**

None



# Certificate of Analytical Results 574261



## TRC Solutions, Inc, Midland, TX

Canvasback 13 Federal #002H

Sample Id: **SP-1 @ 1'**  
Lab Sample Id: 574261-001

Matrix: Soil  
Date Collected: 01.19.18 11.00

Date Received: 01.22.18 15.45  
Sample Depth: 1'

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.25.18 15.00

Basis: Wet Weight

Seq Number: 3039480

| Parameter | Cas Number | Result     | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|------------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | <b>603</b> | 5.00 | mg/kg | 01.26.18 17.53 |      | 1   |



# Certificate of Analytical Results 574261



## TRC Solutions, Inc, Midland, TX

Canvasback 13 Federal #002H

Sample Id: **SP-1 @ 2'**

Matrix: Soil

Date Received: 01.22.18 15.45

Lab Sample Id: 574261-002

Date Collected: 01.19.18 11.05

Sample Depth: 2'

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.25.18 15.00

Basis: Wet Weight

Seq Number: 3039480

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | 1330   | 25.0 | mg/kg | 01.26.18 18.00 |      | 5   |



# Certificate of Analytical Results 574261



## TRC Solutions, Inc, Midland, TX

Canvasback 13 Federal #002H

Sample Id: **SP-1 @ 3'**

Matrix: Soil

Date Received: 01.22.18 15.45

Lab Sample Id: 574261-003

Date Collected: 01.19.18 11.10

Sample Depth: 3'

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.25.18 15.00

Basis: Wet Weight

Seq Number: 3039480

| Parameter | Cas Number | Result | RL   | Units | Analysis Date  | Flag | Dil |
|-----------|------------|--------|------|-------|----------------|------|-----|
| Chloride  | 16887-00-6 | 153    | 4.98 | mg/kg | 01.26.18 18.07 |      | 1   |



## Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

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|----------------|----------------|
| (281) 240-4200 | (281) 240-4280 |
| (214) 902 0300 | (214) 351-9139 |
| (210) 509-3334 | (210) 509-3335 |
| (432) 563-1800 | (432) 563-1713 |
| (602) 437-0330 |                |



TRC Solutions, Inc  
Canvasback 13 Federal #002H

Analytical Method: Chloride by EPA 300

Seq Number: 3039480

MB Sample Id: 7638082-1-BLK

Matrix: Solid

LCS Sample Id: 7638082-1-BKS

Prep Method: E300P

Date Prep: 01.25.18

LCSD Sample Id: 7638082-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|----------------|------|
| Chloride  | <5.00     | 250          | 249        | 100      | 247         | 99        | 90-110 | 1    | 20        | mg/kg | 01.26.18 15:27 |      |

Analytical Method: Chloride by EPA 300

Seq Number: 3039480

Parent Sample Id: 573940-001

Matrix: Soil

MS Sample Id: 573940-001 S

Prep Method: E300P

Date Prep: 01.25.18

MSD Sample Id: 573940-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|----------------|------|
| Chloride  | <5.00         | 250          | 257       | 103     | 260        | 104      | 90-110 | 1    | 20        | mg/kg | 01.26.18 15:48 |      |

Analytical Method: Chloride by EPA 300

Seq Number: 3039480

Parent Sample Id: 574260-005

Matrix: Soil

MS Sample Id: 574260-005 S

Prep Method: E300P

Date Prep: 01.25.18

MSD Sample Id: 574260-005 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date  | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|----------------|------|
| Chloride  | 94.3          | 255          | 350       | 100     | 349        | 100      | 90-110 | 0    | 20        | mg/kg | 01.26.18 17:26 |      |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery

$$[D] = 100 * (C - A) / B$$

$$RPD = 200 * | (C - E) / (C + E) |$$

$$[D] = 100 * (C) / [B]$$

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



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 Dallas, Texas (214-902-0300)

# CHAIN OF CUSTODY

Page 1 Of 1

San Antonio, Texas (210-509-3334)  
 Midland, Texas (432-704-5251)

www.xenco.com

Phoenix, Arizona (480-355-0900)

