TRC

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SITE REMEDIATION SUMMARY

and

SITE CLOSURE REQUEST

COG Operating, LLC
Plains Pipeline Gathering System CTB
Lea County, New Mexico
Unit Letter "B", Section 34, Township 25 South, Range 35 East
Latitude 32.09353° North, Longitude 103.35510° West
NMOCD Incident No. NRM2002733872

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 2020

Russell Sebring
Senior Project Manager

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 *Site Remediation Summary and Site Closure Request* for the Release Site known as Plains Gathering System CTB (the Site). The legal description of the Site is Unit Letter "B", Section 34, Township 25 South, Range 35 East, in Lea County, New Mexico. The subject property is owned by the United States Department of the Interior and administered by the Bureau of Land Management (BLM). The GPS coordinates for the Site are N 32.09353°, W 103.35510°. A topographical map is provided as **Figure 1**. General photographs are provided in the photolog as **Appendix C**.

On November 26, 2019, COG discovered a produced water release at the Site. The Release was attributed to a pinhole formed in a riser due to corrosion. Immediately following the discovery, a vacuum truck was dispatched to recover all freestanding fluids. The C-141 was submitted to the New Mexico Oil Conservation Division (NMOCD) on December 11, 2019. The Release was assigned an NMOCD Incident No. **NRM2002733872**. The Form C-141 indicated a volume of twenty-one (21) bbls of produced water was released. It was estimated eighteen (18) bbls of produced water was recovered during initial response activities. The Release affected an area initially measuring approximately 2,846 square feet (sq. ft.) around the riser and along the caliche lease road west of the pipeline riser. A copy of the submitted Form C-141 for the Release is provided in **Appendix A.**

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) identified a water well located approximately 3,300 feet east-southeast of the Release point. The database indicated the water well has a depth to groundwater of approximately 230 feet below ground surface (bgs). No surface water was observed within one thousand (1,000) feet of the Release. An aerial map with nearby water wells is provided as **Figure 2**.

Based on the depth to groundwater at the Release Site, the NMOCD *Closure Criteria for Soils Impacted by a Release* are the least stringent closure criteria listed. The Plains Pipeline Gathering System CTB location is within a 'low karst' area as outlined in BLM publicly available Karst Potential Map. The karst potential map is provided as **Figure 3**. Consequently, COG will utilize the least stringent NMOCD Closure Criteria for Soils Impacted by a Release for the Plains Pipeline Gathering System CTB as follows:

- Benzene – 10 mg/kg
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) – 50 mg/kg
- Total Petroleum Hydrocarbons (TPH) –2,500 mg/kg
- Chloride – 20,000 mg/kg

REMEDIATION SUMMARY

On January 21, 2020, thirty-seven (37) delineation samples were collected and submitted to Xenco Laboratories in Midland, Texas. The soil samples were submitted for analysis in an effort to determine the horizontal and vertical extent of soils impacted by the release. Nine (9) of the soil samples were collected from the sidewalls of the pipeline construction excavation. Sample N.EX-SWW was used to define the western extent of impacted soil north of the riser.

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On March 6, 2020, three (3) confirmation samples (N.Floor@8', E. Floor @ 9', and S.Floor@8') were collected from bottom of the pipeline construction excavation and submitted to Xenco Laboratories (Xenco) in Midland, Texas for chloride, TPH, and BTEX analysis. A review of the analytical results indicated soil samples N.Floor@8' and S.Floor@8' exhibited chloride, TPH and BTEX concentrations below NMOCD regulatory guidelines. However, soil sample E.Floor@9'exhibited TPH concentrations above NMOCD regulatory guidelines and required additional excavation.

On March 26, 2020, remediation activities commenced to excavate impacted soil from the Release Site. Excavation activities began in the area of sample point E.Floor@9' and the original construction excavation was advanced to a depth of approximately 9.5' feet. The excavation was then advanced horizontally at a depth of approximately four (4) feet to the north and south until visual and olfactory evidence indicated the impacted soil was removed. Furthermore, the floor and sidewalls of the excavation were field screened for chloride concentrations to ensure the extent of chloride impacted soil was removed. The initial remediation excavation was advanced to a minimum depth of four (4) feet and extended horizontally approximately eighteen (18) feet north, and thirty-six (36) feet to the south feet from the release point. Floor and sidewall confirmation soil samples were collected at a frequency of one (1) five-point composite soil sample for approximately every two hundred (200) square feet of excavation. Confirmation soil sample locations are depicted in **Figure 5.**

On March 27, 2020, two (2) excavation floor samples (E.Floor@9.5' and FL01@4') and three (3) sidewall soil samples (SWN-1, SWS-1, and SWE-1) were submitted to Xenco Laboratories in Midland, TX for chloride, TPH, and BTEX analyses. A review of the analytical results indicated each floor and sidewall soil sample exhibited chloride, TPH, and BTEX concentrations below NMOCD regulatory guidelines.

On March 30, 2020, the initial remediation excavation was extended from the riser to the east and southwest until visual and olfactory evidence indicated the impacted soil was removed. Furthermore, the floor and sidewalls of the excavation were field screened for chloride concentrations to ensure the extent of chloride impacted soil was removed. The initial remediation excavation was advanced from the riser at a depth of four (4) feet, to the east approximately twenty-eight (28) feet and to the southwest approximately thirteen (13).

On March 31, 2020, five (5) floor samples (FL02@4', FL03@4', FL04@4', FL05@4', and FL06@4') and four (4) sidewall samples (SWE-2, SWE-3, SWW-1, SWN-2) were submitted to the laboratory for chloride, TPH and BTEX analyses. A review of the analytical results indicated each floor and sidewall sample exhibited chloride, TPH, and BTEX concentrations below NMOCD regulatory guidelines.

It was determined the excavation of the impacted soil south of initial excavation, along the lease road, would be postponed pending approval of enhanced traffic control measures.

On April 27, 2020, remediation activities resumed at the Site to excavate remaining impacted soil. Excavation activities began at the southern terminus of the impacted area, along the lease road. The excavation was advanced horizontally to the north at a depth of approximately one- and one-half feet (1.5'), terminating at the southern boundary of the initial remediation excavation. The

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floor and sidewalls of the excavation were field screened for chloride concentrations to ensure the extent of chloride impacted soil was removed. Areas exhibiting elevated chloride concentrations were advanced by six (6) inches and rescreened until field screening results indicate chloride impacted soils were removed.

On April 29, 2020, six (6) floor samples (FL-13@1.5', FL-14@1.5', FL-15@1.5', FL-16@1.5', FL-17@1.5', and FL-18@1.5') were collected and submitted to the laboratory for chloride, TPH and BTEX analyses. A review of the analytical results indicated each floor and sidewall sample exhibited chloride, TPH, and BTEX concentrations below NMOCD regulatory guidelines.

On April 30, 2020, five (5) floor samples (FL-8@3.5', FL-9@3.5', FL-10@3.5', FL-11@2.5', and FL-12@2.5') and five (5) sidewall samples (SWE-4, SWE-5, SWS-2, SWW-2, and SWW-3) were collected and submitted to the laboratory for chloride, TPH and BTEX analyses. A review of the analytical results indicated each floor and sidewall sample exhibited chloride, TPH, and BTEX concentrations below NMOCD regulatory guidelines.

During excavation activities, excavated soil was loaded directly into twenty (20) yard dump trucks and transported, under manifest to R360 Red Bluff Facility for disposal. Following a final review of the analytical data, the excavation was backfilled to grade with locally sourced non-impacted 'like' material. A summary of the excavation sample location areas is depicted in **Figure 5**. A summary of analytical data is provided in **Table 1**. Laboratory analytical reports are provided in **Appendix D**.

SITE CLOSURE REQUEST

Remediation activities were conducted in accordance with NMCOD regulatory guidelines. Laboratory analytical results from excavation confirmation soil samples indicated TPH, BTEX, and/or chloride concentrations were below the NMOCD regulatory guidelines in the submitted confirmation soil samples. The impacted soil was transported under manifest to the R360 Red Bluff Facility, and the Site was returned to grade with locally sourced non-impacted backfill material. Based on laboratory analytical results and field activities conducted to date, TRC recommends COG provide copies of this Remediation Summary and Site Closure Request to the NMOCD and BLM and request closure status to the Plains Pipeline Gathering System CTB Site.

LIMITATION

TRC has prepared this Remediation Summary and Site 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.

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This report has been prepared for the benefit of COG. 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.

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DISTRIBUTION

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United States Department of Interior
Bureau of Land Management
620 E. Greene Street
Carlsbad, New Mexico 88220

Copy 3: Ike Tavarez
COG Operating, LLC
600 W. Illinois Avenue
Midland, Texas 79701

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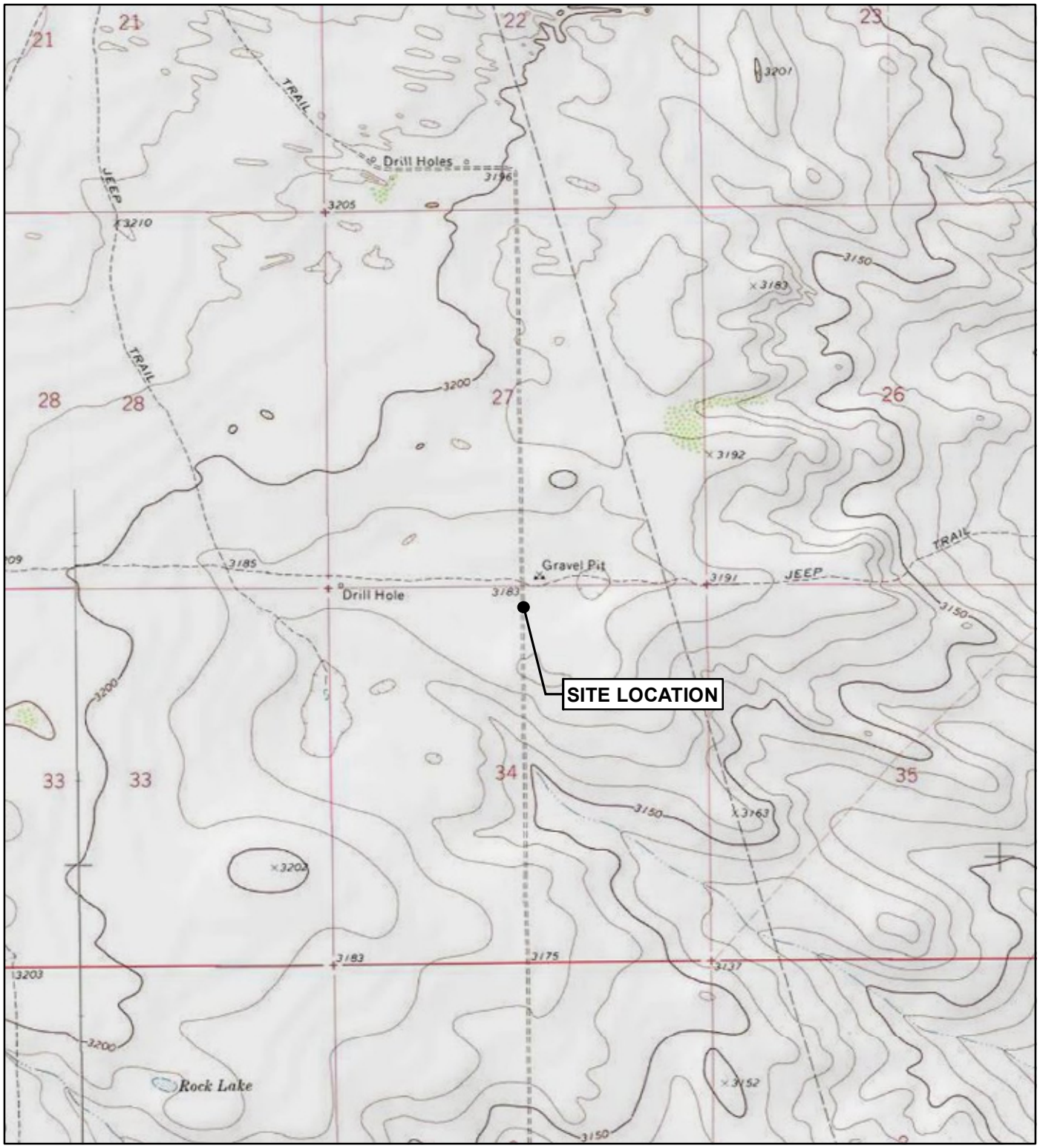

BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES, JAVELINA BASIN, NEW MEXICO (32103-A3).

N

1 " = 2,000 '
1:24,000

0 2,000
FEET

TRC
505 East Huntland Drive
Suite #250
Austin, TX 78752
Phone: 512.329.6080
TRC - GIS

PROJECT:
COG PLAINS GATHERING SYSTEM CTB
LEA COUNTY, NEW MEXICO

TITLE:
SITE LOCATION TOPOGRAPHIC MAP

DRAWN BY:	M. JAGOE
CHECKED BY:	P. HENDERSON
APPROVED BY:	R. SEBRING
DATE:	MAY 2020
PROJ. NO.:	378216
FILE:	378216_1.mxd

FIGURE 1

S:\1-PROJECTS\ConchoResources\378216\mxd\378216_1.mxd -- Saved By: MJAGOE on 5/26/2020, 12:29:15 PM

LEGEND

SITE LOCATION

SOURCE: ESRI World Imagery (9/22/2018)

N

0 2,000 4,000 Feet

1 " = 2,000 '

1:24,000

PROJECT:

COG PLAINS GATHERING SYSTEM CTB
LEA COUNTY, NEW MEXICO

TITLE:

AERIAL MAP

DRAWN BY:	M. JAGOE	PROJ NO.:	378216
CHECKED BY:	P. HENDERSON		
APPROVED BY:	R. SEBRING		
DATE:	MAY 2020		

FIGURE 2

TRC

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Austin, TX 78752
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FILE NO.: 378216_2.mxd

TRC - GIS

Coordinate System: NAD 1983 UTM Zone 15N (Meter)
Map Rotation: 0

Plot Date: 5/19/2020, 15:22:00 PM by MJAGOE -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\ConchoResources\378216\mxd\378216_2.mxd

LEGEND

- LOW KARST POTENTIAL
- MEDIUM KARST POTENTIAL
- HIGH KARST POTENTIAL

NO OTHER KARST POTENTIAL PRESENT AT THIS SCALE

SOURCE: ESRI World Imagery (9/22/2018), New Mexico Bureau of Land Management

N

0 21,120 42,240 Feet

1 " = 20,802 '

1:249,622

PROJECT:

COG PLAINS GATHERING SYSTEM CTB
LEA COUNTY, NEW MEXICO

TITLE:

KARST POTENTIAL MAP

DRAWN BY:	M. JAGOE	PROJ NO.:	378216
CHECKED BY:	P. HENDERSON		
APPROVED BY:	R. SEBRING		
DATE:	MAY 2020		

FIGURE 3

TRC

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FILE NO.: 378216_3.mxd

TRC - GIS

Coordinate System: NAD 1983 UTM Zone 15N (Meter)
Map Rotation: 0

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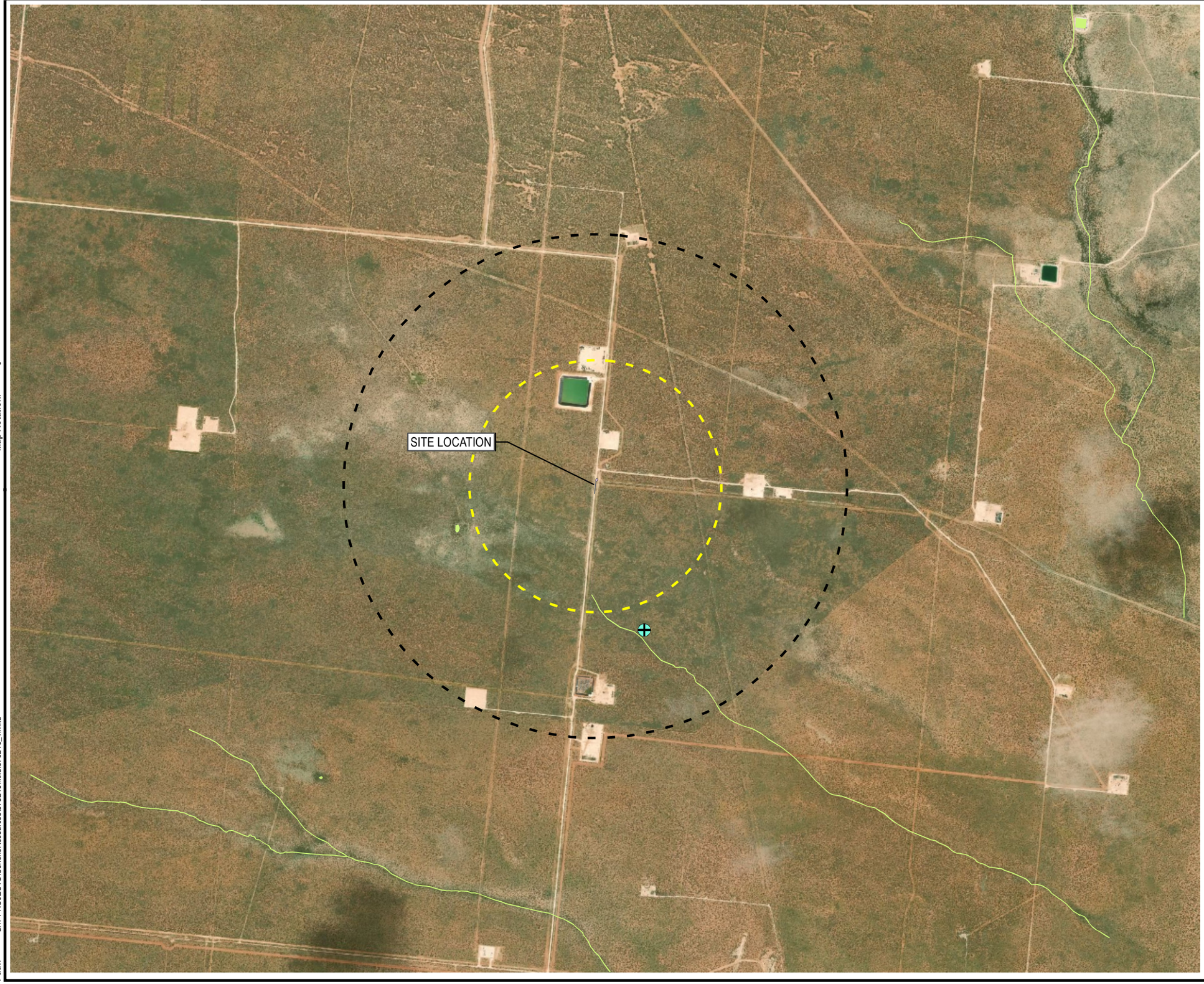

LEGEND

- WATER WELL
- 1/2 MILE RADIUS
- 1 MILE RADIUS
- WETLANDS

SOURCE: ESRI World Imagery (9/22/2018)

N

0 2,000 4,000 Feet

1 " = 2,000 '

1:24,000

PROJECT:

COG PLAINS GATHERING SYSTEM CTB
LEA COUNTY, NEW MEXICO

TITLE:

RELEASE AREA MAP

DRAWN BY:	M. JAGOE	PROJ NO.:	378216
CHECKED BY:	P. HENDERSON		
APPROVED BY:	R. SEBRING		**FIGURE 4**
DATE:	MAY 2020		

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Austin, TX 78752
Phone: 512.329.6080
www.trcsolutions.com

FILE NO.: 378216_4.mxd

Plot Date: 5/18/2020, 12:37:44 PM by MJAGOE -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\ConchoResources\378216\mxd\378216_4.mxd