Xenco Job #

574261

| Client / Reporting Information  |                                | Project Information  |              | Analytical Information                                 |            | Matrix Codes   |                  |                 |              |                  |            |               |                  |               |                |
|---|--------------------------------|--|--------------|--|------------|--|------------------|-----------------|--------------|------------------|------------|---------------|------------------|---------------|----------------|
| Company Name / Branch: TRC Environmental Corporation<br>Company Address: 2057 Commerce Drive Midland, TX 79703<br>Email: jlowry@trcsolutions.com<br>Phone No: 432-466-4450<br>Project Contact: Joel Lowry<br>Samplers Name: Zach Conder   |                                | Project Name/Number: Canvasback 13 Federal #002H<br>Project Location: Eddy Co, NM<br>Invoice To: COG Operating O/O Beedy Haskell<br>Invoice: |              | TPH 8015 M Ext<br>Chloride E 300<br>BTEX 8021B<br>Hold |            | W = Water<br>S = Soil/Sed/Solid<br>GW = Ground Water<br>DW = Drinking Water<br>P = Product<br>SW = Surface water<br>SL = Sludge<br>OW = Ocean/Sea Water<br>WI = Wipe<br>O = Oil<br>WW = Waste Water<br>A = Air |                  |                 |              |                  |            |               |                  |               |                |
| No.   | Field ID / Point of Collection | Sample Depth   | Date         | Time   | Matrix     | # of bottles   | HCI              | NaOH/Zn Acetate | HNO3         | H2SO4            | NaOH       | NaHSO4        | MEOH             | NONE          | Field Comments |
| 1   | SP-1 @1'                       | 1'   | 1/19/2018    | 11:30  | S          | 1  |                  |                 |              |                  |            |               |                  |               |                |
| 2   | SP-1 @2'                       | 2'   | 1/19/2018    | 11:05  | S          | 1  |                  |                 |              |                  |            |               |                  |               |                |
| 3   | SP-1 @3'                       | 3'   | 1/19/2018    | 11:10  | S          | 1  |                  |                 |              |                  |            |               |                  |               |                |
| 4   |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| 5   |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| 6   |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| 7   |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| 8   |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| 9   |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| 10  |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| 11  |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| 12  |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| Turnaround Time (Business days) _____ Data Deliverable Information _____<br>Notes: Temp: 2.1 IR ID: R-8<br>CF: (0-6: -0.2°C) (6-23: +0.2°C)<br>Corrected Temp: 1.9  |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| <input type="checkbox"/> Same Day TAT <input type="checkbox"/> 6 Day TAT <input type="checkbox"/> Level II Std QC <input type="checkbox"/> Level IV (Full Data Pkg /raw data)<br><input type="checkbox"/> Next Day EMERGENCY <input type="checkbox"/> 7 Day TAT <input type="checkbox"/> Level III Std QC+ Forms <input type="checkbox"/> TRRP Level IV<br><input type="checkbox"/> 2 Day EMERGENCY <input checked="" type="checkbox"/> Contract TAT <input type="checkbox"/> Level 3 (CLP Forms) <input type="checkbox"/> UST / RG-411<br><input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> TRRP Checklist <input type="checkbox"/> TRRP Checklist   |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| TAT Starts Day received by Lab, if received by 5:00 pm  |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY   |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |
| Relinquished by Sampler:  |                                | Date Time:   | Received By: | Relinquished By:                                       | Date Time: | Received By:   | Relinquished By: | Date Time:      | Received By: | Relinquished By: | Date Time: | Received By:  | Relinquished By: | Date Time:    | Received By:   |
| 1   |                                | 1/22 3:45  | 1            | 1/22 3:45  | 2          | 1/23/18 3:45   | 2                | 1/23/18 3:45    | 3            | 1/23/18 11:04    | 4          | 1/23/18 11:04 | 4                | 1/23/18 11:04 | 4              |
| 3   |                                |  | 3            |  | 4          |  | 4                |                 | 4            |                  | 4          |               | 4                |               | 4              |
| 5   |                                |  | 5            |  | 5          |  | 5                |                 | 5            |                  | 5          |               | 5                |               | 5              |
| Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract. |                                |  |              |  |            |  |                  |                 |              |                  |            |               |                  |               |                |



# XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 01/22/2018 03:45:00 PM

Work Order #: 574261

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

### Sample Receipt Checklist

### Comments

|   |     |
|---|-----|
| #1 *Temperature of cooler(s)?                           | 1.3 |
| #2 *Shipping container in good condition?               | Yes |
| #3 *Samples received on ice?                            | Yes |
| #4 *Custody Seals intact on shipping container/ cooler? | N/A |
| #5 Custody Seals intact on sample bottles?              | N/A |
| #6*Custody Seals Signed and dated?                      | N/A |
| #7 *Chain of Custody present?                           | Yes |
| #8 Any missing/extra samples?                           | No  |
| #9 Chain of Custody signed when relinquished/ received? | Yes |
| #10 Chain of Custody agrees with sample labels/matrix?  | Yes |
| #11 Container label(s) legible and intact?              | Yes |
| #12 Samples in proper container/ bottle?                | Yes |
| #13 Samples properly preserved?                         | Yes |
| #14 Sample container(s) intact?                         | Yes |
| #15 Sufficient sample amount for indicated test(s)?     | Yes |
| #16 All samples received within hold time?              | Yes |
| #17 Subcontract of sample(s)?                           | No  |
| #18 Water VOC samples have zero headspace?              | N/A |

\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by: Connie Hernandez  
Connie Hernandez

Date: 01/23/2018

Checklist reviewed by: Kelsey Brooks  
Kelsey Brooks

Date: 01/23/2018

# Analytical Report 581742

for  
TRC Solutions, Inc

Project Manager: Joel Lowry

Canvasback 13 Fed #002H

13-APR-18

Collected By: Client



6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab code: TX00122):  
Texas (T104704215-18-24), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)  
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):  
Texas (T104704295-17-16), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)  
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)  
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-18-14)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)  
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)  
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)  
Xenco-Atlanta (LELAP Lab ID #04176)



13-APR-18

Project Manager: **Joel Lowry**  
**TRC Solutions, Inc**  
2057 Commerce  
Midland, TX 79703

Reference: XENCO Report No(s): **581742**  
**Canvasback 13 Fed #002H**  
Project Address: Eddy Co. NM

**Joel Lowry:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 581742. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 581742 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink, appearing to read 'Kelsey Brooks', written over a horizontal line.

**Kelsey Brooks**

Project Manager

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# Sample Cross Reference 581742

TRC Solutions, Inc, Midland, TX

Canvasback 13 Fed #002H

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|----------------|--------------|---------------|
| FL-@ 3'   | S      | 04-04-18 09:00 | 3            | 581742-001    |
| ESW       | S      | 04-04-18 09:10 | 1 1/2        | 581742-002    |
| WSW       | S      | 04-04-18 09:20 | 1 1/2        | 581742-003    |
| SSW       | S      | 04-04-18 09:30 | 1 1/2        | 581742-004    |
| NSW       | S      | 04-04-18 09:40 | 1 1/2        | 581742-005    |



## CASE NARRATIVE

*Client Name: TRC Solutions, Inc*

*Project Name: Canvasback 13 Fed #002H*

Project ID:  
Work Order Number(s): 581742

Report Date: 13-APR-18  
Date Received: 04/06/2018

---

**Sample receipt non conformances and comments:**

None

---

**Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

Batch: LBA-3046275 DRO-ORO By SW8015B

Surrogate Tricosane recovered above QC limits Data confirmed by re-analysis. Samples affected are:  
7642346-1-BKS,7642346-1-BSD.