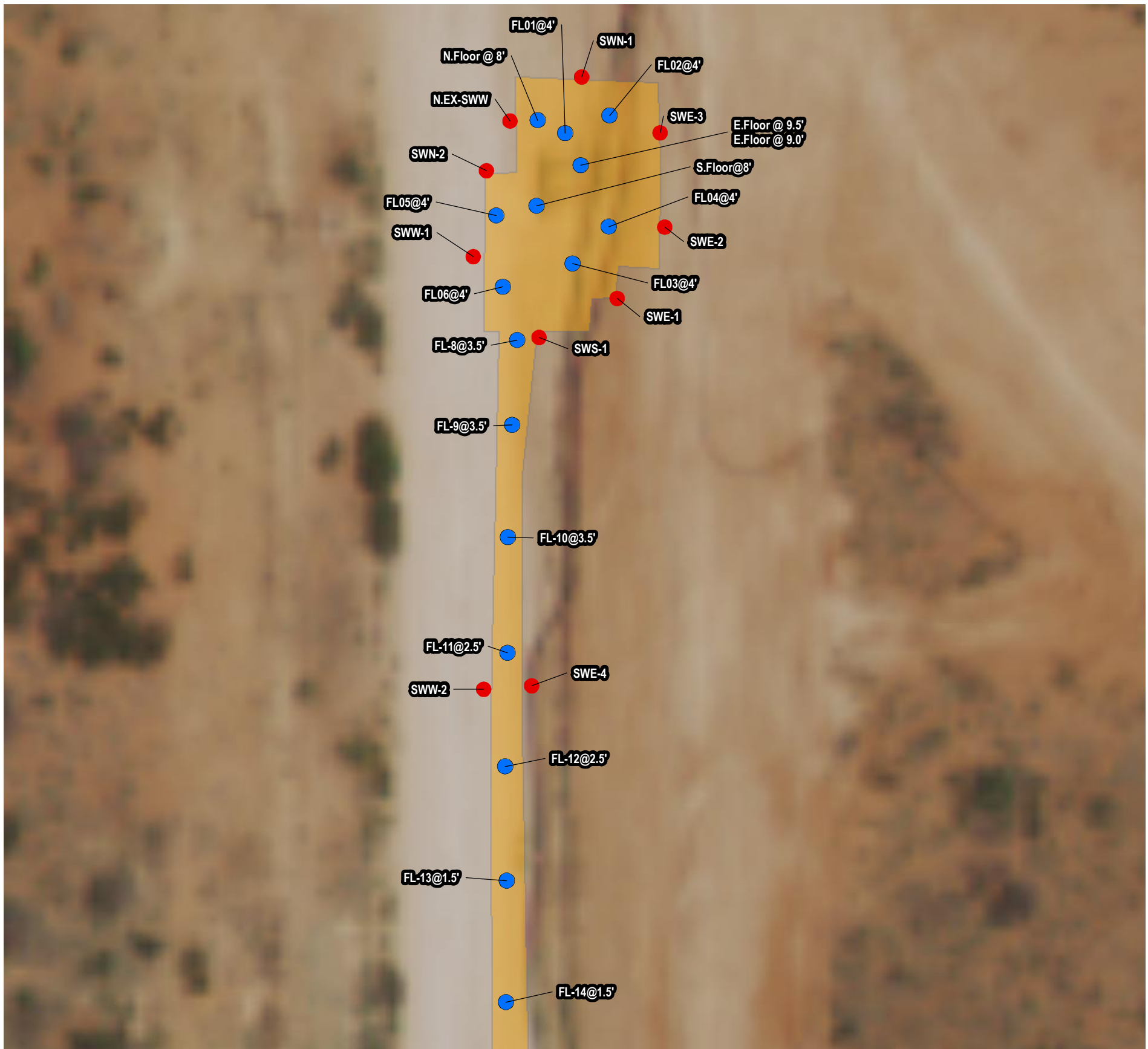
Coordinate System: NAD 1983 UTM Zone 15N (Meter)
Map Rotation: 0

TRC - GIS

Plot Date: 5/22/2020, 12:03:03 PM by MJAGOE -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\ConchoResources\378216\mxd\378216_5.mxd

Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

TRC - GIS



LEGEND

SAMPLE LOCATION
EXCAVATION
SIDE WALL SAMPLE

SOURCE: NAIP Imagery ISDA (4/22/2019)

N

0 25 50 FEET

1 " = 25 '

1:304

TRC
505 East Huntland Drive
Suite #250
Austin, TX 78752
Phone: 512.329.6080

PROJECT:
COG PLAINS GATHERING SYSTEM CTB
LEA COUNTY, NEW MEXICO

TITLE:
SAMPLE LOCATION MAP

DRAWN BY:	M. JAGOE
CHECKED BY:	P. HENDERSON
APPROVED BY:	R. SEBRING
DATE:	MAY 2020
PROJ. NO.:	378216
FILE:	378216_5.mxd

FIGURE 5

TABLE 1
Summary of Sampling Analytical Results (Confirmation Samples)
Concentrations of BTEX, TPH, and/or Chloride in Soil

Sample ID	Date	Depth	SW 846 8021B		SW 846 8015M Ext.					E 300
			Benzene (mg/kg)	BTEX (mg/kg)	GRO C_6-C_{10} (mg/kg)	DRO C_{10}-C_{28} (mg/kg)	GRO + DRO C_6-C_{28} (mg/kg)	ORO C_{28}-C_{35} (mg/kg)	TPH C_6-C_{35} (mg/kg)	Chloride (mg/kg)
Confirmation										
NMOCD Closure Criteria			10	50	-	-	- (0-4' bgs) 1,000 (>4' bgs)	-	100 (0-4' bgs) 2,500 (>4' bgs)	600 (0-4' bgs) 20,000 (>4' bgs)
N.Floor @ 8'	3/6/20	8'	<0.00200	<0.002	<49.8	99.9	99.9	<49.8	99.9	134
E. Floor @ 9'	3/6/20	9'	0.0233	2.7056	261	1050	**1311**	135	1446	1,620
E. Floor@ 9.5'	3/27/20	9.5'	<0.00200	0.00576	<49.9	121	121	<49.9	121	4,330
S. Floor @ 8'	3/6/20	8'	<0.00202	<0.00202	<49.9	208	208	<49.9	208	7,350
FL01 @ 4'	3/27/20	4'	<0.00199	<0.00199	<50.0	<50.0	<50	<50.0	<50.0	794
FL02 @ 4'	3/31/20	4'	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	9,510
FL03 @ 4'	3/31/20	4'	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	10,800
FL04 @ 4'	3/31/20	4'	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	10,100
FL05 @ 4'	3/31/20	4'	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	11,400
FL06 @ 4'	3/31/20	4'	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	12,500
FL-8@3.5'	4/30/20	3.5'	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	58.9
FL-9@3.5'	4/30/20	3.5'	<0.00200	0.00222	<49.8	<49.8	<49.8	<49.8	<49.8	62.0
FL-10@3.5'	4/30/20	3.5'	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	43.3
FL-11@2.5'	4/30/20	2.5'	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	62.9
FL-12@2.5'	4/30/20	2.5'	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	37.5
FL-13@1.5'	4/29/20	1.5'	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	44.8
FL-14@1.5'	4/29/20	1.5'	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	54.1
FL-15@1.5'	4/29/20	1.5'	<0.00200	<0.002	<49.9	<49.9	<49.9	<49.9	<49.9	14.5
FL-16@1.5'	4/29/20	1.5'	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	8.07
FL-17@1.5'	4/29/20	1.5'	<0.00200	<0.002	<50.0	<50.0	<50.0	<50.0	<50.0	8.62
FL-18@1.5'	4/29/20	1.5'	<0.00200	<0.002	<50.0	<50.0	<50.0	<50.0	<50.0	9.95
N.EX-SWW	1/21/20	4'	<0.00200	<0.002	<50.0	<50.0	<50.0	<50.0	<50	2,070
SWW-1	3/31/20	2.5'	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	13.7
SWW-2	4/30/20	1.5'	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	17.8
SWW-3	4/30/20	1'	<0.00200	<0.002	<49.9	<49.9	<49.9	<49.9	<49.9	10.4
SWN-1	3/27/20	2.5'	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	218
SWN-2	3/31/20	2.5'	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	6.76

TABLE 1
Summary of Sampling Analytical Results (Confirmation Samples)
Concentrations of BTEX, TPH, and/or Chloride in Soil

Sample ID	Date	Depth	SW 846 8021B		SW 846 8015M Ext.					E 300
			Benzene (mg/kg)	BTEX (mg/kg)	GRO C_6-C_{10} (mg/kg)	DRO C_{10}-C_{28} (mg/kg)	GRO + DRO C_6-C_{28} (mg/kg)	ORO C_{28}-C_{35} (mg/kg)	TPH C_6-C_{35} (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria			**10**	**50**	**-**	**-**	**- (0-4' bgs) 1,000 (>4' bgs)**	**-**	**100 (0-4' bgs) 2,500 (>4' bgs)**	**600 (0-4' bgs) 20,000 (>4' bgs)**
SWS-1	3/27/20	2.5'	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	226
SWS-2	4/30/20	1'	<0.00200	<0.002	<49.9	<49.9	<49.9	<49.9	<49.9	39.0
SWE-1	3/27/20	2.5'	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	171
SWE-2	3/31/20	2.5'	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	13.6
SWE-3	3/31/20	2.5'	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	12.3
SWE-4	4/30/20	1.5'	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	64.5
SWE-5	4/30/20	1'	<0.0199	<0.0199	<49.9	<49.9	<49.9	<49.9	<49.9	48.3

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

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

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

Unit Letter	Section	Township	Range	County

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

Nature and Volume of Release

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Initial Response

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

☐ The source of the release has been stopped.

☐ The impacted area has been secured to protect human health and the environment.

☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☐ All free liquids and recoverable materials have been removed and managed appropriately.

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

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

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

Printed Name _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Ike Tavarez Title: Senior HSE Supervisor

Signature:  Date: 5/27/20

email: itavarez@concho.com Telephone: 432-683-7443

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

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: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

New Mexico Office of the State Engineer
Wells with Well Log Information

No wells found.

UTMNAD83 Radius Search (in meters):

Easting (X): 655221 **Northing (Y):** 3551986.87 **Radius:** 805

New Mexico Office of the State Engineer
Wells with Well Log Information

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

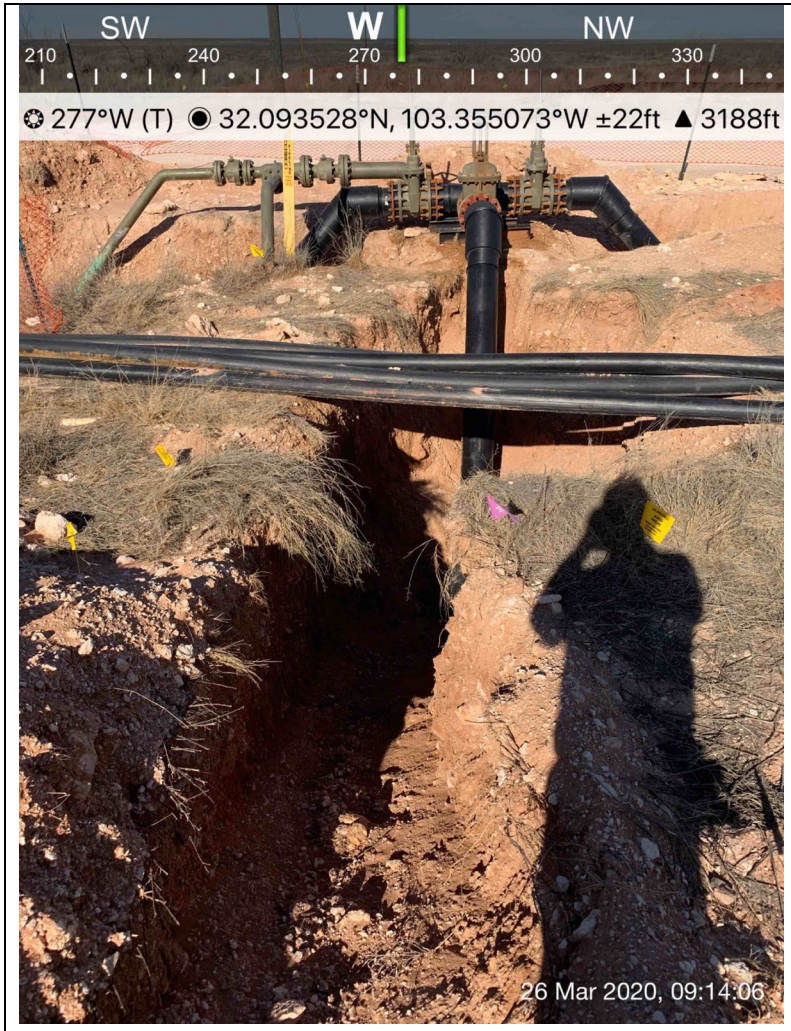
POD Number	POD Sub-basin Code	County	Source	q 6416	q 4	q	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
CP 01305 POD1	CP	LE	Artesian	1	4		31	25S	37E	655628	3551065	1007	05/04/2017	05/06/2017	07/07/2017	420	230	WALLACE, BRYCE J.	1706

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 655221 **Northing (Y):** 3551986.87 **Radius:** 1610

Appendix C
Photographs



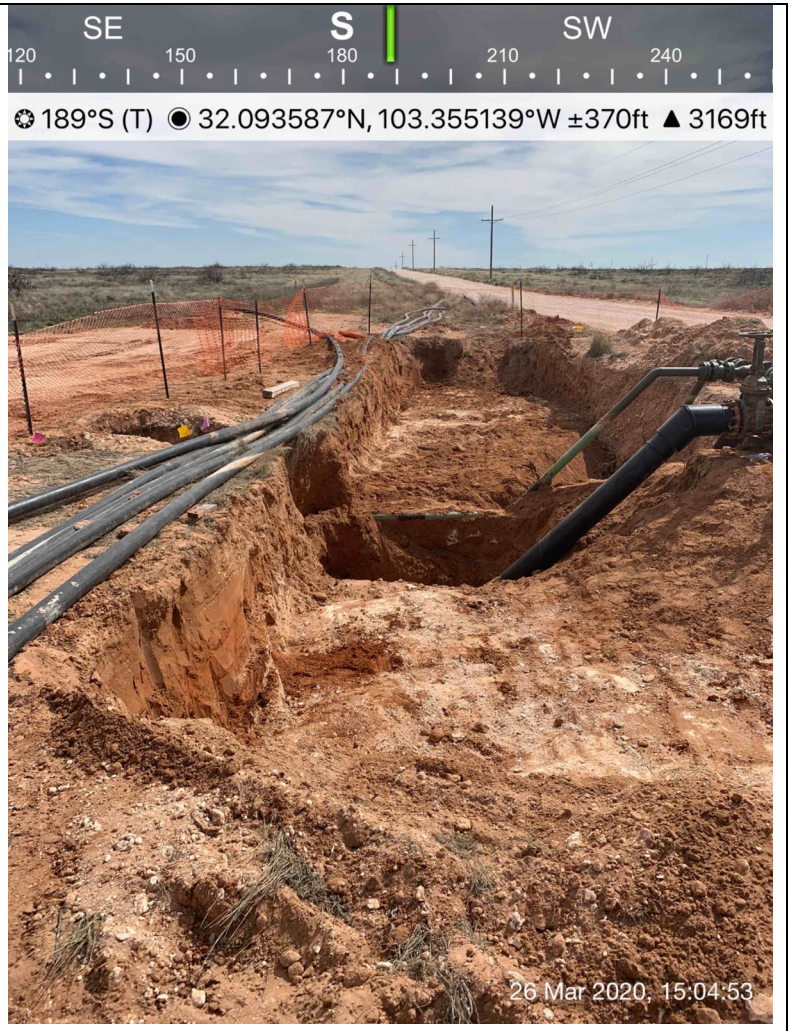
COG_PG01: Construction excavation, prior to remediation

COG_PG02: View of additional excavation (E.Floor@9.5')

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
378216	Russell Sebring	1 of 5	COG Operating, LLC	Plains Pipeline Gathering System CTB	TRC

Appendix C
Photographs

COG_PG03: View of initial remediation excavation near pipelines



COG_PG04: Initial excavation in progress

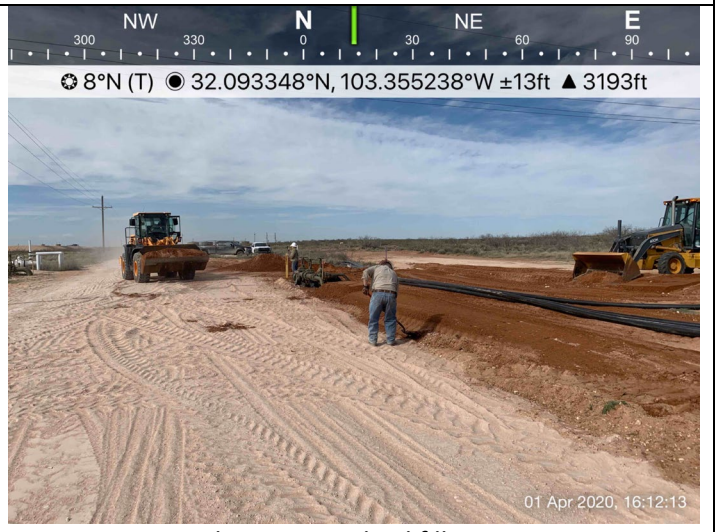
TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
378216	Russell Sebring	2 of 5	COG Operating, LLC	Plains Pipeline Gathering System CTB	TRC

Appendix C
Photographs

COG_PG05: View of Excavation; (1500’ Northeast) Floor Sample Area 16

COG_PG06: View of Excavation; (1750’ Northeast)

COG_PG07: View of Excavation; (900’ Northeast)



COG_PG08: Initial excavation backfill activities

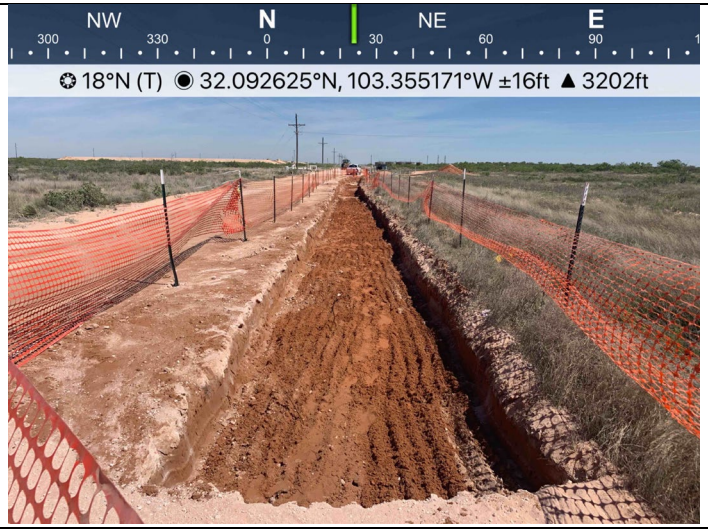
TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:
378216	Russell Sebring	3 of 5	COG Operating, LLC	Plains Pipeline Gathering System CTB

Appendix C
Photographs

COG_PG09: Initial excavation backfill activities

COG_PG10: Initial excavation backfill activities.