Batch: LBA-3046326 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



# Certificate of Analysis Summary 581742

TRC Solutions, Inc, Midland, TX

Project Name: Canvasback 13 Fed #002H

**Project Id:**  
**Contact:** Joel Lowry  
**Project Location:** Eddy Co. NM

**Date Received in Lab:** Fri Apr-06-18 04:40 pm  
**Report Date:** 13-APR-18  
**Project Manager:** Kelsey Brooks

| <b>Analysis Requested</b>       | <b>Lab Id:</b>    | 581742-001      | 581742-002      | 581742-003      | 581742-004      | 581742-005      |  |
|---------------------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
|                                 | <b>Field Id:</b>  | FL-@ 3'         | ESW             | WSW             | SSW             | NSW             |  |
|                                 | <b>Depth:</b>     | 3-              | 1 1/2-          | 1 1/2-          | 1 1/2-          | 1 1/2-          |  |
|                                 | <b>Matrix:</b>    | SOIL            | SOIL            | SOIL            | SOIL            | SOIL            |  |
|                                 | <b>Sampled:</b>   | Apr-04-18 09:00 | Apr-04-18 09:10 | Apr-04-18 09:20 | Apr-04-18 09:30 | Apr-04-18 09:40 |  |
| <b>BTEX by EPA 8021B</b>        | <b>Extracted:</b> | Apr-09-18 12:00 |  |
|                                 | <b>Analyzed:</b>  | Apr-10-18 21:37 | Apr-11-18 00:19 | Apr-11-18 00:46 | Apr-11-18 01:13 | Apr-11-18 01:40 |  |
|                                 | <b>Units/RL:</b>  | mg/kg RL        |  |
|                                 | Benzene           | <0.0190 0.0190  | <0.0189 0.0189  | <0.0196 0.0196  | <0.0186 0.0186  | <0.0194 0.0194  |  |
|                                 | Toluene           | <0.0190 0.0190  | <0.0189 0.0189  | <0.0196 0.0196  | <0.0186 0.0186  | <0.0194 0.0194  |  |
|                                 | Ethylbenzene      | <0.0190 0.0190  | <0.0189 0.0189  | <0.0196 0.0196  | <0.0186 0.0186  | <0.0194 0.0194  |  |
|                                 | m,p-Xylenes       | <0.0381 0.0381  | <0.0377 0.0377  | <0.0393 0.0393  | <0.0372 0.0372  | <0.0388 0.0388  |  |
|                                 | o-Xylene          | <0.0190 0.0190  | <0.0189 0.0189  | <0.0196 0.0196  | <0.0186 0.0186  | <0.0194 0.0194  |  |
| Total Xylenes                   | <0.019 0.019      | <0.0189 0.0189  | <0.0196 0.0196  | <0.0186 0.0186  | <0.0194 0.0194  |                 |  |
| Total BTEX                      | <0.019 0.019      | <0.0189 0.0189  | <0.0196 0.0196  | <0.0186 0.0186  | <0.0194 0.0194  |                 |  |
| <b>Chloride by EPA 300</b>      | <b>Extracted:</b> | Apr-10-18 10:30 |  |
|                                 | <b>Analyzed:</b>  | Apr-10-18 22:27 | Apr-10-18 23:05 | Apr-10-18 23:17 | Apr-10-18 23:29 | Apr-10-18 23:42 |  |
|                                 | <b>Units/RL:</b>  | mg/kg RL        |  |
| Chloride                        | 170 50.0          | 101 25.0        | 124 25.0        | 249 50.0        | <25.0 25.0      |                 |  |
| <b>DRO-ORO By SW8015B</b>       | <b>Extracted:</b> | Apr-10-18 11:35 |  |
|                                 | <b>Analyzed:</b>  | Apr-10-18 15:11 | Apr-10-18 16:56 | Apr-10-18 17:31 | Apr-10-18 18:06 | Apr-10-18 18:41 |  |
|                                 | <b>Units/RL:</b>  | mg/kg RL        |  |
| Diesel Range Organics (DRO)     | <25.2 25.2        | <25.0 25.0      | <25.0 25.0      | <24.9 24.9      | <25.0 25.0      |                 |  |
| Oil Range Hydrocarbons (ORO)    | <25.2 25.2        | <25.0 25.0      | <25.0 25.0      | <24.9 24.9      | <25.0 25.0      |                 |  |
| <b>TPH GRO by EPA 8015 Mod.</b> | <b>Extracted:</b> | Apr-09-18 12:00 |  |
|                                 | <b>Analyzed:</b>  | Apr-10-18 21:37 | Apr-11-18 00:19 | Apr-11-18 00:46 | Apr-11-18 01:13 | Apr-11-18 01:40 |  |
|                                 | <b>Units/RL:</b>  | mg/kg RL        |  |
| TPH-GRO                         | <3.81 3.81        | <3.77 3.77      | <3.93 3.93      | <3.72 3.72      | <3.88 3.88      |                 |  |

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks  
Project Manager





## Form 2 - Surrogate Recoveries

Project Name: Canvasback 13 Fed #002H

Work Orders : 581742,

Project ID:

Lab Batch #: 3046275

Sample: 581742-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 15:11

## SURROGATE RECOVERY STUDY

| DRO-ORO By SW8015B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| Tricosane                      | 10.7             | 10.1            | 106             | 65-144            |       |
| n-Triacontane                  | 8.97             | 10.1            | 89              | 46-152            |       |

Lab Batch #: 3046275

Sample: 581742-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 16:56

## SURROGATE RECOVERY STUDY

| DRO-ORO By SW8015B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| Tricosane                      | 12.1             | 9.99            | 121             | 65-144            |       |
| n-Triacontane                  | 9.99             | 9.99            | 100             | 46-152            |       |

Lab Batch #: 3046275

Sample: 581742-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 17:31

## SURROGATE RECOVERY STUDY

| DRO-ORO By SW8015B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| Tricosane                      | 9.85             | 9.98            | 99              | 65-144            |       |
| n-Triacontane                  | 9.26             | 9.98            | 93              | 46-152            |       |

Lab Batch #: 3046275

Sample: 581742-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 18:06

## SURROGATE RECOVERY STUDY

| DRO-ORO By SW8015B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| Tricosane                      | 9.00             | 9.96            | 90              | 65-144            |       |
| n-Triacontane                  | 9.67             | 9.96            | 97              | 46-152            |       |

Lab Batch #: 3046275

Sample: 581742-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 18:41

## SURROGATE RECOVERY STUDY

| DRO-ORO By SW8015B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| Tricosane                      | 11.7             | 10.0            | 117             | 65-144            |       |
| n-Triacontane                  | 9.75             | 10.0            | 98              | 46-152            |       |