COG_PG11: View of road excavation (North to South)



COG_PG12: View of road excavation (South to North)

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:
378216	Russell Sebring	4 of 5	COG Operating, LLC	Plains Pipeline Gathering System CTB

Appendix C
Photographs

COG_PG13: Staging/Loading area - Post backfill

COG_PG14: Backfill - View from north

COG_PG14: Backfill - View from south

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:
378216	Russell Sebring	5 of 5	COG Operating, LLC	Plains Pipeline Gathering System CTB

Certificate of Analysis Summary 649839

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gathering

Project Id:

Contact: Russell Sebring

Project Location: Jal, NM

Date Received in Lab: Wed Jan-22-20 10:53 am

Report Date: 31-JAN-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	649839-001		649839-002		649839-003		649839-004		649839-005		649839-006	
	Field Id:	HA-01 @ 0.5-1'		HA-01 @ 1.5'		HA-01 @ 2.0'		HA-01 @ 2.5'		HA-01 @ 3.0'		HA-02 @ 0.5-1'	
	Depth:	.5- ft		1.5- ft		2.0- ft		2.5- ft		3.0- ft		.5-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-21-20 10:00		Jan-21-20 10:05		Jan-21-20 10:10		Jan-21-20 10:15		Jan-21-20 10:20		Jan-21-20 10:30	
BTEX by EPA 8021B	***Extracted:***	Jan-29-20 11:30										Jan-29-20 11:30	
	Analyzed:	Jan-30-20 09:52										Jan-30-20 10:12	
	Units/RL:	mg/kg	RL									mg/kg	RL
Benzene		<0.00202	0.00202									<0.00198	0.00198
Toluene		<0.00202	0.00202									<0.00198	0.00198
Ethylbenzene		<0.00202	0.00202									<0.00198	0.00198
m,p-Xylenes		<0.00403	0.00403									<0.00397	0.00397
o-Xylene		<0.00202	0.00202									<0.00198	0.00198
Total Xylenes		<0.00202	0.00202									<0.00198	0.00198
Total BTEX		<0.00202	0.00202									<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	Jan-22-20 16:00		Jan-22-20 16:00		Jan-22-20 16:00		Jan-22-20 16:00		Jan-22-20 16:00		Jan-22-20 16:00	
	Analyzed:	Jan-22-20 22:21		Jan-22-20 22:27		Jan-22-20 22:47		Jan-22-20 22:53		Jan-22-20 23:00		Jan-22-20 23:06	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		11.0	4.99	456	5.02	2410	24.8	3530	49.7	4490	25.0	<5.04	5.04
TPH by SW8015 Mod	***Extracted:***	Jan-25-20 16:00										Jan-25-20 16:00	
	Analyzed:	Jan-26-20 12:41										Jan-26-20 13:45	
	Units/RL:	mg/kg	RL									mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0									<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0									<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0									<50.0	50.0
Total TPH		<50	50									<50	50

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 649839

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gathering

Project Id:

Contact: Russell Sebring

Project Location: Jal, NM

Date Received in Lab: Wed Jan-22-20 10:53 am

Report Date: 31-JAN-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	649839-007		649839-008		649839-009		649839-010		649839-011		649839-012	
	Field Id:	HA-02 @ 1.5'		HA-02 @ 2.0'		HA-02 @ 2.5'		HA-03 @ 0.5-1'		HA-03 @ 1.5'		HA-03 @ 2.0'	
	Depth:	1.5- ft		2.0- ft		2.5- ft		.5-1 ft		1.5- ft		2.0- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-21-20 10:35		Jan-21-20 10:40		Jan-21-20 10:45		Jan-21-20 11:00		Jan-21-20 11:05		Jan-21-20 11:10	
BTEX by EPA 8021B	***Extracted:***							Jan-29-20 11:30					
	Analyzed:							Jan-30-20 10:32					
	Units/RL:							mg/kg	RL				
Benzene								<0.00202	0.00202				
Toluene								0.00246	0.00202				
Ethylbenzene								<0.00202	0.00202				
m,p-Xylenes								<0.00403	0.00403				
o-Xylene								<0.00202	0.00202				
Total Xylenes								<0.00202	0.00202				
Total BTEX								0.00246	0.00202				
Chloride by EPA 300	***Extracted:***	Jan-22-20 16:00		Jan-22-20 16:00		Jan-22-20 16:00		Jan-22-20 16:30		Jan-22-20 16:30		Jan-22-20 16:30	
	Analyzed:	Jan-22-20 23:13		Jan-22-20 23:19		Jan-22-20 23:26		Jan-23-20 00:24		Jan-23-20 00:30		Jan-23-20 00:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<5.01	5.01	<5.01	5.01	5.12	5.00	8550	49.8	8990	50.0	8780	50.3
TPH by SW8015 Mod	***Extracted:***							Jan-25-20 16:00					
	Analyzed:							Jan-26-20 14:07					
	Units/RL:							mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)								<49.9	49.9				
Diesel Range Organics (DRO)								<49.9	49.9				
Motor Oil Range Hydrocarbons (MRO)								<49.9	49.9				
Total TPH								<49.9	49.9				

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Jessica Kramer
Project Assistant

Certificate of Analysis Summary 649839

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gathering

Project Id:

Contact: Russell Sebring

Project Location: Jal, NM

Date Received in Lab: Wed Jan-22-20 10:53 am

Report Date: 31-JAN-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	649839-013		649839-014		649839-015		649839-016		649839-017		649839-018	
	Field Id:	HA-03 @ 2.5'		HA-03 @ 3.0'		HA-04 @ 0.5-1'		HA-04 @ 1.5'		HA-04 @ 2.0'		HA-04 @ 2.5'	
	Depth:	3.5- ft		3.0- ft		.5-1 ft		1.5- ft		2.0- ft		2.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-21-20 11:15		Jan-21-20 11:20		Jan-21-20 11:30		Jan-21-20 11:35		Jan-21-20 11:40		Jan-21-20 11:45	
BTEX by EPA 8021B	***Extracted:***					Jan-29-20 11:30							
	Analyzed:					Jan-30-20 10:52							
	Units/RL:					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						
Chloride by EPA 300	***Extracted:***	Jan-22-20 16:30		Jan-22-20 16:30		Jan-22-20 16:30		Jan-22-20 16:30		Jan-22-20 16:30		Jan-22-20 16:30	
	Analyzed:	Jan-23-20 00:43		Jan-23-20 01:03		Jan-23-20 01:09		Jan-23-20 13:41		Jan-23-20 01:22		Jan-23-20 01:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9590	49.6	9850	50.5	2840	25.0	1690	25.0	3180	24.8	4630	24.8
TPH by SW8015 Mod	***Extracted:***					Jan-25-20 16:00							
	Analyzed:					Jan-26-20 14:28							
	Units/RL:					mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)						<49.8	49.8						
Diesel Range Organics (DRO)						<49.8	49.8						
Motor Oil Range Hydrocarbons (MRO)						<49.8	49.8						
Total TPH						<49.8	49.8						

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 649839

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gathering

Project Id:

Contact: Russell Sebring

Project Location: Jal, NM

Date Received in Lab: Wed Jan-22-20 10:53 am

Report Date: 31-JAN-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	649839-019		649839-020		649839-021		649839-022		649839-023		649839-024	
	Field Id:	HA-05 @ 0.5-1'		HA-05 @ 1.5'		HA-05 @ 2.0'		HA-05 @ 2.5'		HA-06 @ 0.5-1'		HA-06 @ 1.5'	
	Depth:	.5-1 ft		1.5- ft		2.0- ft		2.5- ft		.5-1 ft		1.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-21-20 12:00		Jan-21-20 12:05		Jan-21-20 12:10		Jan-21-20 12:15		Jan-21-20 12:30		Jan-21-20 12:35	
BTEX by EPA 8021B	***Extracted:***	Jan-29-20 11:30								Jan-29-20 11:30			
	Analyzed:	Jan-30-20 11:12								Jan-30-20 11:32			
	Units/RL:	mg/kg	RL							mg/kg	RL		
Benzene		<0.00201	0.00201							<0.00198	0.00198		
Toluene		<0.00201	0.00201							<0.00198	0.00198		
Ethylbenzene		<0.00201	0.00201							<0.00198	0.00198		
m,p-Xylenes		<0.00402	0.00402							<0.00396	0.00396		
o-Xylene		<0.00201	0.00201							<0.00198	0.00198		
Total Xylenes		<0.00201	0.00201							<0.00198	0.00198		
Total BTEX		<0.00201	0.00201							<0.00198	0.00198		
Chloride by EPA 300	***Extracted:***	Jan-22-20 16:30		Jan-22-20 16:30		Jan-22-20 16:30		Jan-22-20 16:30		Jan-22-20 16:30		Jan-22-20 16:30	
	Analyzed:	Jan-23-20 01:55		Jan-23-20 02:01		Jan-23-20 02:20		Jan-23-20 02:27		Jan-23-20 02:33		Jan-23-20 00:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1880	25.2	1940	25.1	2460	24.8	3680	25.0	1270	5.00	162	4.96
TPH by SW8015 Mod	***Extracted:***	Jan-25-20 16:00								Jan-25-20 16:00			
	Analyzed:	Jan-26-20 14:49								Jan-26-20 15:10			
	Units/RL:	mg/kg	RL							mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0							<49.8	49.8		
Diesel Range Organics (DRO)		<50.0	50.0							<49.8	49.8		
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0							<49.8	49.8		
Total TPH		<50	50							<49.8	49.8		

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 649839

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gathering

Project Id:

Contact: Russell Sebring

Project Location: Jal, NM

Date Received in Lab: Wed Jan-22-20 10:53 am

Report Date: 31-JAN-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	649839-025		649839-026		649839-027		649839-028		649839-029		649839-030	
	Field Id:	HA-06 @ 2.0'		HA-06 @ 2.5'		HA-06 @ 3.0'		HA-06 @ 3.5'		N.EX-BH @ 8'		N.EX-SWE	
	Depth:	2.0- ft		2.5- ft		3.0- ft		3.5- ft		8- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-21-20 12:40		Jan-21-20 12:45		Jan-21-20 12:50		Jan-21-20 13:55		Jan-21-20 13:10		Jan-21-20 13:20	
BTEX by EPA 8021B	***Extracted:***									Jan-28-20 09:30		Jan-28-20 09:30	
	Analyzed:									Jan-29-20 17:29		Jan-29-20 17:49	
	Units/RL:									mg/kg	RL	mg/kg	RL
Benzene										<0.00198	0.00198	<0.00199	0.00199
Toluene										<0.00198	0.00198	<0.00199	0.00199
Ethylbenzene										<0.00198	0.00198	<0.00199	0.00199
m,p-Xylenes										<0.00397	0.00397	0.00460	0.00398
o-Xylene										<0.00198	0.00198	0.00210	0.00199
Total Xylenes										<0.00198	0.00198	0.0067	0.00199
Total BTEX										<0.00198	0.00198	0.0067	0.00199
Chloride by EPA 300	***Extracted:***	Jan-22-20 16:30		Jan-22-20 16:30		Jan-22-20 16:30		Jan-22-20 16:30		Jan-22-20 16:30		Jan-23-20 17:00	
	Analyzed:	Jan-23-20 01:35		Jan-23-20 02:40		Jan-23-20 02:46		Jan-23-20 02:53		Jan-23-20 02:59		Jan-23-20 18:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		91.0	4.99	28.9	5.00	77.6	5.03	14.2	4.96	2910	25.0	12.2	5.00
TPH by SW8015 Mod	***Extracted:***									Jan-25-20 16:00		Jan-25-20 16:00	
	Analyzed:									Jan-26-20 15:31		Jan-26-20 15:52	
	Units/RL:									mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)										<49.9	49.9	<50.0	50.0
Diesel Range Organics (DRO)										<49.9	49.9	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)										<49.9	49.9	<50.0	50.0
Total TPH										<49.9	49.9	<50	50

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 649839

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gathering

Project Id:

Contact: Russell Sebring

Project Location: Jal, NM

Date Received in Lab: Wed Jan-22-20 10:53 am

Report Date: 31-JAN-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	649839-031		649839-032		649839-033		649839-034		649839-035		649839-036	
	Field Id:	N.EX-SWW		E.EX-BH @ 8'		E.EX-SWN		E.EX-SWS		S.EX-BH @ 8'		S.EX-SWE	
	Depth:	4- ft		8- ft		4- ft		4- ft		8- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-21-20 13:30		Jan-21-20 14:00		Jan-21-20 14:10		Jan-21-20 14:20		Jan-21-20 14:40		Jan-21-20 14:50	
BTEX by EPA 8021B	***Extracted:***	Jan-28-20 09:30		Jan-30-20 10:00		Jan-31-20 10:30		Jan-30-20 10:00		Jan-30-20 10:00		Jan-30-20 10:00	
	Analyzed:	Jan-29-20 18:09		Jan-30-20 16:53		Jan-31-20 16:12		Jan-30-20 17:33		Jan-30-20 17:53		Jan-30-20 19:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	0.706 D	0.200	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00198	0.00198
Toluene		<0.00200	0.00200	34.5 D	0.200	0.00319	0.00199	0.00550	0.00201	0.0708	0.00199	0.00245	0.00198
Ethylbenzene		<0.00200	0.00200	16.3 D	0.200	0.00214	0.00199	<0.00201	0.00201	0.119	0.00199	<0.00198	0.00198
m,p-Xylenes		<0.00399	0.00399	50.9 D	0.400	0.00823	0.00398	0.00576	0.00402	0.522	0.00398	<0.00397	0.00397
o-Xylene		<0.00200	0.00200	18.3 D	0.200	0.00320	0.00199	0.00220	0.00201	0.251	0.00199	<0.00198	0.00198
Total Xylenes		<0.002	0.002	69.2	0.2	0.01143	0.00199	0.00796	0.00201	0.773	0.00199	<0.00198	0.00198
Total BTEX		<0.002	0.002	120.706	0.2	0.01676	0.00199	0.01346	0.00201	0.9628	0.00199	0.00245	0.00198
Chloride by EPA 300	***Extracted:***	Jan-23-20 17:00		Jan-23-20 17:00		Jan-23-20 17:00		Jan-23-20 17:00		Jan-23-20 17:00		Jan-23-20 17:00	
	Analyzed:	Jan-23-20 19:03		Jan-23-20 19:09		Jan-23-20 19:16		Jan-23-20 19:23		Jan-23-20 19:43		Jan-23-20 19:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2070	25.2	4090	24.8	7630	49.8	6290	50.0	9020	50.2	6810	50.5
TPH by SW8015 Mod	***Extracted:***	Jan-25-20 16:00		Jan-25-20 16:00		Jan-25-20 16:00		Jan-25-20 16:00		Jan-25-20 16:00		Jan-25-20 16:00	
	Analyzed:	Jan-26-20 16:14		Jan-26-20 16:35		Jan-26-20 17:17		Jan-26-20 17:38		Jan-26-20 17:59		Jan-26-20 18:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	3260	49.9	<50.0	50.0	<49.8	49.8	232	49.9	<49.8	49.8
Diesel Range Organics (DRO)		<50.0	50.0	6660	49.9	<50.0	50.0	51.1	49.8	1390	49.9	<49.8	49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	554	49.9	<50.0	50.0	<49.8	49.8	118	49.9	<49.8	49.8
Total TPH		<50	50	10474	49.9	<50	50	51.1	49.8	1740	49.9	<49.8	49.8

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 649839

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gathering

Project Id:

Contact: Russell Sebring

Project Location: Jal, NM

Date Received in Lab: Wed Jan-22-20 10:53 am

Report Date: 31-JAN-20

Project Manager: Jessica Kramer

Analysis Requested								
	Lab Id:	649839-037						
	Field Id:	S.EX-SWW						
	Depth:	4- ft						
	Matrix:	SOIL						
	Sampled:	Jan-21-20 15:00						
BTEX by EPA 8021B	***Extracted:***	Jan-30-20 10:00						
	Analyzed:	Jan-30-20 19:32						
	Units/RL:	mg/kg	RL					
Benzene		<0.00200	0.00200					
Toluene		0.00310	0.00200					
Ethylbenzene		<0.00200	0.00200					
m,p-Xylenes		<0.00399	0.00399					
o-Xylene		<0.00200	0.00200					
Total Xylenes		<0.002	0.002					
Total BTEX		0.0031	0.002					
Chloride by EPA 300	***Extracted:***	Jan-23-20 17:00						
	Analyzed:	Jan-23-20 19:56						
	Units/RL:	mg/kg	RL					
Chloride		5000	25.0					
TPH by SW8015 Mod	***Extracted:***	Jan-25-20 16:00						
	Analyzed:	Jan-26-20 18:40						
	Units/RL:	mg/kg	RL					
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0					
Diesel Range Organics (DRO)		<50.0	50.0					
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0					
Total TPH		<50	50					

Jessica Kramer

Jessica Kramer
Project Assistant

Analytical Report 649839

for

TRC Solutions, Inc

Project Manager: Russell Sebring

COG-Plains Gathering

31-JAN-20

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

31-JAN-20

Project Manager: **Russell Sebring**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **649839**
COG-Plains Gathering
Project Address: Jal, NM

Russell Sebring:

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) 649839. 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. 649839 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,

Jessica Kramer

Jessica Kramer
Project Assistant

Sample Cross Reference 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
HA-01 @ 0.5-1'	S	01-21-20 10:00	.5 ft	649839-001
HA-01 @ 1.5'	S	01-21-20 10:05	1.5 ft	649839-002
HA-01 @ 2.0'	S	01-21-20 10:10	2.0 ft	649839-003
HA-01 @ 2.5'	S	01-21-20 10:15	2.5 ft	649839-004
HA-01 @ 3.0'	S	01-21-20 10:20	3.0 ft	649839-005
HA-02 @ 0.5-1'	S	01-21-20 10:30	.5 - 1 ft	649839-006
HA-02 @ 1.5'	S	01-21-20 10:35	1.5 ft	649839-007
HA-02 @ 2.0'	S	01-21-20 10:40	2.0 ft	649839-008
HA-02 @ 2.5'	S	01-21-20 10:45	2.5 ft	649839-009
HA-03 @ 0.5-1'	S	01-21-20 11:00	.5 - 1 ft	649839-010
HA-03 @ 1.5'	S	01-21-20 11:05	1.5 ft	649839-011
HA-03 @ 2.0'	S	01-21-20 11:10	2.0 ft	649839-012
HA-03 @ 2.5'	S	01-21-20 11:15	3.5 ft	649839-013
HA-03 @ 3.0'	S	01-21-20 11:20	3.0 ft	649839-014
HA-04 @ 0.5-1'	S	01-21-20 11:30	.5 - 1 ft	649839-015
HA-04 @ 1.5'	S	01-21-20 11:35	1.5 ft	649839-016
HA-04 @ 2.0'	S	01-21-20 11:40	2.0 ft	649839-017
HA-04 @ 2.5'	S	01-21-20 11:45	2.5 ft	649839-018
HA-05 @ 0.5-1'	S	01-21-20 12:00	.5 - 1 ft	649839-019
HA-05 @ 1.5'	S	01-21-20 12:05	1.5 ft	649839-020
HA-05 @ 2.0'	S	01-21-20 12:10	2.0 ft	649839-021
HA-05 @ 2.5'	S	01-21-20 12:15	2.5 ft	649839-022
HA-06 @ 0.5-1'	S	01-21-20 12:30	.5 - 1 ft	649839-023
HA-06 @ 1.5'	S	01-21-20 12:35	1.5 ft	649839-024
HA-06 @ 2.0'	S	01-21-20 12:40	2.0 ft	649839-025
HA-06 @ 2.5'	S	01-21-20 12:45	2.5 ft	649839-026
HA-06 @ 3.0'	S	01-21-20 12:50	3.0 ft	649839-027
HA-06 @ 3.5'	S	01-21-20 13:55	3.5 ft	649839-028
N.EX-BH @ 8'	S	01-21-20 13:10	8 ft	649839-029
N.EX-SWE	S	01-21-20 13:20	4 ft	649839-030
N.EX-SWW	S	01-21-20 13:30	4 ft	649839-031
E.EX-BH @ 8'	S	01-21-20 14:00	8 ft	649839-032
E.EX-SWN	S	01-21-20 14:10	4 ft	649839-033
E.EX-SWS	S	01-21-20 14:20	4 ft	649839-034
S.EX-BH @ 8'	S	01-21-20 14:40	8 ft	649839-035
S.EX-SWE	S	01-21-20 14:50	4 ft	649839-036
S.EX-SWW	S	01-21-20 15:00	4 ft	649839-037

CASE NARRATIVE

Client Name: TRC Solutions, Inc
Project Name: COG-Plains Gathering

Project ID:
Work Order Number(s): *649839*

Report Date: *31-JAN-20*
Date Received: *01/22/2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3114937 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3114941 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3115058 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Surrogate 1,4-Difluorobenzene recovered above QC limits. Matrix interferences is suspected.
Samples affected are: 649839-032.
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.
Samples affected are: 649839-035,649839-032.

Batch: LBA-3115184 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.
Samples affected are: 649839-033.

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-01 @ 0.5-1'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-001	Date Collected:	01.21.20 10.00	Sample Depth:	.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.00	Basis:	Wet Weight
Seq Number:	3114301				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.0**	4.99	mg/kg	01.22.20 22.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.26.20 12.41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.26.20 12.41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.26.20 12.41	U	1
Total TPH	PHC635	<50	50	mg/kg	01.26.20 12.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	01.26.20 12.41	
o-Terphenyl	84-15-1	91	%	70-135	01.26.20 12.41	

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-01 @ 0.5-1'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-001	Date Collected:	01.21.20 10.00	Sample Depth:	.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.29.20 11.30	Basis:	Wet Weight
Seq Number:	3114937				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.30.20 09.52	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.30.20 09.52	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.30.20 09.52	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.30.20 09.52	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.30.20 09.52	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.30.20 09.52	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.30.20 09.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	83	%	70-130	01.30.20 09.52	
1,4-Difluorobenzene	540-36-3	112	%	70-130	01.30.20 09.52	

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-01 @ 1.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-002	Date Collected:	01.21.20 10.05	Sample Depth:	1.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.00	Basis:	Wet Weight
Seq Number:	3114301				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**456**	5.02	mg/kg	01.22.20 22.27		1

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-01 @ 2.0'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-003	Date Collected:	01.21.20 10.10	Sample Depth:	2.0 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.00	Basis:	Wet Weight
Seq Number:	3114301				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2410**	24.8	mg/kg	01.22.20 22.47		5

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-01 @ 2.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-004	Date Collected:	01.21.20 10.15	Sample Depth:	2.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.00	Basis:	Wet Weight
Seq Number:	3114301				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3530**	49.7	mg/kg	01.22.20 22.53		10

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-01 @ 3.0'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-005	Date Collected:	01.21.20 10.20	Sample Depth:	3.0 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.00	Basis:	Wet Weight
Seq Number:	3114301				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4490**	25.0	mg/kg	01.22.20 23.00		5

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-02 @ 0.5-1'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-006	Date Collected:	01.21.20 10.30	Sample Depth:	.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.00	Basis:	Wet Weight
Seq Number:	3114301				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.04	5.04	mg/kg	01.22.20 23.06	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.26.20 13.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.26.20 13.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.26.20 13.45	U	1
Total TPH	PHC635	<50	50	mg/kg	01.26.20 13.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	01.26.20 13.45	
o-Terphenyl	84-15-1	94	%	70-135	01.26.20 13.45	

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-02 @ 0.5-1'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-006	Date Collected:	01.21.20 10.30	Sample Depth:	.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.29.20 11.30	Basis:	Wet Weight
Seq Number:	3114937				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.30.20 10.12	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.30.20 10.12	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.30.20 10.12	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.30.20 10.12	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.30.20 10.12	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.30.20 10.12	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.30.20 10.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	84	%	70-130	01.30.20 10.12	
1,4-Difluorobenzene	540-36-3	112	%	70-130	01.30.20 10.12	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-02 @ 1.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-007	Date Collected:	01.21.20 10.35	Sample Depth:	1.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.00	Basis:	Wet Weight
Seq Number:	3114301				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.01	5.01	mg/kg	01.22.20 23.13	U	1

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-02 @ 2.0'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-008	Date Collected:	01.21.20 10.40	Sample Depth:	2.0 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.00	Basis:	Wet Weight
Seq Number:	3114301				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.01	5.01	mg/kg	01.22.20 23.19	U	1

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-02 @ 2.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-009	Date Collected:	01.21.20 10.45	Sample Depth:	2.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.00	Basis:	Wet Weight
Seq Number:	3114301				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5.12**	5.00	mg/kg	01.22.20 23.26		1

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-03 @ 0.5-1'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-010	Date Collected:	01.21.20 11.00	Sample Depth:	.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8550**	49.8	mg/kg	01.23.20 00.24		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.26.20 14.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.26.20 14.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.26.20 14.07	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.26.20 14.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	01.26.20 14.07	
o-Terphenyl	84-15-1	98	%	70-135	01.26.20 14.07	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-03 @ 0.5-1'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-010	Date Collected:	01.21.20 11.00	Sample Depth:	.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.29.20 11.30	Basis:	Wet Weight
Seq Number:	3114937				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.30.20 10.32	U	1
Toluene	108-88-3	**0.00246**	0.00202	mg/kg	01.30.20 10.32		1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.30.20 10.32	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.30.20 10.32	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.30.20 10.32	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.30.20 10.32	U	1
Total BTEX		**0.00246**	0.00202	mg/kg	01.30.20 10.32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.30.20 10.32	
4-Bromofluorobenzene	460-00-4	81	%	70-130	01.30.20 10.32	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-03 @ 1.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-011	Date Collected:	01.21.20 11.05	Sample Depth:	1.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8990**	50.0	mg/kg	01.23.20 00.30		10

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-03 @ 2.0'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-012	Date Collected:	01.21.20 11.10	Sample Depth:	2.0 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8780**	50.3	mg/kg	01.23.20 00.37		10

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-03 @ 2.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-013	Date Collected:	01.21.20 11.15	Sample Depth:	3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9590**	49.6	mg/kg	01.23.20 00.43		10

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-03 @ 3.0'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-014	Date Collected:	01.21.20 11.20	Sample Depth:	3.0 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9850**	50.5	mg/kg	01.23.20 01.03		10

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-04 @ 0.5-1'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-015	Date Collected:	01.21.20 11.30	Sample Depth:	.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2840**	25.0	mg/kg	01.23.20 01.09		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.26.20 14.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.26.20 14.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.26.20 14.28	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.26.20 14.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	01.26.20 14.28	
o-Terphenyl	84-15-1	97	%	70-135	01.26.20 14.28	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-04 @ 0.5-1'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-015	Date Collected:	01.21.20 11.30	Sample Depth:	.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.29.20 11.30	Basis:	Wet Weight
Seq Number:	3114937				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.30.20 10.52	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.30.20 10.52	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.30.20 10.52	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.30.20 10.52	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.30.20 10.52	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.30.20 10.52	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.30.20 10.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.30.20 10.52	
4-Bromofluorobenzene	460-00-4	80	%	70-130	01.30.20 10.52	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-04 @ 1.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-016	Date Collected:	01.21.20 11.35	Sample Depth:	1.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1690**	25.0	mg/kg	01.23.20 13.41		5

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-04 @ 2.0'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-017	Date Collected:	01.21.20 11.40	Sample Depth:	2.0 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3180**	24.8	mg/kg	01.23.20 01.22		5

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-04 @ 2.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-018	Date Collected:	01.21.20 11.45	Sample Depth:	2.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4630**	24.8	mg/kg	01.23.20 01.29		5

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-05 @ 0.5-1'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-019	Date Collected:	01.21.20 12.00	Sample Depth:	.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1880**	25.2	mg/kg	01.23.20 01.55		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.26.20 14.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.26.20 14.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.26.20 14.49	U	1
Total TPH	PHC635	<50	50	mg/kg	01.26.20 14.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	01.26.20 14.49	
o-Terphenyl	84-15-1	94	%	70-135	01.26.20 14.49	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-05 @ 0.5-1'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-019	Date Collected:	01.21.20 12.00	Sample Depth:	.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.29.20 11.30	Basis:	Wet Weight
Seq Number:	3114937				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.30.20 11.12	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.30.20 11.12	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.30.20 11.12	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.30.20 11.12	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.30.20 11.12	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.30.20 11.12	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.30.20 11.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	82	%	70-130	01.30.20 11.12	
1,4-Difluorobenzene	540-36-3	112	%	70-130	01.30.20 11.12	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-05 @ 1.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-020	Date Collected:	01.21.20 12.05	Sample Depth:	1.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1940**	25.1	mg/kg	01.23.20 02.01		5

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-05 @ 2.0'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-021	Date Collected:	01.21.20 12.10	Sample Depth:	2.0 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2460**	24.8	mg/kg	01.23.20 02.20		5

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-05 @ 2.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-022	Date Collected:	01.21.20 12.15	Sample Depth:	2.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3680**	25.0	mg/kg	01.23.20 02.27		5

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-06 @ 0.5-1'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-023	Date Collected:	01.21.20 12.30	Sample Depth:	.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1270**	5.00	mg/kg	01.23.20 02.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.26.20 15.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.26.20 15.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.26.20 15.10	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.26.20 15.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	01.26.20 15.10	
o-Terphenyl	84-15-1	96	%	70-135	01.26.20 15.10	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-06 @ 0.5-1'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-023	Date Collected:	01.21.20 12.30	Sample Depth:	.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.29.20 11.30	Basis:	Wet Weight
Seq Number:	3114937				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.30.20 11.32	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.30.20 11.32	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.30.20 11.32	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.30.20 11.32	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.30.20 11.32	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.30.20 11.32	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.30.20 11.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	01.30.20 11.32	
4-Bromofluorobenzene	460-00-4	83	%	70-130	01.30.20 11.32	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-06 @ 1.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-024	Date Collected:	01.21.20 12.35	Sample Depth:	1.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**162**	4.96	mg/kg	01.23.20 00.05		1

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-06 @ 2.0'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-025	Date Collected:	01.21.20 12.40	Sample Depth:	2.0 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**91.0**	4.99	mg/kg	01.23.20 01.35		1

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-06 @ 2.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-026	Date Collected:	01.21.20 12.45	Sample Depth:	2.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28.9**	5.00	mg/kg	01.23.20 02.40		1

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-06 @ 3.0'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-027	Date Collected:	01.21.20 12.50	Sample Depth:	3.0 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**77.6**	5.03	mg/kg	01.23.20 02.46		1

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**HA-06 @ 3.5'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-028	Date Collected:	01.21.20 13.55	Sample Depth:	3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.2**	4.96	mg/kg	01.23.20 02.53		1

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**N.EX-BH @ 8'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-029	Date Collected:	01.21.20 13.10	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.22.20 16.30	Basis:	Wet Weight
Seq Number:	3114302				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2910**	25.0	mg/kg	01.23.20 02.59		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.26.20 15.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.26.20 15.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.26.20 15.31	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.26.20 15.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	01.26.20 15.31	
o-Terphenyl	84-15-1	95	%	70-135	01.26.20 15.31	

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COG-Plains Gathering

Sample Id:	**N.EX-BH @ 8'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-029	Date Collected:	01.21.20 13.10	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.28.20 09.30	Basis:	Wet Weight
Seq Number:	3114941				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.29.20 17.29	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.29.20 17.29	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.29.20 17.29	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.29.20 17.29	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.29.20 17.29	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.29.20 17.29	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.29.20 17.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	75	%	70-130	01.29.20 17.29	
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.29.20 17.29	

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COG-Plains Gathering

Sample Id:	**N.EX-SWE**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-030	Date Collected:	01.21.20 13.20	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.23.20 17.00	Basis:	Wet Weight
Seq Number:	3114309				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.2**	5.00	mg/kg	01.23.20 18.43		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.26.20 15.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.26.20 15.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.26.20 15.52	U	1
Total TPH	PHC635	<50	50	mg/kg	01.26.20 15.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	01.26.20 15.52	
o-Terphenyl	84-15-1	99	%	70-135	01.26.20 15.52	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**N.EX-SWE**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-030	Date Collected:	01.21.20 13.20	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.28.20 09.30	Basis:	Wet Weight
Seq Number:	3114941				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.29.20 17.49	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.29.20 17.49	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.29.20 17.49	U	1
m,p-Xylenes	179601-23-1	**0.00460**	0.00398	mg/kg	01.29.20 17.49		1
o-Xylene	95-47-6	**0.00210**	0.00199	mg/kg	01.29.20 17.49		1
Total Xylenes	1330-20-7	**0.0067**	0.00199	mg/kg	01.29.20 17.49		1
Total BTEX		**0.0067**	0.00199	mg/kg	01.29.20 17.49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.29.20 17.49	
4-Bromofluorobenzene	460-00-4	82	%	70-130	01.29.20 17.49	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**N.EX-SWW**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-031	Date Collected:	01.21.20 13.30	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.23.20 17.00	Basis:	Wet Weight
Seq Number:	3114309				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2070**	25.2	mg/kg	01.23.20 19.03		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.26.20 16.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.26.20 16.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.26.20 16.14	U	1
Total TPH	PHC635	<50	50	mg/kg	01.26.20 16.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	01.26.20 16.14	
o-Terphenyl	84-15-1	97	%	70-135	01.26.20 16.14	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**N.EX-SWW**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-031	Date Collected:	01.21.20 13.30	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.28.20 09.30	Basis:	Wet Weight
Seq Number:	3114941				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.29.20 18.09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.29.20 18.09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.29.20 18.09	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.29.20 18.09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.29.20 18.09	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	01.29.20 18.09	U	1
Total BTEX		<0.002	0.002	mg/kg	01.29.20 18.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	73	%	70-130	01.29.20 18.09	
1,4-Difluorobenzene	540-36-3	110	%	70-130	01.29.20 18.09	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**E.EX-BH @ 8'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-032	Date Collected:	01.21.20 14.00	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.23.20 17.00	Basis:	Wet Weight
Seq Number:	3114309				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4090**	24.8	mg/kg	01.23.20 19.09		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**3260**	49.9	mg/kg	01.26.20 16.35		1
Diesel Range Organics (DRO)	C10C28DRO	**6660**	49.9	mg/kg	01.26.20 16.35		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**554**	49.9	mg/kg	01.26.20 16.35		1
Total TPH	PHC635	**10474**	49.9	mg/kg	01.26.20 16.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	01.26.20 16.35	
o-Terphenyl	84-15-1	102	%	70-135	01.26.20 16.35	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**E.EX-BH @ 8'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-032	Date Collected:	01.21.20 14.00	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.30.20 10.00	Basis:	Wet Weight
Seq Number:	3115058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.706**	0.200	mg/kg	01.31.20 16.32	D	100
Toluene	108-88-3	**34.5**	0.200	mg/kg	01.31.20 16.32	D	100
Ethylbenzene	100-41-4	**16.3**	0.200	mg/kg	01.31.20 16.32	D	100
m,p-Xylenes	179601-23-1	**50.9**	0.400	mg/kg	01.31.20 16.32	D	100
o-Xylene	95-47-6	**18.3**	0.200	mg/kg	01.31.20 16.32	D	100
Total Xylenes	1330-20-7	**69.2**	0.2	mg/kg	01.31.20 16.32		100
Total BTEX		**120.706**	0.2	mg/kg	01.31.20 16.32		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	2207	%	70-130	01.30.20 16.53	**
1,4-Difluorobenzene	540-36-3	133	%	70-130	01.30.20 16.53	**

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**E.EX-SWN**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-033	Date Collected:	01.21.20 14.10	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.23.20 17.00	Basis:	Wet Weight
Seq Number:	3114309				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7630**	49.8	mg/kg	01.23.20 19.16		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.26.20 17.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.26.20 17.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.26.20 17.17	U	1
Total TPH	PHC635	<50	50	mg/kg	01.26.20 17.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	01.26.20 17.17	
o-Terphenyl	84-15-1	97	%	70-135	01.26.20 17.17	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**E.EX-SWN**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-033	Date Collected:	01.21.20 14.10	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.31.20 10.30	Basis:	Wet Weight
Seq Number:	3115184				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.31.20 16.12	U	1
Toluene	108-88-3	**0.00319**	0.00199	mg/kg	01.31.20 16.12		1
Ethylbenzene	100-41-4	**0.00214**	0.00199	mg/kg	01.31.20 16.12		1
m,p-Xylenes	179601-23-1	**0.00823**	0.00398	mg/kg	01.31.20 16.12		1
o-Xylene	95-47-6	**0.00320**	0.00199	mg/kg	01.31.20 16.12		1
Total Xylenes	1330-20-7	**0.01143**	0.00199	mg/kg	01.31.20 16.12		1
Total BTEX		**0.01676**	0.00199	mg/kg	01.31.20 16.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	01.31.20 16.12	
4-Bromofluorobenzene	460-00-4	93	%	70-130	01.31.20 16.12	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**E.EX-SWS**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-034	Date Collected:	01.21.20 14.20	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.23.20 17.00	Basis:	Wet Weight
Seq Number:	3114309				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6290**	50.0	mg/kg	01.23.20 19.23		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.26.20 17.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	**51.1**	49.8	mg/kg	01.26.20 17.38		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.26.20 17.38	U	1
Total TPH	PHC635	**51.1**	49.8	mg/kg	01.26.20 17.38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	01.26.20 17.38	
o-Terphenyl	84-15-1	101	%	70-135	01.26.20 17.38	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**E.EX-SWS**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-034	Date Collected:	01.21.20 14.20	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.30.20 10.00	Basis:	Wet Weight
Seq Number:	3115058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.30.20 17.33	U	1
Toluene	108-88-3	**0.00550**	0.00201	mg/kg	01.30.20 17.33		1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.30.20 17.33	U	1
m,p-Xylenes	179601-23-1	**0.00576**	0.00402	mg/kg	01.30.20 17.33		1
o-Xylene	95-47-6	**0.00220**	0.00201	mg/kg	01.30.20 17.33		1
Total Xylenes	1330-20-7	**0.00796**	0.00201	mg/kg	01.30.20 17.33		1
Total BTEX		**0.01346**	0.00201	mg/kg	01.30.20 17.33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	01.30.20 17.33	
1,4-Difluorobenzene	540-36-3	112	%	70-130	01.30.20 17.33	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**S.EX-BH @ 8'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-035	Date Collected:	01.21.20 14.40	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.23.20 17.00	Basis:	Wet Weight
Seq Number:	3114309				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9020**	50.2	mg/kg	01.23.20 19.43		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**232**	49.9	mg/kg	01.26.20 17.59		1
Diesel Range Organics (DRO)	C10C28DRO	**1390**	49.9	mg/kg	01.26.20 17.59		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**118**	49.9	mg/kg	01.26.20 17.59		1
Total TPH	PHC635	**1740**	49.9	mg/kg	01.26.20 17.59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	01.26.20 17.59	
o-Terphenyl	84-15-1	98	%	70-135	01.26.20 17.59	

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**S.EX-BH @ 8'**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-035	Date Collected:	01.21.20 14.40	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.30.20 10.00	Basis:	Wet Weight
Seq Number:	3115058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.20 17.53	U	1
Toluene	108-88-3	**0.0708**	0.00199	mg/kg	01.30.20 17.53		1
Ethylbenzene	100-41-4	**0.119**	0.00199	mg/kg	01.30.20 17.53		1
m,p-Xylenes	179601-23-1	**0.522**	0.00398	mg/kg	01.30.20 17.53		1
o-Xylene	95-47-6	**0.251**	0.00199	mg/kg	01.30.20 17.53		1
Total Xylenes	1330-20-7	**0.773**	0.00199	mg/kg	01.30.20 17.53		1
Total BTEX		**0.9628**	0.00199	mg/kg	01.30.20 17.53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	251	%	70-130	01.30.20 17.53	**
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.30.20 17.53	

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**S.EX-SWE**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-036	Date Collected:	01.21.20 14.50	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.23.20 17.00	Basis:	Wet Weight
Seq Number:	3114309				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6810**	50.5	mg/kg	01.23.20 19.49		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.26.20 18.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.26.20 18.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.26.20 18.20	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.26.20 18.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	01.26.20 18.20	
o-Terphenyl	84-15-1	100	%	70-135	01.26.20 18.20	

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**S.EX-SWE**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-036	Date Collected:	01.21.20 14.50	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.30.20 10.00	Basis:	Wet Weight
Seq Number:	3115058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.30.20 19.12	U	1
Toluene	108-88-3	**0.00245**	0.00198	mg/kg	01.30.20 19.12		1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.30.20 19.12	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.30.20 19.12	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.30.20 19.12	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.30.20 19.12	U	1
Total BTEX		**0.00245**	0.00198	mg/kg	01.30.20 19.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	80	%	70-130	01.30.20 19.12	
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.30.20 19.12	

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**S.EX-SWW**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-037	Date Collected:	01.21.20 15.00	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.23.20 17.00	Basis:	Wet Weight
Seq Number:	3114309				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5000**	25.0	mg/kg	01.23.20 19.56		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.25.20 16.00	Basis:	Wet Weight
Seq Number:	3114519				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.26.20 18.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.26.20 18.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.26.20 18.40	U	1
Total TPH	PHC635	<50	50	mg/kg	01.26.20 18.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	01.26.20 18.40	
o-Terphenyl	84-15-1	97	%	70-135	01.26.20 18.40	

Certificate of Analytical Results 649839

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering

Sample Id:	**S.EX-SWW**	Matrix:	Soil	Date Received:	01.22.20 10.53
Lab Sample Id:	649839-037	Date Collected:	01.21.20 15.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.30.20 10.00	Basis:	Wet Weight
Seq Number:	3115058				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.20 19.32	U	1
Toluene	108-88-3	**0.00310**	0.00200	mg/kg	01.30.20 19.32		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.20 19.32	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.20 19.32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.20 19.32	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	01.30.20 19.32	U	1
Total BTEX		**0.0031**	0.002	mg/kg	01.30.20 19.32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.30.20 19.32	
4-Bromofluorobenzene	460-00-4	79	%	70-130	01.30.20 19.32	

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

QC Summary 649839

TRC Solutions, Inc

COG-Plains Gathering

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3114301 — Matrix: Solid — Date Prep: 01.22.20
MB Sample Id: 7695000-1-BLK — LCS Sample Id: 7695000-1-BKS — LCSD Sample Id: 7695000-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	258	103	256	102	90-110	1	20	mg/kg	01.22.20 20:18	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3114302 — Matrix: Solid — Date Prep: 01.22.20
MB Sample Id: 7695001-1-BLK — LCS Sample Id: 7695001-1-BKS — LCSD Sample Id: 7695001-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	256	102	253	101	90-110	1	20	mg/kg	01.22.20 23:52	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3114309 — Matrix: Solid — Date Prep: 01.23.20
MB Sample Id: 7695083-1-BLK — LCS Sample Id: 7695083-1-BKS — LCSD Sample Id: 7695083-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1.88	250	250	100	252	101	90-110	1	20	mg/kg	01.23.20 18:30	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3114301 — Matrix: Soil — Date Prep: 01.22.20
Parent Sample Id: 649823-061 — MS Sample Id: 649823-061 S — MSD Sample Id: 649823-061 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	33.2	252	289	102	287	101	90-110	1	20	mg/kg	01.22.20 20:37	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3114301 — Matrix: Soil — Date Prep: 01.22.20
Parent Sample Id: 649823-071 — MS Sample Id: 649823-071 S — MSD Sample Id: 649823-071 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	86.5	248	343	103	341	103	90-110	1	20	mg/kg	01.22.20 22:08	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