\* Surrogate outside of Laboratory QC limits

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Canvasback 13 Fed #002H

Work Orders : 581742,

Project ID:

Lab Batch #: 3046326

Sample: 581742-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 21:37

## SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene          | 0.109            | 0.100           | 109             | 68-120            |       |
| a,a,a-Trifluorotoluene        | 1.98             | 1.90            | 104             | 71-121            |       |

Lab Batch #: 3046330

Sample: 581742-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 21:37

## SURROGATE RECOVERY STUDY

| TPH GRO by EPA 8015 Mod.<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene                 | 0.104            | 0.100           | 104             | 76-123            |       |
| a,a,a-Trifluorotoluene               | 1.81             | 1.90            | 95              | 69-120            |       |

Lab Batch #: 3046326

Sample: 581742-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/11/18 00:19

## SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene          | 0.108            | 0.100           | 108             | 68-120            |       |
| a,a,a-Trifluorotoluene        | 1.90             | 1.89            | 101             | 71-121            |       |

Lab Batch #: 3046330

Sample: 581742-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/11/18 00:19

## SURROGATE RECOVERY STUDY

| TPH GRO by EPA 8015 Mod.<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene                 | 0.102            | 0.100           | 102             | 76-123            |       |
| a,a,a-Trifluorotoluene               | 1.60             | 1.89            | 85              | 69-120            |       |

Lab Batch #: 3046326

Sample: 581742-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/11/18 00:46

## SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene          | 0.107            | 0.100           | 107             | 68-120            |       |
| a,a,a-Trifluorotoluene        | 2.04             | 1.96            | 104             | 71-121            |       |

\* Surrogate outside of Laboratory QC limits

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Canvasback 13 Fed #002H

Work Orders : 581742,

Project ID:

Lab Batch #: 3046330

Sample: 581742-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/11/18 00:46

## SURROGATE RECOVERY STUDY

| TPH GRO by EPA 8015 Mod.<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene                 | 0.0989           | 0.100           | 99              | 76-123            |       |
| a,a,a-Trifluorotoluene               | 1.67             | 1.96            | 85              | 69-120            |       |

Lab Batch #: 3046326

Sample: 581742-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/11/18 01:13

## SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene          | 0.106            | 0.100           | 106             | 68-120            |       |
| a,a,a-Trifluorotoluene        | 1.86             | 1.86            | 100             | 71-121            |       |

Lab Batch #: 3046330

Sample: 581742-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/11/18 01:13

## SURROGATE RECOVERY STUDY

| TPH GRO by EPA 8015 Mod.<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene                 | 0.0986           | 0.100           | 99              | 76-123            |       |
| a,a,a-Trifluorotoluene               | 1.61             | 1.86            | 87              | 69-120            |       |

Lab Batch #: 3046330

Sample: 581742-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/11/18 01:40

## SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene          | 0.107            | 0.100           | 107             | 68-120            |       |
| a,a,a-Trifluorotoluene        | 1.99             | 1.94            | 103             | 71-121            |       |

Lab Batch #: 3046330

Sample: 581742-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/11/18 01:40

## SURROGATE RECOVERY STUDY

| TPH GRO by EPA 8015 Mod.<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene                 | 0.0993           | 0.100           | 99              | 76-123            |       |
| a,a,a-Trifluorotoluene               | 1.83             | 1.94            | 94              | 69-120            |       |

\* Surrogate outside of Laboratory QC limits

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Canvasback 13 Fed #002H

Work Orders : 581742,

Project ID:

Lab Batch #: 3046275

Sample: 7642346-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/10/18 13:24

## SURROGATE RECOVERY STUDY

| DRO-ORO By SW8015B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| Tricosane                      | 10.5             | 10.0            | 105             | 65-144            |       |
| n-Triacontane                  | 12.8             | 10.0            | 128             | 46-152            |       |

Lab Batch #: 3046326

Sample: 7642254-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/10/18 21:10

## SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene          | 0.0966           | 0.100           | 97              | 68-120            |       |
| a,a,a-Trifluorotoluene        | 1.94             | 2.00            | 97              | 71-121            |       |

Lab Batch #: 3046330

Sample: 7642259-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/10/18 21:10

## SURROGATE RECOVERY STUDY

| TPH GRO by EPA 8015 Mod.<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene                 | 0.0933           | 0.100           | 93              | 76-123            |       |
| a,a,a-Trifluorotoluene               | 2.24             | 2.00            | 112             | 69-120            |       |

Lab Batch #: 3046275

Sample: 7642346-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/10/18 14:00

## SURROGATE RECOVERY STUDY

| DRO-ORO By SW8015B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| Tricosane                      | 16.7             | 10.0            | 167             | 65-144            | **    |
| n-Triacontane                  | 11.6             | 10.0            | 116             | 46-152            |       |

Lab Batch #: 3046326

Sample: 7642254-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/10/18 18:27

## SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene          | 0.0955           | 0.100           | 96              | 68-120            |       |
| a,a,a-Trifluorotoluene        | 1.69             | 2.00            | 85              | 71-121            |       |

\* Surrogate outside of Laboratory QC limits

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Canvasback 13 Fed #002H

Work Orders : 581742,

Project ID:

Lab Batch #: 3046330

Sample: 7642259-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/10/18 19:22

## SURROGATE RECOVERY STUDY

| TPH GRO by EPA 8015 Mod.<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene                 | 0.0971           | 0.100           | 97              | 76-123            |       |
| a,a,a-Trifluorotoluene               | 1.98             | 2.00            | 99              | 69-120            |       |

Lab Batch #: 3046275

Sample: 7642346-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/10/18 14:35

## SURROGATE RECOVERY STUDY

| DRO-ORO By SW8015B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| Tricosane                      | 15.7             | 10.0            | 157             | 65-144            | **    |
| n-Triacontane                  | 11.8             | 10.0            | 118             | 46-152            |       |

Lab Batch #: 3046326

Sample: 7642254-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/10/18 18:54

## SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene          | 0.0953           | 0.100           | 95              | 68-120            |       |
| a,a,a-Trifluorotoluene        | 1.78             | 2.00            | 89              | 71-121            |       |

Lab Batch #: 3046330

Sample: 7642259-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/10/18 19:49

## SURROGATE RECOVERY STUDY

| TPH GRO by EPA 8015 Mod.<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene                 | 0.0995           | 0.100           | 100             | 76-123            |       |
| a,a,a-Trifluorotoluene               | 1.57             | 2.00            | 79              | 69-120            |       |

Lab Batch #: 3046275

Sample: 581742-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 15:45

## SURROGATE RECOVERY STUDY

| DRO-ORO By SW8015B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| Tricosane                      | 12.6             | 10.1            | 125             | 65-144            |       |
| n-Triacontane                  | 7.71             | 10.1            | 76              | 46-152            |       |

\* Surrogate outside of Laboratory QC limits

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



## Form 2 - Surrogate Recoveries

Project Name: Canvasback 13 Fed #002H

Work Orders : 581742,

Project ID:

Lab Batch #: 3046326

Sample: 581742-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 22:04

## SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene          | 0.103            | 0.100           | 103             | 68-120            |       |
| a,a,a-Trifluorotoluene        | 1.79             | 1.94            | 92              | 71-121            |       |

Lab Batch #: 3046330

Sample: 581742-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 22:57

## SURROGATE RECOVERY STUDY

| TPH GRO by EPA 8015 Mod.<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene                 | 0.104            | 0.100           | 104             | 76-123            |       |
| a,a,a-Trifluorotoluene               | 1.60             | 1.98            | 81              | 69-120            |       |

Lab Batch #: 3046275

Sample: 581742-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 16:21

## SURROGATE RECOVERY STUDY

| DRO-ORO By SW8015B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| Tricosane                      | 12.3             | 10.0            | 123             | 65-144            |       |
| n-Triacontane                  | 8.97             | 10.0            | 90              | 46-152            |       |

Lab Batch #: 3046326

Sample: 581742-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 22:31

## SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene          | 0.104            | 0.100           | 104             | 68-120            |       |
| a,a,a-Trifluorotoluene        | 1.82             | 1.88            | 97              | 71-121            |       |

Lab Batch #: 3046330

Sample: 581742-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/10/18 23:25

## SURROGATE RECOVERY STUDY

| TPH GRO by EPA 8015 Mod.<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|--------------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 4-Bromofluorobenzene                 | 0.105            | 0.100           | 105             | 76-123            |       |
| a,a,a-Trifluorotoluene               | 1.43             | 1.91            | 75              | 69-120            |       |

\* Surrogate outside of Laboratory QC limits

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes.



# BS / BSD Recoveries



**Project Name: Canvasback 13 Fed #002H**

**Work Order #: 581742**

**Project ID:**

**Analyst: MIT**

**Date Prepared: 04/09/2018**

**Date Analyzed: 04/10/2018**

**Lab Batch ID: 3046326**

**Sample: 7642254-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| <b>BTEX by EPA 8021B</b> | <b>Blank Sample Result [A]</b> | <b>Spike Added [B]</b> | <b>Blank Spike Result [C]</b> | <b>Blank Spike %R [D]</b> | <b>Spike Added [E]</b> | <b>Blank Spike Duplicate Result [F]</b> | <b>Blk. Spk Dup. %R [G]</b> | <b>RPD %</b> | <b>Control Limits %R</b> | <b>Control Limits %RPD</b> | <b>Flag</b> |
|--------------------------|--------------------------------|------------------------|-------------------------------|---------------------------|------------------------|---|-----------------------------|--------------|--------------------------|----------------------------|-------------|
| <b>Analytes</b>          |                                |                        |                               |                           |                        |   |                             |              |                          |                            |             |
| Benzene                  | <0.0200                        | 2.00                   | 1.92                          | 96                        | 2.00                   | 1.93                                    | 97                          | 1            | 55-120                   | 20                         |             |
| Toluene                  | <0.0200                        | 2.00                   | 1.93                          | 97                        | 2.00                   | 1.96                                    | 98                          | 2            | 77-120                   | 20                         |             |
| Ethylbenzene             | <0.0200                        | 2.00                   | 1.95                          | 98                        | 2.00                   | 2.00                                    | 100                         | 3            | 77-120                   | 20                         |             |
| m,p-Xylenes              | <0.0400                        | 4.00                   | 3.92                          | 98                        | 4.00                   | 4.01                                    | 100                         | 2            | 78-120                   | 20                         |             |
| o-Xylene                 | <0.0200                        | 2.00                   | 1.93                          | 97                        | 2.00                   | 1.98                                    | 99                          | 3            | 78-120                   | 20                         |             |

**Analyst: RNL**

**Date Prepared: 04/10/2018**

**Date Analyzed: 04/10/2018**

**Lab Batch ID: 3046397**

**Sample: 7642452-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| <b>Chloride by EPA 300</b> | <b>Blank Sample Result [A]</b> | <b>Spike Added [B]</b> | <b>Blank Spike Result [C]</b> | <b>Blank Spike %R [D]</b> | <b>Spike Added [E]</b> | <b>Blank Spike Duplicate Result [F]</b> | <b>Blk. Spk Dup. %R [G]</b> | <b>RPD %</b> | <b>Control Limits %R</b> | <b>Control Limits %RPD</b> | <b>Flag</b> |
|----------------------------|--------------------------------|------------------------|-------------------------------|---------------------------|------------------------|---|-----------------------------|--------------|--------------------------|----------------------------|-------------|
| <b>Analytes</b>            |                                |                        |                               |                           |                        |   |                             |              |                          |                            |             |
| Chloride                   | <25.0                          | 250                    | 259                           | 104                       | 250                    | 254                                     | 102                         | 2            | 90-110                   | 20                         |             |

Relative Percent Difference RPD = 200\*(C-F)/(C+F)

Blank Spike Recovery [D] = 100\*(C)/[B]

Blank Spike Duplicate Recovery [G] = 100\*(F)/[E]