TRC Solutions, Inc

COG-Plains Gathering

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3114302 — Matrix: Soil — Date Prep: 01.22.20
Parent Sample Id: 649839-024 — MS Sample Id: 649839-024 S — MSD Sample Id: 649839-024 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	162	248	405	98	405	98	90-110	0	20	mg/kg	01.23.20 00:11	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3114302 — Matrix: Soil — Date Prep: 01.22.20
Parent Sample Id: 649839-025 — MS Sample Id: 649839-025 S — MSD Sample Id: 649839-025 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	91.0	250	345	102	342	100	90-110	1	20	mg/kg	01.23.20 01:42	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3114309 — Matrix: Soil — Date Prep: 01.23.20
Parent Sample Id: 649839-030 — MS Sample Id: 649839-030 S — MSD Sample Id: 649839-030 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12.2	300	300	96	292	93	90-110	3	20	mg/kg	01.23.20 18:50	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3114309 — Matrix: Soil — Date Prep: 01.23.20
Parent Sample Id: 650005-001 — MS Sample Id: 650005-001 S — MSD Sample Id: 650005-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3.75	250	265	105	259	102	90-110	2	20	mg/kg	01.23.20 20:23	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3114519 — Matrix: Solid — Date Prep: 01.25.20
MB Sample Id: 7695243-1-BLK — LCS Sample Id: 7695243-1-BKS — LCSD Sample Id: 7695243-1-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	808	81	917	92	70-135	13	20	mg/kg	01.26.20 11:59	
Diesel Range Organics (DRO)	<15.0	1000	814	81	926	93	70-135	13	20	mg/kg	01.26.20 11:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	110		105		119		70-135	%	01.26.20 11:59
o-Terphenyl	110		104		117		70-135	%	01.26.20 11:59

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 649839

TRC Solutions, Inc

COG-Plains Gathering

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3114519 | Matrix: Solid | Date Prep: 01.25.20
MB Sample Id: 7695243-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.26.20 11:38	

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3114519 | Matrix: Soil | Date Prep: 01.25.20
Parent Sample Id: 649839-001 | MS Sample Id: 649839-001 S | MSD Sample Id: 649839-001 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	997	831	83	841	84	70-135	1	20	mg/kg	01.26.20 13:03	
Diesel Range Organics (DRO)	17.8	997	824	81	839	82	70-135	2	20	mg/kg	01.26.20 13:03	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		102		70-135	%	01.26.20 13:03
o-Terphenyl	93		97		70-135	%	01.26.20 13:03

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3114941 | Matrix: Solid | Date Prep: 01.28.20
MB Sample Id: 7695316-1-BLK | LCS Sample Id: 7695316-1-BKS | LCSD Sample Id: 7695316-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.100	100	0.105	105	70-130	5	35	mg/kg	01.29.20 14:53	
Toluene	<0.000456	0.100	0.105	105	0.102	102	70-130	3	35	mg/kg	01.29.20 14:53	
Ethylbenzene	<0.000565	0.100	0.102	102	0.0977	98	70-130	4	35	mg/kg	01.29.20 14:53	
m,p-Xylenes	<0.00101	0.200	0.206	103	0.193	97	70-130	7	35	mg/kg	01.29.20 14:53	
o-Xylene	<0.000344	0.100	0.104	104	0.0969	97	70-130	7	35	mg/kg	01.29.20 14:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		110		111		70-130	%	01.29.20 14:53
4-Bromofluorobenzene	72		93		92		70-130	%	01.29.20 14:53

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

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

QC Summary 649839

TRC Solutions, Inc

COG-Plains Gathering

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B

Seq Number: 3114937 — Matrix: Solid — Date Prep: 01.29.20

MB Sample Id: 7695438-1-BLK — LCS Sample Id: 7695438-1-BKS — LCSD Sample Id: 7695438-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.102	102	0.100	100	70-130	2	35	mg/kg	01.30.20 01:50	
Toluene	<0.000456	0.100	0.0972	97	0.0991	99	70-130	2	35	mg/kg	01.30.20 01:50	
Ethylbenzene	<0.000565	0.100	0.0907	91	0.0937	94	70-130	3	35	mg/kg	01.30.20 01:50	
m,p-Xylenes	<0.00101	0.200	0.181	91	0.188	94	70-130	4	35	mg/kg	01.30.20 01:50	
o-Xylene	<0.000344	0.100	0.0924	92	0.0950	95	70-130	3	35	mg/kg	01.30.20 01:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		104		102		70-130	%	01.30.20 01:50
4-Bromofluorobenzene	90		95		92		70-130	%	01.30.20 01:50

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B

Seq Number: 3115058 — Matrix: Solid — Date Prep: 01.30.20

MB Sample Id: 7695528-1-BLK — LCS Sample Id: 7695528-1-BKS — LCSD Sample Id: 7695528-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.107	107	0.110	110	70-130	3	35	mg/kg	01.30.20 12:32	
Toluene	<0.000456	0.100	0.101	101	0.106	106	70-130	5	35	mg/kg	01.30.20 12:32	
Ethylbenzene	<0.000565	0.100	0.0956	96	0.102	102	70-130	6	35	mg/kg	01.30.20 12:32	
m,p-Xylenes	<0.00101	0.200	0.186	93	0.200	100	70-130	7	35	mg/kg	01.30.20 12:32	
o-Xylene	<0.000344	0.100	0.0943	94	0.0980	98	70-130	4	35	mg/kg	01.30.20 12:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		110		112		70-130	%	01.30.20 12:32
4-Bromofluorobenzene	79		85		88		70-130	%	01.30.20 12:32

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B

Seq Number: 3115184 — Matrix: Solid — Date Prep: 01.31.20

MB Sample Id: 7695650-1-BLK — LCS Sample Id: 7695650-1-BKS — LCSD Sample Id: 7695650-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.112	112	0.102	102	70-130	9	35	mg/kg	01.31.20 13:12	
Toluene	<0.000456	0.100	0.104	104	0.114	114	70-130	9	35	mg/kg	01.31.20 13:12	
Ethylbenzene	<0.000565	0.100	0.100	100	0.114	114	70-130	13	35	mg/kg	01.31.20 13:12	
m,p-Xylenes	<0.00101	0.200	0.197	99	0.233	117	70-130	17	35	mg/kg	01.31.20 13:12	
o-Xylene	<0.000344	0.100	0.0978	98	0.115	115	70-130	16	35	mg/kg	01.31.20 13:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		110		110		70-130	%	01.31.20 13:12
4-Bromofluorobenzene	76		87		99		70-130	%	01.31.20 13:12

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike

Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added

LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec

Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 649839

TRC Solutions, Inc

COG-Plains Gathering

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3114941 — Matrix: Soil — Date Prep: 01.28.20
Parent Sample Id: 649839-029 — MS Sample Id: 649839-029 S — MSD Sample Id: 649839-029 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000383	0.0996	0.105	105	0.103	104	70-130	2	35	mg/kg	01.29.20 15:50	
Toluene	0.000853	0.0996	0.110	110	0.104	104	70-130	6	35	mg/kg	01.29.20 15:50	
Ethylbenzene	<0.000563	0.0996	0.107	107	0.100	101	70-130	7	35	mg/kg	01.29.20 15:50	
m,p-Xylenes	<0.00101	0.199	0.215	108	0.199	100	70-130	8	35	mg/kg	01.29.20 15:50	
o-Xylene	0.000407	0.0996	0.106	106	0.0975	98	70-130	8	35	mg/kg	01.29.20 15:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		112		70-130	%	01.29.20 15:50
4-Bromofluorobenzene	100		95		70-130	%	01.29.20 15:50

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3114937 — Matrix: Soil — Date Prep: 01.29.20
Parent Sample Id: 649818-001 — MS Sample Id: 649818-001 S — MSD Sample Id: 649818-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000383	0.0996	0.0811	81	0.0751	76	70-130	8	35	mg/kg	01.30.20 02:30	
Toluene	0.000940	0.0996	0.0702	70	0.0679	68	70-130	3	35	mg/kg	01.30.20 02:30	X
Ethylbenzene	<0.000563	0.0996	0.0695	70	0.0622	63	70-130	11	35	mg/kg	01.30.20 02:30	X
m,p-Xylenes	<0.00101	0.199	0.0636	32	0.0634	32	70-130	0	35	mg/kg	01.30.20 02:30	X
o-Xylene	<0.000343	0.0996	0.0648	65	0.0578	58	70-130	11	35	mg/kg	01.30.20 02:30	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		109		70-130	%	01.30.20 02:30
4-Bromofluorobenzene	84		88		70-130	%	01.30.20 02:30

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3115058 — Matrix: Soil — Date Prep: 01.30.20
Parent Sample Id: 649845-001 — MS Sample Id: 649845-001 S — MSD Sample Id: 649845-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000383	0.0994	0.112	113	0.102	102	70-130	9	35	mg/kg	01.30.20 13:13	
Toluene	0.000596	0.0994	0.107	107	0.0978	98	70-130	9	35	mg/kg	01.30.20 13:13	
Ethylbenzene	<0.000561	0.0994	0.103	104	0.0945	95	70-130	9	35	mg/kg	01.30.20 13:13	
m,p-Xylenes	<0.00101	0.199	0.202	102	0.184	92	70-130	9	35	mg/kg	01.30.20 13:13	
o-Xylene	0.000378	0.0994	0.0996	100	0.0925	92	70-130	7	35	mg/kg	01.30.20 13:13	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	115		107		70-130	%	01.30.20 13:13
4-Bromofluorobenzene	95		87		70-130	%	01.30.20 13:13

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 649839

TRC Solutions, Inc

COG-Plains Gathering

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3115184 Matrix: Soil Date Prep: 01.31.20

Parent Sample Id: 650807-001 MS Sample Id: 650807-001 S MSD Sample Id: 650807-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.110	110	0.0951	94	70-130	15	35	mg/kg	01.31.20 13:53	
Toluene	<0.000457	0.100	0.107	107	0.0961	95	70-130	11	35	mg/kg	01.31.20 13:53	
Ethylbenzene	<0.000567	0.100	0.103	103	0.0914	90	70-130	12	35	mg/kg	01.31.20 13:53	
m,p-Xylenes	<0.00102	0.201	0.205	102	0.179	89	70-130	14	35	mg/kg	01.31.20 13:53	
o-Xylene	<0.000346	0.100	0.104	104	0.0884	88	70-130	16	35	mg/kg	01.31.20 13:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	115		118		70-130	%	01.31.20 13:53
4-Bromofluorobenzene	94		78		70-130	%	01.31.20 13:53

MS/MSD Percent Recovery	[D] = 100*(C-A) / B	LCS = Laboratory Control Sample	MS = Matrix Spike
Relative Percent Difference	RPD = 200* | (C-E) / (C+E) |	A = Parent Result	B = Spike Added
LCS/LCSD Recovery	[D] = 100 * (C) / [B]	C = MS/LCS Result	D = MSD/LCSD % Rec
Log Difference	Log Diff. = Log(Sample Duplicate) - Log(Original Sample)	E = MSD/LCSD Result	

Chain of Custody

* PLEASE INCLUDE/COPY IKE TAVAREZ ON RESULTS: ITAVAREZ@CONCHO.COM

Work Order No: 449889

XENCO LABORATORIES
Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Project Manager:	RUSSELL SEBRING	Bill to: (if different)	IKE TAVAREZ
Company Name:	TRC MIDLAND	Company Name:	COG - CONCHO
Address:	10 DESTA DR. #150E	Address:	600 W ILLINOIS AVE
City, State ZIP:	MIDLAND TX 79705	City, State ZIP:	MIDLAND, TX 79701
Phone:	432.250.4465	Email:	RSEBRING@TRCCOMPANIES.COM

Work Order Comments

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

Project Name:	COG - PLAINS GATHERING	Turn Around	
Project Number:		Routine	☑
Project Location	JAL, NM	Rush:	
Sampler's Name:	RUSSELL SEBRING	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT

Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	3.0	Thermometer ID	PS
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	0
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH SW846 8015	Chloride E300	BTEX 8021B	Sample Comments
	HA-Ø1 @ 0.5-1'	S	21 JAN 20	1000	.5-1'	1	✓	✓	✓	* PLEASE RUN DEEPER
	HA-Ø1 @ 1.5'			1005	1.5'	1	*	✓	*	SAMPLES IF TPH > 100
	HA-Ø1 @ 2.0'			1010	2.0'	1	*	✓	*	OR BZ > 10, OR
	HA-Ø1 @ 2.5'			1015	2.5'	1	*	✓	*	BTEX > 50
	HA-Ø1 @ 3.0'			1020	3.0'	1	*	✓	*	
	HA-Ø2 @ 0.5-1'			1030	0.5-1'	1	✓	✓	✓	
	HA-Ø2 @ 1.5'			1035	1.5'	1	*	✓	*	
	HA-Ø2 @ 2.0'			1040	2.0'	1	*	✓	*	
	HA-Ø2 @ 2.5'			1045	2.5'	1	*	✓	*	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		1/22/20 1053	2		
3			4		
5			6		

Revised Date 022619 Rev. 2019.1

* Please copy jtavarez@concho.com w/ results

Chain of Custody

Work Order No: 409889

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701 www.xenco.com

Project Manager:	Russell Sebring	Bill to: (if different)	JE Tavarez
Company Name:	TRC Midland	Company Name:	COG - Concho
Address:	10 Desta Dr. #150E	Address:	600 W Illinois Ave
City, State ZIP:	Midland Tx 79705	City, State ZIP:	Midland Tx 79701
Phone:	432.750.4465	Email:	rsebring@trcompanies.com

Work Order Comments

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

Project Name:	COG-Plains Gathy	Turn Around	
Project Number:		Routine ☑	
Project Location	Jal NM	Rush:	
Sampler's Name:	Russell Sebring	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	3.9	Thermometer ID	
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH SW846 8015	Chlorides E300	BTEX 8021B	Sample Comments
	HA-Ø3 @ 0.5-1'	S	21 Jan 20	1100	0.5-1'	1	✓	✓	✓	* Run deeper if hot
	HA-Ø3 @ 1.5'			1105	1.5'	1	*	✓	*	
	HA-Ø3 @ 2.0'			1110	2.0'	1	*	✓	*	
	HA-Ø3 @ 2.5'			1115	2.5'	1	*	✓	*	
	HA-Ø3 @ 3.0'			1120	3.0'	1	*	✓	*	
	HA-Ø4 @ 0.5-1'			1130	0.5-1'	1	✓	✓	✓	
	HA-Ø4 @ 1.5'			1135	1.5'	1	*	✓	*	
	HA-Ø4 @ 2.0'			1140	2.0'	1	*	✓	*	
	HA-Ø4 @ 2.5'			1145	2.5'	1	*	✓	*	

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		1/22	2		
3			4		
5		1053	6		

Revised Date 022619 Rev. 2019.1

XENCO LABORATORIES

* Please Copy Ike (itavarez@concho.com) w/ Results

Chain of Custody

Work Order No: 449839

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
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Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701 www.xenco.com

Project Manager:	Russell Sebring	Bill to: (if different)	Ike Tavarez
Company Name:	TRC Midland	Company Name:	COG - Concho
Address:	10 Desta Dr. #150E	Address:	600 W Illinois
City, State ZIP:	Midland TX 79705	City, State ZIP:	Midland Tx 79701
Phone:	432.250.4465	Email:	rsebring@trcompanies.com

Work Order Comments

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

Project Name:	COG - Plains Gathering	Turn Around	
Project Number:		Routine	✓
Project Location	Jal NM	Rush:	
Sampler's Name:	Russell Sebring	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	3.4	Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH 8015 Suball	Chloride E300	BTEX 8021 B	Sample Comments
	HA-Ø5@0.5-1'	S	21 Jan 2020	1200	0.5-1'	1	✓	✓	✓	* Run Deeper if Hot
	HA-Ø5@1.5'			1205	1.5'	1	*	✓	*	
	HA-Ø5@2.0'			1210	2.0'	1	*	✓	*	
	HA-Ø5@2.5'			1215	2.5'	1	*	✓	*	
	HA-Ø6@0.5-1'			1230	0.5-1'	1	✓	✓	✓	
	HA-Ø6@1.5'			1235	1.5'	1	*	✓	*	
	HA-Ø6@2.0'			1240	2.0'	1	*	✓	*	
	HA-Ø6@2.5'			1245	2.5'	1	*	✓	*	
	HA-Ø6@3.0'			1250	3.0'	1	*	✓	*	
	HA-Ø6@3.5'			1255	3.5	1	*	✓	*	

ANALYSIS REQUEST

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		1/22 1053	2		
3			4		
5			6		

Revised Date 022619 Rev. 2019.1

XENCO LABORATORIES

Chain of Custody

* Please copy ITAMAREZ@concho.com w/ Results

Work Order No: 429889

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Project Manager:	Russell Sebring	Bill to: (if different)	ITAMAREZ@concho.com
Company Name:	TRC Midland	Company Name:	COG - Concho
Address:	16 Desta Dr #150E	Address:	600 W. Illinois
City, State ZIP:	Midland TX 79705	City, State ZIP:	Midland TX 79701
Phone:	432.250.4465	Email:	RSEBRING@TRCCOMPANIES.com

Work Order Comments

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

Project Name:	COG-Plains Gath.	Turn Around	
Project Number:		Routine	☑
Project Location	Jal NM	Rush:	
Sampler's Name:	Russell Sebring	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	3.0	Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH SW846 8015	Chloride E300	BTEX 8021 B	Sample Comments
	N.Ex-BH @ 8'	S	21-Jan-2020	1310	8'	1	✓	✓	✓	
	N.Ex-SWE			1320	4'	1	✓	✓	✓	
	N.Ex-SWW			1330	4'	1	✓	✓	✓	
	E.Ex-BH @ 8'			1400	8'	1	✓	✓	✓	
	E.Ex-SWN			1410	4'	1	✓	✓	✓	
	E.Ex-SWS			1420	4'	1	✓	✓	✓	
	S.Ex-BH @ 8'			1440	8'	1	✓	✓	✓	
	S.Ex-SWE			1450	4'	1	✓	✓	✓	
	S.Ex-SWW	↓	↓	1500	4'	1	✓	✓	✓	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		1/22 1453	2		
3			4		
5			6		

Revised Date 022619 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 01.22.2020 10.53.00 AM

Work Order #: 649839

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)?	3.6
#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)?	**N/A**
#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: Brianna Teel Date: 01.22.2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 01.24.2020
Jessica Kramer

Certificate of Analysis Summary 655558

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gath.Pipeline

Project Id:
Contact: Russell Sebring
Project Location: Jal. NM

Date Received in Lab: Thu Mar-12-20 05:36 pm
Report Date: 19-MAR-20
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	655558-001		655558-002		655558-003			
	Field Id:	N.Floor @ 8'		E.Floor @ 9'		S.Floor @ 8'			
	Depth:	8- ft		9- ft		8- ft			
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Mar-06-20 09:30		Mar-06-20 10:15		Mar-06-20 10:45			
BTEX by EPA 8021B	***Extracted:***	Mar-18-20 10:00		Mar-18-20 10:00		Mar-18-20 10:00			
	Analyzed:	Mar-18-20 11:43		Mar-18-20 12:03		Mar-18-20 12:23			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		<0.00200	0.00200	0.0233	0.0200	<0.00202	0.00202		
Toluene		<0.00200	0.00200	0.0583	0.0200	<0.00202	0.00202		
Ethylbenzene		<0.00200	0.00200	0.200	0.0200	<0.00202	0.00202		
m,p-Xylenes		<0.00399	0.00399	1.71	0.0399	<0.00403	0.00403		
o-Xylene		<0.00200	0.00200	0.714	0.0200	<0.00202	0.00202		
Total Xylenes		<0.002	0.002	2.424	0.02	<0.00202	0.00202		
Total BTEX		<0.002	0.002	2.7056	0.02	<0.00202	0.00202		
Chloride by EPA 300	***Extracted:***	Mar-14-20 13:05		Mar-14-20 13:05		Mar-14-20 13:05			
	Analyzed:	Mar-14-20 17:21		Mar-14-20 17:27		Mar-14-20 17:32			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		134	4.95	1620	25.3	7350	49.6		
TPH by SW8015 Mod	***Extracted:***	Mar-14-20 13:00		Mar-14-20 13:00		Mar-14-20 13:00			
	Analyzed:	Mar-14-20 22:12		Mar-14-20 22:30		Mar-14-20 22:49			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	261	49.9	<49.9	49.9		
Diesel Range Organics (DRO)		99.9	49.8	1050	49.9	208	49.9		
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	135	49.9	<49.9	49.9		
Total TPH		99.9	49.8	1446	49.9	208	49.9		

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Version: 1.%

Jessica Kramer
Project Manager

Analytical Report 655558

for

TRC Solutions, Inc

Project Manager: Russell Sebring

COG-Plains Gath.Pipeline

19-MAR-20

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

19-MAR-20

Project Manager: **Russell Sebring**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **655558**
COG-Plains Gath.Pipeline
Project Address: Jal. NM

Russell Sebring:

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) 655558. 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. 655558 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,

Jessica Kramer

Jessica Kramer
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
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 655558