All results are based on MDL and Validated for QC Purposes



# BS / BSD Recoveries



**Project Name: Canvasback 13 Fed #002H**

**Work Order #: 581742**

**Project ID:**

**Analyst: PGM**

**Date Prepared: 04/10/2018**

**Date Analyzed: 04/10/2018**

**Lab Batch ID: 3046275**

**Sample: 7642346-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| <b>DRO-ORO By SW8015B</b>   | <b>Blank Sample Result [A]</b> | <b>Spike Added [B]</b> | <b>Blank Spike Result [C]</b> | <b>Blank Spike %R [D]</b> | <b>Spike Added [E]</b> | <b>Blank Spike Duplicate Result [F]</b> | <b>Blk. Spk Dup. %R [G]</b> | <b>RPD %</b> | <b>Control Limits %R</b> | <b>Control Limits %RPD</b> | <b>Flag</b> |
|-----------------------------|--------------------------------|------------------------|-------------------------------|---------------------------|------------------------|---|-----------------------------|--------------|--------------------------|----------------------------|-------------|
| <b>Analytes</b>             |                                |                        |                               |                           |                        |   |                             |              |                          |                            |             |
| Diesel Range Organics (DRO) | <25.0                          | 100                    | 119                           | 119                       | 100                    | 114                                     | 114                         | 4            | 63-139                   | 20                         |             |

**Analyst: MIT**

**Date Prepared: 04/09/2018**

**Date Analyzed: 04/10/2018**

**Lab Batch ID: 3046330**

**Sample: 7642259-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

| <b>TPH GRO by EPA 8015 Mod.</b> | <b>Blank Sample Result [A]</b> | <b>Spike Added [B]</b> | <b>Blank Spike Result [C]</b> | <b>Blank Spike %R [D]</b> | <b>Spike Added [E]</b> | <b>Blank Spike Duplicate Result [F]</b> | <b>Blk. Spk Dup. %R [G]</b> | <b>RPD %</b> | <b>Control Limits %R</b> | <b>Control Limits %RPD</b> | <b>Flag</b> |
|---------------------------------|--------------------------------|------------------------|-------------------------------|---------------------------|------------------------|---|-----------------------------|--------------|--------------------------|----------------------------|-------------|
| <b>Analytes</b>                 |                                |                        |                               |                           |                        |   |                             |              |                          |                            |             |
| TPH-GRO                         | <4.00                          | 20.0                   | 19.2                          | 96                        | 20.0                   | 20.7                                    | 104                         | 8            | 35-129                   | 20                         |             |

Relative Percent Difference RPD = 200\*|(C-F)/(C+F)|

Blank Spike Recovery [D] = 100\*(C)/[B]

Blank Spike Duplicate Recovery [G] = 100\*(F)/[E]

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS / MSD Recoveries

**Project Name: Canvasback 13 Fed #002H**

**Work Order # :** 581742

**Project ID:**

**Lab Batch ID:** 3046326

**QC- Sample ID:** 581742-001 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 04/10/2018

**Date Prepared:** 04/09/2018

**Analyst:** MIT

**Reporting Units:** mg/kg

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

| <b>BTEX by EPA 8021B</b><br><b>Analytes</b> | <b>Parent Sample Result [A]</b> | <b>Spike Added [B]</b> | <b>Spiked Sample Result [C]</b> | <b>Spiked Sample %R [D]</b> | <b>Spike Added [E]</b> | <b>Duplicate Spiked Sample Result [F]</b> | <b>Spiked Dup. %R [G]</b> | <b>RPD %</b> | <b>Control Limits %R</b> | <b>Control Limits %RPD</b> | <b>Flag</b> |
|---|---------------------------------|------------------------|---------------------------------|-----------------------------|------------------------|---|---------------------------|--------------|--------------------------|----------------------------|-------------|
| Benzene                                     | <0.0194                         | 1.94                   | 1.76                            | 91                          | 1.88                   | 1.70                                      | 90                        | 3            | 54-120                   | 25                         |             |
| Toluene                                     | <0.0194                         | 1.94                   | 1.79                            | 92                          | 1.88                   | 1.77                                      | 94                        | 1            | 57-120                   | 25                         |             |
| Ethylbenzene                                | <0.0194                         | 1.94                   | 1.91                            | 98                          | 1.88                   | 1.89                                      | 101                       | 1            | 58-131                   | 25                         |             |
| m,p-Xylenes                                 | <0.0388                         | 3.88                   | 3.83                            | 99                          | 3.75                   | 3.78                                      | 101                       | 1            | 62-124                   | 25                         |             |
| o-Xylene                                    | <0.0194                         | 1.94                   | 1.89                            | 97                          | 1.88                   | 1.87                                      | 99                        | 1            | 62-124                   | 25                         |             |

**Lab Batch ID:** 3046397

**QC- Sample ID:** 581742-001 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 04/10/2018

**Date Prepared:** 04/10/2018

**Analyst:** RNL

**Reporting Units:** mg/kg

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

| <b>Chloride by EPA 300</b><br><b>Analytes</b> | <b>Parent Sample Result [A]</b> | <b>Spike Added [B]</b> | <b>Spiked Sample Result [C]</b> | <b>Spiked Sample %R [D]</b> | <b>Spike Added [E]</b> | <b>Duplicate Spiked Sample Result [F]</b> | <b>Spiked Dup. %R [G]</b> | <b>RPD %</b> | <b>Control Limits %R</b> | <b>Control Limits %RPD</b> | <b>Flag</b> |
|---|---------------------------------|------------------------|---------------------------------|-----------------------------|------------------------|---|---------------------------|--------------|--------------------------|----------------------------|-------------|
| Chloride                                      | 170                             | 250                    | 415                             | 98                          | 250                    | 412                                       | 97                        | 1            | 80-120                   | 20                         |             |

**Lab Batch ID:** 3046275

**QC- Sample ID:** 581742-001 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 04/10/2018

**Date Prepared:** 04/10/2018

**Analyst:** PGM

**Reporting Units:** mg/kg

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

| <b>DRO-ORO By SW8015B</b><br><b>Analytes</b> | <b>Parent Sample Result [A]</b> | <b>Spike Added [B]</b> | <b>Spiked Sample Result [C]</b> | <b>Spiked Sample %R [D]</b> | <b>Spike Added [E]</b> | <b>Duplicate Spiked Sample Result [F]</b> | <b>Spiked Dup. %R [G]</b> | <b>RPD %</b> | <b>Control Limits %R</b> | <b>Control Limits %RPD</b> | <b>Flag</b> |
|--|---------------------------------|------------------------|---------------------------------|-----------------------------|------------------------|---|---------------------------|--------------|--------------------------|----------------------------|-------------|
| Diesel Range Organics (DRO)                  | <25.1                           | 101                    | 86.4                            | 86                          | 100                    | 85.9                                      | 86                        | 1            | 63-139                   | 20                         |             |

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
Relative Percent Difference RPD = 200\*(C-F)/(C+F)

Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



# Form 3 - MS / MSD Recoveries

**Project Name: Canvasback 13 Fed #002H**

**Work Order # :** 581742

**Project ID:**

**Lab Batch ID:** 3046330

**QC- Sample ID:** 581742-001 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 04/10/2018

**Date Prepared:** 04/09/2018

**Analyst:** MIT

**Reporting Units:** mg/kg

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

| TPH GRO by EPA 8015 Mod.<br><br>Analytes | Parent Sample Result [A] | Spike Added [B] | Spiked Sample Result [C] | Spiked Sample %R [D] | Spike Added [E] | Duplicate Spiked Sample Result [F] | Spiked Dup. %R [G] | RPD % | Control Limits %R | Control Limits %RPD | Flag |
|--|--------------------------|-----------------|--------------------------|----------------------|-----------------|------------------------------------|--------------------|-------|-------------------|---------------------|------|
| TPH-GRO                                  | <3.95                    | 19.8            | 15.6                     | 79                   | 19.1            | 14.9                               | 78                 | 5     | 35-129            | 20                  |      |

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
Relative Percent Difference RPD = 200\*(C-F)/(C+F)

Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.





# XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 04/06/2018 04:40:00 PM

Work Order #: 581742

Acceptable Temperature Range: 0 - 6 degC  
Air and Metal samples Acceptable Range: Ambient  
Temperature Measuring device used : IR-3

| Sample Receipt Checklist                                | Comments |
|---|----------|
| #1 *Temperature of cooler(s)?                           | 4.5      |
| #2 *Shipping container in good condition?               | Yes      |
| #3 *Samples received on ice?                            | Yes      |
| #4 *Custody Seals intact on shipping container/ cooler? | N/A      |
| #5 Custody Seals intact on sample bottles?              | N/A      |
| #6*Custody Seals Signed and dated?                      | N/A      |
| #7 *Chain of Custody present?                           | Yes      |
| #8 Any missing/extra samples?                           | No       |
| #9 Chain of Custody signed when relinquished/ received? | Yes      |
| #10 Chain of Custody agrees with sample labels/matrix?  | Yes      |
| #11 Container label(s) legible and intact?              | Yes      |
| #12 Samples in proper container/ bottle?                | Yes      |
| #13 Samples properly preserved?                         | Yes      |
| #14 Sample container(s) intact?                         | Yes      |
| #15 Sufficient sample amount for indicated test(s)?     | Yes      |
| #16 All samples received within hold time?              | Yes      |
| #17 Subcontract of sample(s)?                           | No       |
| #18 Water VOC samples have zero headspace?              | N/A      |

\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by: Brenda Ward  
Brenda Ward Date: 04/06/2018

Checklist reviewed by: Kelsey Brooks  
Kelsey Brooks Date: 04/11/2018



### Photographic Log

**Client:** COG Operating, LLC  
**Project Name:** Canvasback 13 Federal #002H

**Prepared by:** TRC Environmental Corp.  
**Location:** Eddy County, NM

|   |  |
|---|--|
| <p><b>Photograph No. 1</b></p> <p><b>Description:</b><br/>View of the affected area prior to remediation activities.</p> <p><b>Direction:</b><br/>Northwest</p> |  |
| <p><b>Photograph No. 2</b></p> <p><b>Description:</b><br/>View of the affected area prior to remediation activities.</p> <p><b>Direction:</b><br/>Northeast</p> |  |