TRC Solutions, Inc, Midland, TX

COG-Plains Gath.Pipeline

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
N.Floor @ 8'	S	03-06-20 09:30	8 ft	655558-001
E.Floor @ 9'	S	03-06-20 10:15	9 ft	655558-002
S.Floor @ 8'	S	03-06-20 10:45	8 ft	655558-003

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: COG-Plains Gath.Pipeline

Project ID:
Work Order Number(s): *655558*

Report Date: *19-MAR-20*
Date Received: *03/12/2020*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3120206 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.
Samples affected are: 655558-002.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 655558

TRC Solutions, Inc, Midland, TX

COG-Plains Gath.Pipeline

Sample Id:	**N.Floor @ 8'**	Matrix:	Soil	Date Received:	03.12.20 17.36
Lab Sample Id:	655558-001	Date Collected:	03.06.20 09.30	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.14.20 13.05	Basis:	Wet Weight
Seq Number:	3119690				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**134**	4.95	mg/kg	03.14.20 17.21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.14.20 13.00	Basis:	Wet Weight
Seq Number:	3119719				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.14.20 22.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	**99.9**	49.8	mg/kg	03.14.20 22.12		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.14.20 22.12	U	1
Total TPH	PHC635	**99.9**	49.8	mg/kg	03.14.20 22.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	03.14.20 22.12	
o-Terphenyl	84-15-1	88	%	70-135	03.14.20 22.12	

Certificate of Analytical Results 655558

TRC Solutions, Inc, Midland, TX

COG-Plains Gath.Pipeline

Sample Id:	**N.Floor @ 8'**	Matrix:	Soil	Date Received:	03.12.20 17.36
Lab Sample Id:	655558-001	Date Collected:	03.06.20 09.30	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.18.20 10.00	Basis:	Wet Weight
Seq Number:	3120206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.18.20 11.43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.18.20 11.43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.18.20 11.43	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.18.20 11.43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.18.20 11.43	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.18.20 11.43	U	1
Total BTEX		<0.002	0.002	mg/kg	03.18.20 11.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.18.20 11.43	
4-Bromofluorobenzene	460-00-4	84	%	70-130	03.18.20 11.43	

Certificate of Analytical Results 655558

TRC Solutions, Inc, Midland, TX

COG-Plains Gath.Pipeline

Sample Id:	**E.Floor @ 9'**	Matrix:	Soil	Date Received:	03.12.20 17.36
Lab Sample Id:	655558-002	Date Collected:	03.06.20 10.15	Sample Depth:	9 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.14.20 13.05	Basis:	Wet Weight
Seq Number:	3119690				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1620**	25.3	mg/kg	03.14.20 17.27		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.14.20 13.00	Basis:	Wet Weight
Seq Number:	3119719				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**261**	49.9	mg/kg	03.14.20 22.30		1
Diesel Range Organics (DRO)	C10C28DRO	**1050**	49.9	mg/kg	03.14.20 22.30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**135**	49.9	mg/kg	03.14.20 22.30		1
Total TPH	PHC635	**1446**	49.9	mg/kg	03.14.20 22.30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	03.14.20 22.30	
o-Terphenyl	84-15-1	108	%	70-135	03.14.20 22.30	

Certificate of Analytical Results 655558

TRC Solutions, Inc, Midland, TX

COG-Plains Gath.Pipeline

Sample Id:	**E.Floor @ 9'**	Matrix:	Soil	Date Received:	03.12.20 17.36
Lab Sample Id:	655558-002	Date Collected:	03.06.20 10.15	Sample Depth:	9 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.18.20 10.00	Basis:	Wet Weight
Seq Number:	3120206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.0233**	0.0200	mg/kg	03.18.20 12.03		10
Toluene	108-88-3	**0.0583**	0.0200	mg/kg	03.18.20 12.03		10
Ethylbenzene	100-41-4	**0.200**	0.0200	mg/kg	03.18.20 12.03		10
m,p-Xylenes	179601-23-1	**1.71**	0.0399	mg/kg	03.18.20 12.03		10
o-Xylene	95-47-6	**0.714**	0.0200	mg/kg	03.18.20 12.03		10
Total Xylenes	1330-20-7	**2.424**	0.02	mg/kg	03.18.20 12.03		10
Total BTEX		**2.7056**	0.02	mg/kg	03.18.20 12.03		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	89	%	70-130	03.18.20 12.03	
4-Bromofluorobenzene	460-00-4	172	%	70-130	03.18.20 12.03	**

Certificate of Analytical Results 655558

TRC Solutions, Inc, Midland, TX

COG-Plains Gath.Pipeline

Sample Id:	**S.Floor @ 8'**	Matrix:	Soil	Date Received:	03.12.20 17.36
Lab Sample Id:	655558-003	Date Collected:	03.06.20 10.45	Sample Depth:	8 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.14.20 13.05	Basis:	Wet Weight
Seq Number:	3119690				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7350**	49.6	mg/kg	03.14.20 17.32		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.14.20 13.00	Basis:	Wet Weight
Seq Number:	3119719				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.14.20 22.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	**208**	49.9	mg/kg	03.14.20 22.49		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.14.20 22.49	U	1
Total TPH	PHC635	**208**	49.9	mg/kg	03.14.20 22.49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	03.14.20 22.49	
o-Terphenyl	84-15-1	91	%	70-135	03.14.20 22.49	

Certificate of Analytical Results 655558

TRC Solutions, Inc, Midland, TX

COG-Plains Gath.Pipeline

Sample Id:	**S.Floor @ 8'**	Matrix:	Soil	Date Received:	03.12.20 17.36
Lab Sample Id:	655558-003	Date Collected:	03.06.20 10.45	Sample Depth:	8 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.18.20 10.00	Basis:	Wet Weight
Seq Number:	3120206				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.18.20 12.23	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.18.20 12.23	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.18.20 12.23	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.18.20 12.23	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.18.20 12.23	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.18.20 12.23	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.18.20 12.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	03.18.20 12.23	
1,4-Difluorobenzene	540-36-3	103	%	70-130	03.18.20 12.23	

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

QC Summary 655558

TRC Solutions, Inc

COG-Plains Gath.Pipeline

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3119690 — Matrix: Solid — Date Prep: 03.14.20
MB Sample Id: 7698884-1-BLK — LCS Sample Id: 7698884-1-BKS — LCSD Sample Id: 7698884-1-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	255	102	252	101	90-110	1	20	mg/kg	03.14.20 15:15	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3119690 — Matrix: Soil — Date Prep: 03.14.20
Parent Sample Id: 655487-008 — MS Sample Id: 655487-008 S — MSD Sample Id: 655487-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1070	253	1250	71	1270	79	90-110	2	20	mg/kg	03.14.20 15:31	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3119690 — Matrix: Soil — Date Prep: 03.14.20
Parent Sample Id: 655545-002 — MS Sample Id: 655545-002 S — MSD Sample Id: 655545-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	92.3	248	332	97	330	96	90-110	1	20	mg/kg	03.14.20 16:45	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3119719 — Matrix: Solid — Date Prep: 03.14.20
MB Sample Id: 7698919-1-BLK — LCS Sample Id: 7698919-1-BKS — LCSD Sample Id: 7698919-1-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	923	92	936	94	70-135	1	20	mg/kg	03.14.20 18:44	
Diesel Range Organics (DRO)	<15.0	1000	987	99	1000	100	70-135	1	20	mg/kg	03.14.20 18:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	83		110		109		70-135	%	03.14.20 18:44
o-Terphenyl	86		97		101		70-135	%	03.14.20 18:44

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3119719 — Matrix: Solid — Date Prep: 03.14.20
MB Sample Id: 7698919-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.14.20 18:25	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 655558

TRC Solutions, Inc

COG-Plains Gath.Pipeline

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3119719 | Matrix: Soil | Date Prep: 03.14.20
Parent Sample Id: 655563-001 | MS Sample Id: 655563-001 S | MSD Sample Id: 655563-001 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	919	92	921	92	70-135	0	20	mg/kg	03.14.20 19:41	
Diesel Range Organics (DRO)	<15.0	998	990	99	992	99	70-135	0	20	mg/kg	03.14.20 19:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		103		70-135	%	03.14.20 19:41
o-Terphenyl	99		102		70-135	%	03.14.20 19:41

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3120206 | Matrix: Solid | Date Prep: 03.18.20
MB Sample Id: 7699242-1-BLK | LCS Sample Id: 7699242-1-BKS | LCSD Sample Id: 7699242-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0921	92	0.0956	96	70-130	4	35	mg/kg	03.18.20 09:23	
Toluene	<0.000456	0.100	0.0937	94	0.0982	98	70-130	5	35	mg/kg	03.18.20 09:23	
Ethylbenzene	<0.000565	0.100	0.0893	89	0.0966	97	70-130	8	35	mg/kg	03.18.20 09:23	
m,p-Xylenes	<0.00101	0.200	0.174	87	0.192	96	70-130	10	35	mg/kg	03.18.20 09:23	
o-Xylene	<0.000344	0.100	0.0904	90	0.0959	96	70-130	6	35	mg/kg	03.18.20 09:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		109		70-130	%	03.18.20 09:23
4-Bromofluorobenzene	78		89		90		70-130	%	03.18.20 09:23

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3120206 | Matrix: Soil | Date Prep: 03.18.20
Parent Sample Id: 655558-001 | MS Sample Id: 655558-001 S | MSD Sample Id: 655558-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.0995	100	0.0952	96	70-130	4	35	mg/kg	03.18.20 10:04	
Toluene	<0.000455	0.0998	0.100	100	0.0982	99	70-130	2	35	mg/kg	03.18.20 10:04	
Ethylbenzene	<0.000564	0.0998	0.0955	96	0.0949	96	70-130	1	35	mg/kg	03.18.20 10:04	
m,p-Xylenes	<0.00101	0.200	0.188	94	0.188	95	70-130	0	35	mg/kg	03.18.20 10:04	
o-Xylene	<0.000344	0.0998	0.0942	94	0.0954	96	70-130	1	35	mg/kg	03.18.20 10:04	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	115		112		70-130	%	03.18.20 10:04
4-Bromofluorobenzene	92		93		70-130	%	03.18.20 10:04

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

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

Final 1.000

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 555558

Page 1 of 1

Project Manager:	Russell Sebring	Bill to: (if different)	Ike Tavarez
Company Name:	TRC - Midland	Company Name:	COG
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	432-250-4465	Email:	RSebring@TRCcompanies.com

Work Order Comments

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

Project Name:	COG-Plains Gath. Pipeline	Turn Around	
Project Number:		Routine ☒	
Project Location	Jal NM	Rush:	
Sampler's Name:	Russell Sebring	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT

Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	3.2 | 2.9	Thermometer ID	29
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.3
Sample Custody Seals:	Yes No N/A	Total Containers:	3

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	Chloride	TPH	BTEX
	N Floor @ 8'	S	6/MAR/20	930	8'	1		✓	✓	✓
	E Floor @ 9'	S		1015	9'	1		✓	✓	✓
	S Floor @ 8'	S		1045	8'	1		✓	✓	✓

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

1631 / 245.1 / 7470 / 7471 : Hg

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 $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			3-12-20 17:30	2		
3				4		
5				6		

Revised Date 022619 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 03/12/2020 05:36:00 PM

Work Order #: 655558

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.9
#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)?	**N/A**
#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: Brianna Teel Date: 03/13/2020

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 03/18/2020

Jessica Kramer

Certificate of Analysis Summary 657218

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gath System

Project Id:

Contact: Russell Sebring

Project Location: Jal, NM

Date Received in Lab: Fri Mar-27-20 05:07 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

Analysis Requested		Lab Id:	657218-001		657218-002		657218-003		657218-004		657218-005	
		Field Id:	E.Floor @ 9.5'		FL01 @ 4'		SWN-1		SWS-1		SWE-1	
		Depth:	9.5- ft		4- ft							
		Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
		Sampled:	Mar-27-20 11:15		Mar-27-20 11:45		Mar-27-20 12:30		Mar-27-20 12:45		Mar-27-20 13:15	
BTEX by EPA 8021B	Extracted:		Mar-30-20 08:30		Mar-30-20 08:30		Mar-30-20 08:30		Mar-30-20 08:30		Mar-30-20 08:30	
	Analyzed:		Mar-30-20 12:28		Mar-30-20 18:32		Mar-30-20 18:52		Mar-30-20 19:13		Mar-30-20 19:33	
	Units/RL:		mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene			<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200
Toluene			<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene			<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes			0.00576	0.00401	<0.00398	0.00398	<0.00397	0.00397	<0.00399	0.00399	<0.00400	0.00400
o-Xylene			<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes			0.00576	0.002	<0.00199	0.00199	<0.00198	0.00198	<0.002	0.002	<0.002	0.002
Total BTEX			0.00576	0.002	<0.00199	0.00199	<0.00198	0.00198	<0.002	0.002	<0.002	0.002
Chloride by EPA 300	Extracted:		Mar-30-20 11:30		Mar-30-20 11:30		Mar-30-20 11:30		Mar-30-20 11:30		Mar-30-20 11:30	
	Analyzed:		Mar-30-20 13:25		Mar-30-20 13:44		Mar-30-20 13:51		Mar-30-20 13:57		Mar-30-20 14:03	
	Units/RL:		mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride			4330	25.0	794	5.00	218	4.97	226	4.97	171	5.00
TPH by SW8015 Mod	Extracted:		Mar-30-20 15:00		Mar-30-20 15:00		Mar-30-20 15:00		Mar-30-20 15:00		Mar-30-20 15:00	
	Analyzed:		Mar-31-20 04:37		Mar-31-20 03:40		Mar-31-20 04:55		Mar-31-20 05:14		Mar-31-20 05:33	
	Units/RL:		mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)			<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.9	49.9
Diesel Range Organics (DRO)			121	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)			<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.9	49.9
Total TPH			121	49.9	<50	50	<49.9	49.9	<50	50	<49.9	49.9

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Version: 1.%

Jessica Kramer
Project Manager

Analytical Report 657218

for

TRC Solutions, Inc

Project Manager: Russell Sebring

COG-Plains Gath System

31-MAR-20

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

31-MAR-20

Project Manager: **Russell Sebring**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **657218**
COG-Plains Gath System
Project Address: Jal, NM

Russell Sebring:

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) 657218. 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. 657218 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,

Jessica Kramer

Jessica Kramer
Project Manager

Sample Cross Reference 657218

TRC Solutions, Inc, Midland, TX

COG-Plains Gath System

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
E.Floor @ 9.5'	S	03-27-20 11:15	9.5 ft	657218-001
FL01 @ 4'	S	03-27-20 11:45	4 ft	657218-002
SWN-1	S	03-27-20 12:30		657218-003
SWS-1	S	03-27-20 12:45		657218-004
SWE-1	S	03-27-20 13:15		657218-005

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: COG-Plains Gath System

Project ID:
Work Order Number(s): *657218*

Report Date: *31-MAR-20*
Date Received: *03/27/2020*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121378 BTEX by EPA 8021B

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

Certificate of Analytical Results 657218

TRC Solutions, Inc, Midland, TX

COG-Plains Gath System

Sample Id:	**E.Floor @ 9.5'**	Matrix:	Soil	Date Received:	03.27.20 17.07
Lab Sample Id:	657218-001	Date Collected:	03.27.20 11.15	Sample Depth:	9.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.30.20 11.30	Basis:	Wet Weight
Seq Number:	3121356				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4330**	25.0	mg/kg	03.30.20 13.25		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.30.20 15.00	Basis:	Wet Weight
Seq Number:	3121479				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.31.20 04.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	**121**	49.9	mg/kg	03.31.20 04.37		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.31.20 04.37	U	1
Total TPH	PHC635	**121**	49.9	mg/kg	03.31.20 04.37		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	03.31.20 04.37	
o-Terphenyl	84-15-1	88	%	70-130	03.31.20 04.37	

Certificate of Analytical Results 657218

TRC Solutions, Inc, Midland, TX

COG-Plains Gath System

Sample Id:	**E.Floor @ 9.5'**	Matrix:	Soil	Date Received:	03.27.20 17.07
Lab Sample Id:	657218-001	Date Collected:	03.27.20 11.15	Sample Depth:	9.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.30.20 08.30	Basis:	Wet Weight
Seq Number:	3121378				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 12.28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 12.28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 12.28	U	1
m,p-Xylenes	179601-23-1	**0.00576**	0.00401	mg/kg	03.30.20 12.28		1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 12.28	U	1
Total Xylenes	1330-20-7	**0.00576**	0.002	mg/kg	03.30.20 12.28		1
Total BTEX		**0.00576**	0.002	mg/kg	03.30.20 12.28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	03.30.20 12.28	
1,4-Difluorobenzene	540-36-3	106	%	70-130	03.30.20 12.28	

Certificate of Analytical Results 657218

TRC Solutions, Inc, Midland, TX

COG-Plains Gath System

Sample Id:	**FL01 @ 4'**	Matrix:	Soil	Date Received:	03.27.20 17.07
Lab Sample Id:	657218-002	Date Collected:	03.27.20 11.45	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.30.20 11.30	Basis:	Wet Weight
Seq Number:	3121356				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**794**	5.00	mg/kg	03.30.20 13.44		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.30.20 15.00	Basis:	Wet Weight
Seq Number:	3121479				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.20 03.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.20 03.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.20 03.40	U	1
Total TPH	PHC635	<50	50	mg/kg	03.31.20 03.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	03.31.20 03.40	
o-Terphenyl	84-15-1	97	%	70-130	03.31.20 03.40	

Certificate of Analytical Results 657218

TRC Solutions, Inc, Midland, TX

COG-Plains Gath System

Sample Id:	**FL01 @ 4'**	Matrix:	Soil	Date Received:	03.27.20 17.07
Lab Sample Id:	657218-002	Date Collected:	03.27.20 11.45	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.30.20 08.30	Basis:	Wet Weight
Seq Number:	3121378				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.30.20 18.32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.30.20 18.32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.30.20 18.32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.30.20 18.32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.30.20 18.32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.30.20 18.32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.30.20 18.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.30.20 18.32	
4-Bromofluorobenzene	460-00-4	104	%	70-130	03.30.20 18.32	

Certificate of Analytical Results 657218

TRC Solutions, Inc, Midland, TX

COG-Plains Gath System

Sample Id:	**SWN-1**	Matrix:	Soil	Date Received:	03.27.20 17.07
Lab Sample Id:	657218-003	Date Collected:	03.27.20 12.30		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.30.20 11.30	Basis:	Wet Weight
Seq Number:	3121356				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**218**	4.97	mg/kg	03.30.20 13.51		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.30.20 15.00	Basis:	Wet Weight
Seq Number:	3121479				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.31.20 04.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.31.20 04.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.31.20 04.55	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.31.20 04.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	03.31.20 04.55	
o-Terphenyl	84-15-1	79	%	70-130	03.31.20 04.55	

Certificate of Analytical Results 657218

TRC Solutions, Inc, Midland, TX

COG-Plains Gath System

Sample Id:	**SWN-1**	Matrix:	Soil	Date Received:	03.27.20 17.07
Lab Sample Id:	657218-003	Date Collected:	03.27.20 12.30		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.30.20 08.30	Basis:	Wet Weight
Seq Number:	3121378				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.30.20 18.52	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.30.20 18.52	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.30.20 18.52	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.30.20 18.52	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.30.20 18.52	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.30.20 18.52	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.30.20 18.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.30.20 18.52	
4-Bromofluorobenzene	460-00-4	103	%	70-130	03.30.20 18.52	

Certificate of Analytical Results 657218

TRC Solutions, Inc, Midland, TX

COG-Plains Gath System

Sample Id:	**SWS-1**	Matrix:	Soil	Date Received:	03.27.20 17.07
Lab Sample Id:	657218-004	Date Collected:	03.27.20 12.45		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.30.20 11.30	Basis:	Wet Weight
Seq Number:	3121356				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**226**	4.97	mg/kg	03.30.20 13.57		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.30.20 15.00	Basis:	Wet Weight
Seq Number:	3121479				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.20 05.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.20 05.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.20 05.14	U	1
Total TPH	PHC635	<50	50	mg/kg	03.31.20 05.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	03.31.20 05.14	
o-Terphenyl	84-15-1	79	%	70-130	03.31.20 05.14	

Certificate of Analytical Results 657218

TRC Solutions, Inc, Midland, TX

COG-Plains Gath System

Sample Id:	**SWS-1**	Matrix:	Soil	Date Received:	03.27.20 17.07
Lab Sample Id:	657218-004	Date Collected:	03.27.20 12.45		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.30.20 08.30	Basis:	Wet Weight
Seq Number:	3121378				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 19.13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 19.13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 19.13	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.30.20 19.13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 19.13	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.30.20 19.13	U	1
Total BTEX		<0.002	0.002	mg/kg	03.30.20 19.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	03.30.20 19.13	
4-Bromofluorobenzene	460-00-4	111	%	70-130	03.30.20 19.13	

Certificate of Analytical Results 657218

TRC Solutions, Inc, Midland, TX

COG-Plains Gath System

Sample Id:	**SWE-1**	Matrix:	Soil	Date Received:	03.27.20 17.07
Lab Sample Id:	657218-005	Date Collected:	03.27.20 13.15		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.30.20 11.30	Basis:	Wet Weight
Seq Number:	3121356				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**171**	5.00	mg/kg	03.30.20 14.03		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.30.20 15.00	Basis:	Wet Weight
Seq Number:	3121479				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.31.20 05.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.31.20 05.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.31.20 05.33	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.31.20 05.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	03.31.20 05.33	
o-Terphenyl	84-15-1	79	%	70-130	03.31.20 05.33	

Certificate of Analytical Results 657218

TRC Solutions, Inc, Midland, TX

COG-Plains Gath System

Sample Id:	**SWE-1**	Matrix:	Soil	Date Received:	03.27.20 17.07
Lab Sample Id:	657218-005	Date Collected:	03.27.20 13.15		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.30.20 08.30	Basis:	Wet Weight
Seq Number:	3121378				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 19.33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 19.33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 19.33	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.30.20 19.33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 19.33	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.30.20 19.33	U	1
Total BTEX		<0.002	0.002	mg/kg	03.30.20 19.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	03.30.20 19.33	
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.30.20 19.33	

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

QC Summary 657218

TRC Solutions, Inc

COG-Plains Gath System

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3121356 — Matrix: Solid — Date Prep: 03.30.20
MB Sample Id: 7700049-1-BLK — LCS Sample Id: 7700049-1-BKS — LCSD Sample Id: 7700049-1-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	259	104	258	103	90-110	0	20	mg/kg	03.30.20 12:37	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3121356 — Matrix: Soil — Date Prep: 03.30.20
Parent Sample Id: 657072-006 — MS Sample Id: 657072-006 S — MSD Sample Id: 657072-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.99	250	263	105	265	106	90-110	1	20	mg/kg	03.30.20 14:22	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3121356 — Matrix: Soil — Date Prep: 03.30.20
Parent Sample Id: 657151-014 — MS Sample Id: 657151-014 S — MSD Sample Id: 657151-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1.53	249	257	103	250	100	90-110	3	20	mg/kg	03.30.20 12:58	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3121479 — Matrix: Solid — Date Prep: 03.30.20
MB Sample Id: 7700076-1-BLK — LCS Sample Id: 7700076-1-BKS — LCSD Sample Id: 7700076-1-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)	<50.0	1000	861	86	835	84	70-130	3	20	mg/kg	03.31.20 03:03	
Diesel Range Organics (DRO)	<50.0	1000	922	92	890	89	70-130	4	20	mg/kg	03.31.20 03:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	79		99		100		70-130	%	03.31.20 03:03
o-Terphenyl	83		95		88		70-130	%	03.31.20 03:03

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3121479 — Matrix: Solid — Date Prep: 03.30.20
MB Sample Id: 7700076-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.31.20 02:45	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 657218

TRC Solutions, Inc

COG-Plains Gath System

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3121479 | Matrix: Soil | Date Prep: 03.30.20
Parent Sample Id: 657218-002 | MS Sample Id: 657218-002 S | MSD Sample Id: 657218-002 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)	<49.8	996	893	90	872	87	70-130	2	20	mg/kg	03.31.20 03:59	
Diesel Range Organics (DRO)	<49.8	996	963	97	943	94	70-130	2	20	mg/kg	03.31.20 03:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		96		70-130	%	03.31.20 03:59
o-Terphenyl	92		94		70-130	%	03.31.20 03:59

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3121378 | Matrix: Solid | Date Prep: 03.30.20
MB Sample Id: 7700085-1-BLK | LCS Sample Id: 7700085-1-BKS | LCSD Sample Id: 7700085-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0978	98	0.0967	97	70-130	1	35	mg/kg	03.30.20 09:25	
Toluene	<0.000456	0.100	0.102	102	0.0953	95	70-130	7	35	mg/kg	03.30.20 09:25	
Ethylbenzene	<0.000565	0.100	0.104	104	0.0956	96	70-130	8	35	mg/kg	03.30.20 09:25	
m,p-Xylenes	<0.00101	0.200	0.210	105	0.189	95	70-130	11	35	mg/kg	03.30.20 09:25	
o-Xylene	<0.000344	0.100	0.104	104	0.0946	95	70-130	9	35	mg/kg	03.30.20 09:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		107		108		70-130	%	03.30.20 09:25
4-Bromofluorobenzene	98		105		95		70-130	%	03.30.20 09:25

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3121378 | Matrix: Soil | Date Prep: 03.30.20
Parent Sample Id: 657218-001 | MS Sample Id: 657218-001 S | MSD Sample Id: 657218-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000383	0.0996	0.0917	92	0.0909	91	70-130	1	35	mg/kg	03.30.20 10:06	
Toluene	<0.000454	0.0996	0.0907	91	0.0953	95	70-130	5	35	mg/kg	03.30.20 10:06	
Ethylbenzene	<0.000563	0.0996	0.0841	84	0.0934	94	70-130	10	35	mg/kg	03.30.20 10:06	
m,p-Xylenes	0.00576	0.199	0.167	81	0.188	91	70-130	12	35	mg/kg	03.30.20 10:06	
o-Xylene	0.000621	0.0996	0.0795	79	0.0871	87	70-130	9	35	mg/kg	03.30.20 10:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		105		70-130	%	03.30.20 10:06
4-Bromofluorobenzene	103		103		70-130	%	03.30.20 10:06

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

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

Final 1.000

XENCO LABORATORIES

Chain of Custody

Work Order No: 657210

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Page ____ of ____

Project Manager:	Jared Russell Sebring	Bill to: (if different)	Ike Tavarez
Company Name:	TRC-Midland	Company Name:	COG
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	432.250.4465	Email:	RSebring@TRCcompanies.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project:

Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	COG-Plains Gathering System	Turn Around	
Project Number:		Routine ☐	
Project Location	Jal NM	Rush: 24 HR	
Sampler's Name:	Russell Sebring	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	3.8/3.5	Thermometer ID	R9
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.3
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH	BTEX	Chloride	Sample Comments
	E. Floor @ 9.5'	S	3.27.20	1115	9.5'	1	✓	✓	✓	
	FL@1@4'	↓	↓	1145	4'	1	✓	✓	✓	
	SWN-1	↓	↓	1230	–	1	✓	✓	✓	
	SWS-1	↓	↓	1245	–	1	✓	✓	✓	
	SWE-1	↓	↓	1315	–	1	✓	✓	✓	

Pres. Code

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 [signature]	[signature]	3/27/20	2		
3			4		
5		1707	6		

Revised Date 022619 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 03/27/2020 05:07:00 PM

Work Order #: 657218

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.5
#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)?	**N/A**
#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: Brianna Teel Date: 03/30/2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 03/31/2020
Jessica Kramer

Certificate of Analysis Summary 657449

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gathering System

Project Id:

Contact: Russell Sebring

Project Location: JAL, NM

Date Received in Lab: Tue Mar-31-20 04:53 pm

Report Date: 01-APR-20

Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	657449-001		657449-002		657449-003		657449-004		657449-005	
	Field Id:	SWE-2		SWE-3		FL02 @ 4'		FL03 @ 4'		FL04 @4'	
	Depth:					4- ft		4- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-31-20 12:45		Mar-31-20 13:30		Mar-31-20 08:30		Mar-31-20 08:45		Mar-31-20 09:00	
BTEX by EPA 8021B	***Extracted:***	Mar-31-20 17:00		Mar-31-20 17:00		Mar-31-20 17:00		Mar-31-20 17:00		Mar-31-20 17:00	
	Analyzed:	Apr-01-20 06:29		Apr-01-20 06:50		Apr-01-20 07:10		Apr-01-20 07:31		Apr-01-20 07:51	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Toluene		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00397	0.00397	<0.00398	0.00398	<0.00401	0.00401	<0.00398	0.00398	<0.00399	0.00399
o-Xylene		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200
Total Xylenes		<0.00198	0.00198	<0.00199	0.00199	<0.002	0.002	<0.00199	0.00199	<0.002	0.002
Total BTEX		<0.00198	0.00198	<0.00199	0.00199	<0.002	0.002	<0.00199	0.00199	<0.002	0.002
Chloride by EPA 300	***Extracted:***	Mar-31-20 18:00		Mar-31-20 18:00		Mar-31-20 18:00		Mar-31-20 18:00		Mar-31-20 18:00	
	Analyzed:	Apr-01-20 01:37		Apr-01-20 01:53		Apr-01-20 01:58		Apr-01-20 02:04		Apr-01-20 02:09	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		13.6	5.04	12.3	4.97	9510	49.8	10800	99.4	10100	50.1
TPH by Texas1005	***Extracted:***	Mar-31-20 17:30		Mar-31-20 17:30		Mar-31-20 17:30		Mar-31-20 17:30		Mar-31-20 17:30	
	Analyzed:	Apr-01-20 05:08		Apr-01-20 06:05		Apr-01-20 06:24		Apr-01-20 06:43		Apr-01-20 07:02	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		<50.0	50.0	<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9
>C12-C28 Diesel Range Hydrocarbons		<50.0	50.0	<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9
>C28-C35 Oil Range Hydrocarbons		<50.0	50.0	<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9
Total TPH		<50	50	<50	50	<49.8	49.8	<50	50	<49.9	49.9

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Version: 1.%

Jessica Kramer
Project Manager

Analytical Report 657449

for

TRC Solutions, Inc

Project Manager: Russell Sebring

COG-Plains Gathering System

01-APR-20

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

01-APR-20

Project Manager: **Russell Sebring**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **657449**
COG-Plains Gathering System
Project Address: JAL, NM

Russell Sebring:

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) 657449. 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. 657449 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,

Jessica Kramer

Jessica Kramer
Project Manager

Sample Cross Reference 657449

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SWE-2	S	03-31-20 12:45		657449-001
SWE-3	S	03-31-20 13:30		657449-002
FL02 @ 4'	S	03-31-20 08:30	4 ft	657449-003
FL03 @ 4'	S	03-31-20 08:45	4 ft	657449-004
FL04 @4'	S	03-31-20 09:00	4 ft	657449-005

Version: 1.%

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: COG-Plains Gathering System

Project ID:
Work Order Number(s): *657449*

Report Date: *01-APR-20*
Date Received: *03/31/2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121547 BTEX by EPA 8021B

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

Certificate of Analytical Results 657449

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWE-2**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657449-001	Date Collected:	03.31.20 12.45		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.31.20 18.00	Basis:	Wet Weight
Seq Number:	3121538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.6**	5.04	mg/kg	04.01.20 01.37		1

Analytical Method:	TPH by Texas1005			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.31.20 17.30	Basis:	Wet Weight
Seq Number:	3121601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<50.0	50.0	mg/kg	04.01.20 05.08	U	1
>C12-C28 Diesel Range Hydrocarbons	PHCG1228	<50.0	50.0	mg/kg	04.01.20 05.08	U	1
>C28-C35 Oil Range Hydrocarbons	PHCG2835	<50.0	50.0	mg/kg	04.01.20 05.08	U	1
Total TPH	PHC635	<50	50	mg/kg	04.01.20 05.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
o-Terphenyl	84-15-1	83	%	70-130	04.01.20 05.08	
1-Chlorooctane	111-85-3	80	%	70-130	04.01.20 05.08	

Certificate of Analytical Results 657449

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWE-2**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657449-001	Date Collected:	03.31.20 12.45		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.31.20 17.00	Basis:	Wet Weight
Seq Number:	3121547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.01.20 06.29	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.01.20 06.29	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.01.20 06.29	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	04.01.20 06.29	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.01.20 06.29	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.01.20 06.29	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.01.20 06.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.01.20 06.29	
4-Bromofluorobenzene	460-00-4	108	%	70-130	04.01.20 06.29	

Certificate of Analytical Results 657449

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWE-3**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657449-002	Date Collected:	03.31.20 13.30		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.31.20 18.00	Basis:	Wet Weight
Seq Number:	3121538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.3**	4.97	mg/kg	04.01.20 01.53		1

Analytical Method:	TPH by Texas1005			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.31.20 17.30	Basis:	Wet Weight
Seq Number:	3121601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<50.0	50.0	mg/kg	04.01.20 06.05	U	1
>C12-C28 Diesel Range Hydrocarbons	PHCG1228	<50.0	50.0	mg/kg	04.01.20 06.05	U	1
>C28-C35 Oil Range Hydrocarbons	PHCG2835	<50.0	50.0	mg/kg	04.01.20 06.05	U	1
Total TPH	PHC635	<50	50	mg/kg	04.01.20 06.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
o-Terphenyl	84-15-1	77	%	70-130	04.01.20 06.05	
1-Chlorooctane	111-85-3	75	%	70-130	04.01.20 06.05	

Certificate of Analytical Results 657449

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWE-3**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657449-002	Date Collected:	03.31.20 13.30		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.31.20 17.00	Basis:	Wet Weight
Seq Number:	3121547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.01.20 06.50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.01.20 06.50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.01.20 06.50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.01.20 06.50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.01.20 06.50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.01.20 06.50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.01.20 06.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	70-130	04.01.20 06.50	
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.01.20 06.50	

Certificate of Analytical Results 657449

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL02 @ 4'**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657449-003	Date Collected:	03.31.20 08.30	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.31.20 18.00	Basis:	Wet Weight
Seq Number:	3121538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9510**	49.8	mg/kg	04.01.20 01.58		10

Analytical Method:	TPH by Texas1005			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.31.20 17.30	Basis:	Wet Weight
Seq Number:	3121601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<49.8	49.8	mg/kg	04.01.20 06.24	U	1
>C12-C28 Diesel Range Hydrocarbons	PHCG1228	<49.8	49.8	mg/kg	04.01.20 06.24	U	1
>C28-C35 Oil Range Hydrocarbons	PHCG2835	<49.8	49.8	mg/kg	04.01.20 06.24	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.01.20 06.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
o-Terphenyl	84-15-1	82	%	70-130	04.01.20 06.24	
1-Chlorooctane	111-85-3	78	%	70-130	04.01.20 06.24	

Certificate of Analytical Results 657449

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL02 @ 4'**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657449-003	Date Collected:	03.31.20 08.30	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.31.20 17.00	Basis:	Wet Weight
Seq Number:	3121547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.01.20 07.10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.01.20 07.10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.01.20 07.10	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.01.20 07.10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.01.20 07.10	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.01.20 07.10	U	1
Total BTEX		<0.002	0.002	mg/kg	04.01.20 07.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	04.01.20 07.10	
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.01.20 07.10	

Certificate of Analytical Results 657449

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL03 @ 4'**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657449-004	Date Collected:	03.31.20 08.45	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.31.20 18.00	Basis:	Wet Weight
Seq Number:	3121538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10800**	99.4	mg/kg	04.01.20 02.04		20

Analytical Method:	TPH by Texas1005			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.31.20 17.30	Basis:	Wet Weight
Seq Number:	3121601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<50.0	50.0	mg/kg	04.01.20 06.43	U	1
>C12-C28 Diesel Range Hydrocarbons	PHCG1228	<50.0	50.0	mg/kg	04.01.20 06.43	U	1
>C28-C35 Oil Range Hydrocarbons	PHCG2835	<50.0	50.0	mg/kg	04.01.20 06.43	U	1
Total TPH	PHC635	<50	50	mg/kg	04.01.20 06.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
o-Terphenyl	84-15-1	80	%	70-130	04.01.20 06.43	
1-Chlorooctane	111-85-3	76	%	70-130	04.01.20 06.43	

Certificate of Analytical Results 657449

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL03 @ 4'**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657449-004	Date Collected:	03.31.20 08.45	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.31.20 17.00	Basis:	Wet Weight
Seq Number:	3121547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.01.20 07.31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.01.20 07.31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.01.20 07.31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.01.20 07.31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.01.20 07.31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.01.20 07.31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.01.20 07.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	04.01.20 07.31	
1,4-Difluorobenzene	540-36-3	103	%	70-130	04.01.20 07.31	

Certificate of Analytical Results 657449

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL04 @4'**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657449-005	Date Collected:	03.31.20 09.00	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.31.20 18.00	Basis:	Wet Weight
Seq Number:	3121538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10100**	50.1	mg/kg	04.01.20 02.09		10

Analytical Method:	TPH by Texas1005			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.31.20 17.30	Basis:	Wet Weight
Seq Number:	3121601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<49.9	49.9	mg/kg	04.01.20 07.02	U	1
>C12-C28 Diesel Range Hydrocarbons	PHCG1228	<49.9	49.9	mg/kg	04.01.20 07.02	U	1
>C28-C35 Oil Range Hydrocarbons	PHCG2835	<49.9	49.9	mg/kg	04.01.20 07.02	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.01.20 07.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
o-Terphenyl	84-15-1	81	%	70-130	04.01.20 07.02	
1-Chlorooctane	111-85-3	77	%	70-130	04.01.20 07.02	

Certificate of Analytical Results 657449

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL04 @4'**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657449-005	Date Collected:	03.31.20 09.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.31.20 17.00	Basis:	Wet Weight
Seq Number:	3121547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.01.20 07.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.01.20 07.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.01.20 07.51	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.01.20 07.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.01.20 07.51	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.01.20 07.51	U	1
Total BTEX		<0.002	0.002	mg/kg	04.01.20 07.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	04.01.20 07.51	
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.01.20 07.51	

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

QC Summary 657449

TRC Solutions, Inc

COG-Plains Gathering System

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3121538 — Matrix: Solid — Date Prep: 03.31.20
MB Sample Id: 7700186-1-BLK — LCS Sample Id: 7700186-1-BKS — LCSD Sample Id: 7700186-1-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	253	101	253	101	90-110	0	20	mg/kg	04.01.20 01:27	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3121538 — Matrix: Soil — Date Prep: 03.31.20
Parent Sample Id: 657410-005 — MS Sample Id: 657410-005 S — MSD Sample Id: 657410-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	208	250	448	96	449	96	90-110	0	20	mg/kg	04.01.20 02:56	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3121538 — Matrix: Soil — Date Prep: 03.31.20
Parent Sample Id: 657449-001 — MS Sample Id: 657449-001 S — MSD Sample Id: 657449-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.6	252	265	100	262	99	90-110	1	20	mg/kg	04.01.20 01:43	

Analytical Method: TPH by Texas1005 — Prep Method: TX1005P
Seq Number: 3121601 — Matrix: Solid — Date Prep: 03.31.20
MB Sample Id: 7700215-1-BLK — LCS Sample Id: 7700215-1-BKS — LCSD Sample Id: 7700215-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<50.0	1000	939	94	928	93	75-125	1	20	mg/kg	04.01.20 04:31	
>C12-C28 Diesel Range Hydrocarbons	<50.0	1000	992	99	967	97	75-125	3	20	mg/kg	04.01.20 04:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
o-Terphenyl	83		92		92		70-130	%	04.01.20 04:31
1-Chlorooctane	78		95		93		70-130	%	04.01.20 04:31

Analytical Method: TPH by Texas1005 — Prep Method: TX1005P
Seq Number: 3121601 — Matrix: Solid — Date Prep: 03.31.20
MB Sample Id: 7700215-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
>C28-C35 Oil Range Hydrocarbons	<50.0	mg/kg	04.01.20 04:12	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 657449

TRC Solutions, Inc

COG-Plains Gathering System

Analytical Method: TPH by Texas1005 | Prep Method: TX1005P
Seq Number: 3121601 | Matrix: Soil | Date Prep: 03.31.20
Parent Sample Id: 657449-001 | MS Sample Id: 657449-001 S | MSD Sample Id: 657449-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<49.9	997	998	100	884	88	75-125	12	30	mg/kg	04.01.20 05:27	
>C12-C28 Diesel Range Hydrocarbons	<49.9	997	1040	104	928	93	75-125	11	30	mg/kg	04.01.20 05:27	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
o-Terphenyl	93		84		70-130	%	04.01.20 05:27
1-Chlorooctane	100		89		70-130	%	04.01.20 05:27

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3121547 | Matrix: Solid | Date Prep: 03.31.20
MB Sample Id: 7700225-1-BLK | LCS Sample Id: 7700225-1-BKS | LCSD Sample Id: 7700225-1-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	0.0930	93	0.0933	93	70-130	0	35	mg/kg	04.01.20 04:07	
Toluene	<0.00200	0.100	0.0916	92	0.0968	97	70-130	6	35	mg/kg	04.01.20 04:07	
Ethylbenzene	<0.00200	0.100	0.0907	91	0.0971	97	70-130	7	35	mg/kg	04.01.20 04:07	
m,p-Xylenes	<0.00400	0.200	0.179	90	0.194	97	70-130	8	35	mg/kg	04.01.20 04:07	
o-Xylene	<0.00200	0.100	0.0913	91	0.100	100	70-130	9	35	mg/kg	04.01.20 04:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		108		70-130	%	04.01.20 04:07
4-Bromofluorobenzene	101		96		106		70-130	%	04.01.20 04:07