### Photographic Log

**Client:** COG Operating, LLC  
**Project Name:** Canvasback 13 Federal #002H

**Prepared by:** TRC Environmental Corp.  
**Location:** Eddy County, NM

**Photograph No. 3**

**Description:**  
View of delineation activities.

**Direction:**  
South



**Photograph No. 4**

**Description:**  
View of delineation activities.

**Direction:**  
South





### Photographic Log

**Client:** COG Operating, LLC  
**Project Name:** Canvasback 13 Federal #002H

**Prepared by:** TRC Environmental Corp.  
**Location:** Eddy County, NM

**Photograph No. 5**

**Description:**  
View of portion of the excavated area.

**Direction:**  
South





### Photographic Log

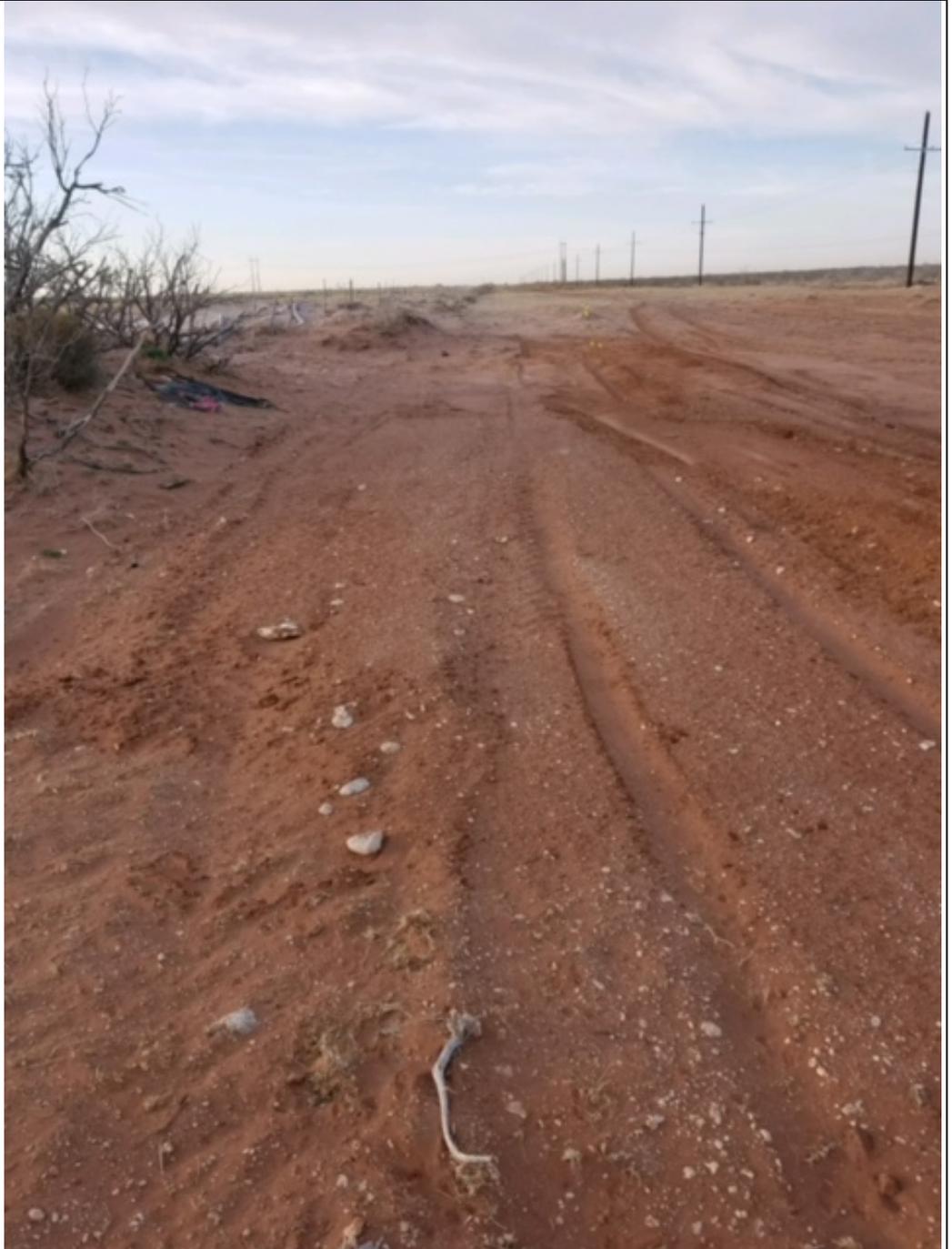
**Client:** COG Operating, LLC  
**Project Name:** Canvasback 13 Federal #002H

**Prepared by:** TRC Environmental Corp.  
**Location:** Eddy County, NM

**Photograph No. 6**

**Description:**  
View of the affected area after remediation activities.

**Direction:**  
South



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

NM OIL CONSERVATION  
ARTESIA DISTRICT

AUG 03 2017

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.  
**RECEIVED**

**Release Notification and Corrective Action**

*NAB17219515L3*

*217955* OPERATOR

Initial Report  Final Report

|   |                            |
|---|----------------------------|
| Name of Company: COG Operating LLC OGRID # 229157   | Contact: Robert McNeill    |
| Address: 600 West Illinois Avenue, Midland TX 79701 | Telephone No. 432-683-7443 |
| Facility Name: Canvasback 13 Federal #002H          | Facility Type: Flowline    |

|                        |                        |                      |
|------------------------|------------------------|----------------------|
| Surface Owner: Federal | Mineral Owner: Federal | API No. 30-015-40538 |
|------------------------|------------------------|----------------------|

**LOCATION OF RELEASE**

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| A           | 13      | 24S      | 31E   | 330           | North            | 480           | East           | Eddy   |

Latitude 32.222781 Longitude -103.723080

**NATURE OF RELEASE**

|   |  |   |
|---|--|---|
| Type of Release: Produced Water   | Volume of Release: 18 bbls.                        | Volume Recovered: 16 bbls.                        |
| Source of Release: Flowline   | Date and Hour of Occurrence: July 26, 2017 3:00 pm | Date and Hour of Discovery: July 26, 2017 3:00 pm |
| Was Immediate Notice Given?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom?                                   |   |
| By Whom?  | Date and Hour:                                     |   |
| Was a Watercourse Reached?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   | If YES, Volume Impacting the Watercourse.          |   |

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

The release was due to a ruptured flowline. The flowline was repaired.

Describe Area Affected and Cleanup Action Taken.\*

The release was within a pasture. The fluid released originated from the Triste Draw 5 Federal Com #002H (API 30-025-40581) which is located in Lea County. The release occurred in Eddy county near the Canvasback 13 Federal #002H pad. A vacuum truck was dispatched to remove all freestanding fluids. Concho will have the spill area sampled to delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant 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 NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

|  |   |                                   |
|--|---|-----------------------------------|
| Signature: <i>Rebecca Haskell</i>        | <b>OIL CONSERVATION DIVISION</b>            |                                   |
| Printed Name: Rebecca Haskell            | Signed By <i>Mike Brumley</i>               |                                   |
| Title: Senior HSE Coordinator            | Approved by Environmental Specialist:       |                                   |
| E-mail Address: rhaskell@concho.com      | Approval Date: <i>8/4/17</i>                | Expiration Date: <i>N/A</i>       |
| Date: August 3, 2017 Phone: 432-683-7443 | Conditions of Approval: <i>See attached</i> | Attached <input type="checkbox"/> |

\* Attach Additional Sheets If Necessary

*2RD-4324*

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
 Action 167792

**CONDITIONS**

|   |   |
|---|---|
| Operator:<br>COG OPERATING LLC<br>600 W Illinois Ave<br>Midland, TX 79701 | OGRID:<br>229137  |
|   | Action Number:<br>167792                                  |
|   | Action Type:<br>[C-141] Release Corrective Action (C-141) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|------------|-----------|----------------|
| amaxwell   | None      | 2/7/2023       |