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3121547 | Matrix: Soil | Date Prep: 03.31.20
Parent Sample Id: 657449-001 | MS Sample Id: 657449-001 S | MSD Sample Id: 657449-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0886	89	0.0805	81	70-130	10	35	mg/kg	04.01.20 04:48	
Toluene	<0.00200	0.0998	0.0881	88	0.0797	80	70-130	10	35	mg/kg	04.01.20 04:48	
Ethylbenzene	<0.00200	0.0998	0.0872	87	0.0782	78	70-130	11	35	mg/kg	04.01.20 04:48	
m,p-Xylenes	<0.00399	0.200	0.174	87	0.156	78	70-130	11	35	mg/kg	04.01.20 04:48	
o-Xylene	<0.00200	0.0998	0.0875	88	0.0796	80	70-130	9	35	mg/kg	04.01.20 04:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		70-130	%	04.01.20 04:48
4-Bromofluorobenzene	97		100		70-130	%	04.01.20 04:48

MS/MSD Percent Recovery | [D] = 100*(C-A) / B | LCS = Laboratory Control Sample | MS = Matrix Spike
Relative Percent Difference | RPD = 200* | (C-E) / (C+E) | | A = Parent Result | B = Spike Added
LCS/LCSD Recovery | [D] = 100 * (C) / [B] | C = MS/LCS Result | D = MSD/LCSD % Rec
Log Difference | Log Diff. = Log(Sample Duplicate) - Log(Original Sample) | E = MSD/LCSD Result

XENCO LABORATORIES

Chain of Custody

Work Order No: 537449

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Page 1 of 1

Project Manager:	Russell Sebring	Bill to: (if different)	Ike Tavarez
Company Name:	TRC - Midland	Company Name:	COG
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	432.250.4465	Email:	RSebring@trcompanies.com

Work Order Comments

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

Project Name:	COG-Plains Gathering Sweep	Turn Around	
Project Number:		Routine ☐	
Project Location	Lea NM	Rush: 24HR	
Sampler's Name:	Russell Sebring	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	4.2/4.4	Thermometer ID	K9
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.3
Sample Custody Seals:	Yes No N/A	Total Containers:	

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	Chlorides	TPH 8015	BTEX	Sample Comments
	SWE-2	S	30-MAR-2020	1245	—	1		✓	✓	✓	* Please send
	SWE-3	S	30-MAR-2020	1330	—	1		✓	✓	✓	Results as soon
	FL02 @ 4'	S	31-MAR-2020	830	4'	1		✓	✓	✓	as Rush
	FL03 @ 4'	S	31-MAR-2020	845	4'	1		✓	✓	✓	
	FL04 @ 4'	S	31-MAR-2020	900	4'	1		✓	✓	✓	

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

1631 / 245.1 / 7470 / 7471 : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			3/31	2		
3				4		
5			1053	6		

Revised Date 022619 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 03.31.2020 04.53.00 PM

Work Order #: 657449

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.4
#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)?	**N/A**
#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: Brianna Teel Date: 03.31.2020

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 04.01.2020

Jessica Kramer

Certificate of Analysis Summary 657452

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gathering System

Project Id:

Contact: Russell Sebring

Project Location:

Date Received in Lab: Tue Mar-31-20 04:53 pm

Report Date: 01-APR-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	657452-001		657452-002		657452-003		657452-004					
	Field Id:	FL05 @4'		FL06 @4'		SWW-1		SWN-2					
	Depth:	4- ft		4- ft									
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Mar-31-20 11:00		Mar-31-20 11:30		Mar-31-20 11:45		Mar-31-20 12:00					
BTEX by EPA 8021B	***Extracted:***	Mar-31-20 17:00		Mar-31-20 17:00		Mar-31-20 17:00		Mar-31-20 17:00					
	Analyzed:	Apr-01-20 08:11		Apr-01-20 08:32		Apr-01-20 08:52		Apr-01-20 09:13					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200				
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200				
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200				
m,p-Xylenes		<0.00398	0.00398	<0.00400	0.00400	<0.00396	0.00396	<0.00399	0.00399				
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200				
Total Xylenes		<0.00199	0.00199	<0.002	0.002	<0.00198	0.00198	<0.002	0.002				
Total BTEX		<0.00199	0.00199	<0.002	0.002	<0.00198	0.00198	<0.002	0.002				
Chloride by EPA 300	***Extracted:***	Mar-31-20 18:00		Mar-31-20 18:00		Mar-31-20 18:00		Mar-31-20 18:00					
	Analyzed:	Apr-01-20 02:25		Apr-01-20 02:30		Apr-01-20 02:35		Apr-01-20 02:41					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		11400	99.0	12500	101	13.7	4.98	6.76	4.98				
TPH by Texas1005	***Extracted:***	Mar-31-20 17:30		Mar-31-20 17:30		Mar-31-20 17:30		Mar-31-20 17:30					
	Analyzed:	Apr-01-20 07:21		Apr-01-20 07:40		Apr-01-20 07:59		Apr-01-20 08:18					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		<50.0	50.0	<49.9	49.9	<50.0	50.0	<50.0	50.0				
>C12-C28 Diesel Range Hydrocarbons		<50.0	50.0	<49.9	49.9	<50.0	50.0	<50.0	50.0				
>C28-C35 Oil Range Hydrocarbons		<50.0	50.0	<49.9	49.9	<50.0	50.0	<50.0	50.0				
Total TPH		<50	50	<49.9	49.9	<50	50	<50	50				

Jessica Kramer
Project Manager

Analytical Report 657452

for

TRC Solutions, Inc

Project Manager: Russell Sebring

COG-Plains Gathering System

01-APR-20

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

01-APR-20

Project Manager: **Russell Sebring**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **657452**
COG-Plains Gathering System
Project Address:

Russell Sebring:

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) 657452. 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. 657452 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,

Jessica Kramer

Jessica Kramer
Project Manager

Sample Cross Reference 657452

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL05 @4'	S	03-31-20 11:00	4 ft	657452-001
FL06 @4'	S	03-31-20 11:30	4 ft	657452-002
SWW-1	S	03-31-20 11:45		657452-003
SWN-2	S	03-31-20 12:00		657452-004

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: COG-Plains Gathering System

Project ID:
Work Order Number(s): *657452*

Report Date: *01-APR-20*
Date Received: *03/31/2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121547 BTEX by EPA 8021B

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

Certificate of Analytical Results 657452

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL05 @4'**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657452-001	Date Collected:	03.31.20 11.00	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.31.20 18.00	Basis:	Wet Weight
Seq Number:	3121538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11400**	99.0	mg/kg	04.01.20 02.25		20

Analytical Method:	TPH by Texas1005			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.31.20 17.30	Basis:	Wet Weight
Seq Number:	3121601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<50.0	50.0	mg/kg	04.01.20 07.21	U	1
>C12-C28 Diesel Range Hydrocarbons	PHCG1228	<50.0	50.0	mg/kg	04.01.20 07.21	U	1
>C28-C35 Oil Range Hydrocarbons	PHCG2835	<50.0	50.0	mg/kg	04.01.20 07.21	U	1
Total TPH	PHC635	<50	50	mg/kg	04.01.20 07.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
o-Terphenyl	84-15-1	80	%	70-130	04.01.20 07.21	
1-Chlorooctane	111-85-3	77	%	70-130	04.01.20 07.21	

Certificate of Analytical Results 657452

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL05 @4'**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657452-001	Date Collected:	03.31.20 11.00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.31.20 17.00	Basis:	Wet Weight
Seq Number:	3121547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.01.20 08.11	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.01.20 08.11	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.01.20 08.11	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.01.20 08.11	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.01.20 08.11	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.01.20 08.11	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.01.20 08.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	04.01.20 08.11	
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.01.20 08.11	

Certificate of Analytical Results 657452

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL06 @4'**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657452-002	Date Collected:	03.31.20 11.30	Sample Depth:	4 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.31.20 18.00	Basis:	Wet Weight
Seq Number:	3121538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12500**	101	mg/kg	04.01.20 02.30		20

Analytical Method:	TPH by Texas1005			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.31.20 17.30	Basis:	Wet Weight
Seq Number:	3121601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<49.9	49.9	mg/kg	04.01.20 07.40	U	1
>C12-C28 Diesel Range Hydrocarbons	PHCG1228	<49.9	49.9	mg/kg	04.01.20 07.40	U	1
>C28-C35 Oil Range Hydrocarbons	PHCG2835	<49.9	49.9	mg/kg	04.01.20 07.40	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.01.20 07.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
o-Terphenyl	84-15-1	87	%	70-130	04.01.20 07.40	
1-Chlorooctane	111-85-3	83	%	70-130	04.01.20 07.40	

Certificate of Analytical Results 657452

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL06 @4'**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657452-002	Date Collected:	03.31.20 11.30	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.31.20 17.00	Basis:	Wet Weight
Seq Number:	3121547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.01.20 08.32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.01.20 08.32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.01.20 08.32	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.01.20 08.32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.01.20 08.32	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.01.20 08.32	U	1
Total BTEX		<0.002	0.002	mg/kg	04.01.20 08.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.01.20 08.32	
4-Bromofluorobenzene	460-00-4	110	%	70-130	04.01.20 08.32	

Certificate of Analytical Results 657452

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWW-1**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657452-003	Date Collected:	03.31.20 11.45		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.31.20 18.00	Basis:	Wet Weight
Seq Number:	3121538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.7**	4.98	mg/kg	04.01.20 02.35		1

Analytical Method:	TPH by Texas1005			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.31.20 17.30	Basis:	Wet Weight
Seq Number:	3121601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<50.0	50.0	mg/kg	04.01.20 07.59	U	1
>C12-C28 Diesel Range Hydrocarbons	PHCG1228	<50.0	50.0	mg/kg	04.01.20 07.59	U	1
>C28-C35 Oil Range Hydrocarbons	PHCG2835	<50.0	50.0	mg/kg	04.01.20 07.59	U	1
Total TPH	PHC635	<50	50	mg/kg	04.01.20 07.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
o-Terphenyl	84-15-1	79	%	70-130	04.01.20 07.59	
1-Chlorooctane	111-85-3	76	%	70-130	04.01.20 07.59	

Certificate of Analytical Results 657452

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWW-1**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657452-003	Date Collected:	03.31.20 11.45		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.31.20 17.00	Basis:	Wet Weight
Seq Number:	3121547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.01.20 08.52	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.01.20 08.52	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.01.20 08.52	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	04.01.20 08.52	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.01.20 08.52	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.01.20 08.52	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.01.20 08.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	04.01.20 08.52	
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.01.20 08.52	

Certificate of Analytical Results 657452

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWN-2**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657452-004	Date Collected:	03.31.20 12.00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.31.20 18.00	Basis:	Wet Weight
Seq Number:	3121538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.76**	4.98	mg/kg	04.01.20 02.41		1

Analytical Method:	TPH by Texas1005			Prep Method:	TX1005P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.31.20 17.30	Basis:	Wet Weight
Seq Number:	3121601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<50.0	50.0	mg/kg	04.01.20 08.18	U	1
>C12-C28 Diesel Range Hydrocarbons	PHCG1228	<50.0	50.0	mg/kg	04.01.20 08.18	U	1
>C28-C35 Oil Range Hydrocarbons	PHCG2835	<50.0	50.0	mg/kg	04.01.20 08.18	U	1
Total TPH	PHC635	<50	50	mg/kg	04.01.20 08.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
o-Terphenyl	84-15-1	79	%	70-130	04.01.20 08.18	
1-Chlorooctane	111-85-3	80	%	70-130	04.01.20 08.18	

Certificate of Analytical Results 657452

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWN-2**	Matrix:	Soil	Date Received:	03.31.20 16.53
Lab Sample Id:	657452-004	Date Collected:	03.31.20 12.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.31.20 17.00	Basis:	Wet Weight
Seq Number:	3121547				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.01.20 09.13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.01.20 09.13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.01.20 09.13	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.01.20 09.13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.01.20 09.13	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.01.20 09.13	U	1
Total BTEX		<0.002	0.002	mg/kg	04.01.20 09.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	04.01.20 09.13	
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.01.20 09.13	

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

QC Summary 657452

TRC Solutions, Inc

COG-Plains Gathering System

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3121538 — Matrix: Solid — Date Prep: 03.31.20
MB Sample Id: 7700186-1-BLK — LCS Sample Id: 7700186-1-BKS — LCSD Sample Id: 7700186-1-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	253	101	253	101	90-110	0	20	mg/kg	04.01.20 01:27	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3121538 — Matrix: Soil — Date Prep: 03.31.20
Parent Sample Id: 657410-005 — MS Sample Id: 657410-005 S — MSD Sample Id: 657410-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	208	250	448	96	449	96	90-110	0	20	mg/kg	04.01.20 02:56	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3121538 — Matrix: Soil — Date Prep: 03.31.20
Parent Sample Id: 657449-001 — MS Sample Id: 657449-001 S — MSD Sample Id: 657449-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.6	252	265	100	262	99	90-110	1	20	mg/kg	04.01.20 01:43	

Analytical Method: TPH by Texas1005 — Prep Method: TX1005P
Seq Number: 3121601 — Matrix: Solid — Date Prep: 03.31.20
MB Sample Id: 7700215-1-BLK — LCS Sample Id: 7700215-1-BKS — LCSD Sample Id: 7700215-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<50.0	1000	939	94	928	93	75-125	1	20	mg/kg	04.01.20 04:31	
>C12-C28 Diesel Range Hydrocarbons	<50.0	1000	992	99	967	97	75-125	3	20	mg/kg	04.01.20 04:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
o-Terphenyl	83		92		92		70-130	%	04.01.20 04:31
1-Chlorooctane	78		95		93		70-130	%	04.01.20 04:31

Analytical Method: TPH by Texas1005 — Prep Method: TX1005P
Seq Number: 3121601 — Matrix: Solid — Date Prep: 03.31.20
MB Sample Id: 7700215-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
>C28-C35 Oil Range Hydrocarbons	<50.0	mg/kg	04.01.20 04:12	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 657452

TRC Solutions, Inc

COG-Plains Gathering System

Analytical Method: TPH by Texas1005 | Prep Method: TX1005P
Seq Number: 3121601 | Matrix: Soil | Date Prep: 03.31.20
Parent Sample Id: 657449-001 | MS Sample Id: 657449-001 S | MSD Sample Id: 657449-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<49.9	997	998	100	884	88	75-125	12	30	mg/kg	04.01.20 05:27	
>C12-C28 Diesel Range Hydrocarbons	<49.9	997	1040	104	928	93	75-125	11	30	mg/kg	04.01.20 05:27	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
o-Terphenyl	93		84		70-130	%	04.01.20 05:27
1-Chlorooctane	100		89		70-130	%	04.01.20 05:27

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3121547 | Matrix: Solid | Date Prep: 03.31.20
MB Sample Id: 7700225-1-BLK | LCS Sample Id: 7700225-1-BKS | LCSD Sample Id: 7700225-1-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	0.0930	93	0.0933	93	70-130	0	35	mg/kg	04.01.20 04:07	
Toluene	<0.00200	0.100	0.0916	92	0.0968	97	70-130	6	35	mg/kg	04.01.20 04:07	
Ethylbenzene	<0.00200	0.100	0.0907	91	0.0971	97	70-130	7	35	mg/kg	04.01.20 04:07	
m,p-Xylenes	<0.00400	0.200	0.179	90	0.194	97	70-130	8	35	mg/kg	04.01.20 04:07	
o-Xylene	<0.00200	0.100	0.0913	91	0.100	100	70-130	9	35	mg/kg	04.01.20 04:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		108		70-130	%	04.01.20 04:07
4-Bromofluorobenzene	101		96		106		70-130	%	04.01.20 04:07

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3121547 | Matrix: Soil | Date Prep: 03.31.20
Parent Sample Id: 657449-001 | MS Sample Id: 657449-001 S | MSD Sample Id: 657449-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0886	89	0.0805	81	70-130	10	35	mg/kg	04.01.20 04:48	
Toluene	<0.00200	0.0998	0.0881	88	0.0797	80	70-130	10	35	mg/kg	04.01.20 04:48	
Ethylbenzene	<0.00200	0.0998	0.0872	87	0.0782	78	70-130	11	35	mg/kg	04.01.20 04:48	
m,p-Xylenes	<0.00399	0.200	0.174	87	0.156	78	70-130	11	35	mg/kg	04.01.20 04:48	
o-Xylene	<0.00200	0.0998	0.0875	88	0.0796	80	70-130	9	35	mg/kg	04.01.20 04:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		70-130	%	04.01.20 04:48
4-Bromofluorobenzene	97		100		70-130	%	04.01.20 04:48

MS/MSD Percent Recovery | [D] = 100*(C-A) / B | LCS = Laboratory Control Sample | MS = Matrix Spike
Relative Percent Difference | RPD = 200* | (C-E) / (C+E) | | A = Parent Result | B = Spike Added
LCS/LCSD Recovery | [D] = 100 * (C) / [B] | C = MS/LCS Result | D = MSD/LCSD % Rec
Log Difference | Log Diff. = Log(Sample Duplicate) - Log(Original Sample) | E = MSD/LCSD Result

XENCO LABORATORIES

Chain of Custody

Work Order No: 457452

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

www.xenco.com Page 1 of 1

Project Manager:	Russell Sibbring	Bill to: (If different)	Ike Thurber
Company Name:	TRC - Midland	Company Name:	COG
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	432.250.4465	Email:	RSibring@TRCcompanies.com

Work Order Comments

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

Project Name:	COG-Plains Gathering System	Turn Around	
Project Number:		Routine ☐	
Project Location		Rush: 24 HR	
Sampler's Name:	Russell Sibbring	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT

Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	4.7 4.4	Thermometer ID	R8
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	~
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	Chlorides	TPH	BTEX	Sample Comments
	FL#5 @ 4'	S	3/May/2020	1100	4'	1		✓	✓	✓	
	FL#6 @ 4'			1130	4'	1		✓	✓	✓	
	SWW-1			1145	—	1		✓	✓	✓	
	SWN-2			1200	—	1		✓	✓	✓	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			5/1	2		
3				4		
5			1653	6		

Revised Date 022619 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 03.31.2020 04.53.00 PM

Work Order #: 657452

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.4
#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)?	**N/A**
#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: Brianna Teel Date: 03.31.2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 04.01.2020
Jessica Kramer

Certificate of Analysis Summary 660184

TRC Solutions, Inc, Midland, TX

Project Name: COG Plains Gath

Project Id:

Contact: Russell Sebring

Project Location: Jal, NM

Date Received in Lab: Wed 04.29.2020 16:50

Report Date: 04.30.2020 17:52

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	660184-001		660184-002		660184-003		660184-004		660184-005		660184-006	
	Field Id:	FL-13 @ 1.5'		FL-14 @ 1.5'		FL-15 @ 1.5'		FL-16 @ 1.5'		FL-17 @ 1.5'		FL-18 @ 1.5'	
	Depth:	1.5- ft		1.5- ft		1.5- ft		1.5- ft		1.5- ft		1.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.29.2020 12:15		04.29.2020 11:45		04.29.2020 11:15		04.29.2020 10:45		04.29.2020 10:15		04.29.2020 10:00	
BTEX by EPA 8021B	***Extracted:***	04.29.2020 17:00		04.29.2020 17:00		04.29.2020 17:00		04.29.2020 17:00		04.29.2020 17:00		04.29.2020 17:00	
	Analyzed:	04.30.2020 11:57		04.30.2020 12:18		04.30.2020 12:38		04.30.2020 12:59		04.30.2020 13:19		04.30.2020 13:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00398	0.00398	<0.00402	0.00402	<0.00401	0.00401	<0.00397	0.00397	<0.00399	0.00399	<0.00399	0.00399
o-Xylene		<0.00199	0.00199	<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00199	0.00199	<0.00201	0.00201	<0.002	0.002	<0.00198	0.00198	<0.002	0.002	<0.002	0.002
Total BTEX		<0.00199	0.00199	<0.00201	0.00201	<0.002	0.002	<0.00198	0.00198	<0.002	0.002	<0.002	0.002
Chloride by EPA 300	***Extracted:***	04.29.2020 17:35		04.29.2020 17:35		04.29.2020 17:35		04.29.2020 17:35		04.29.2020 17:35		04.29.2020 17:35	
	Analyzed:	04.29.2020 20:05		04.29.2020 20:21		04.29.2020 20:26		04.29.2020 20:32		04.29.2020 20:37		04.29.2020 20:53	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		44.8	4.95	54.1	4.98	14.5	4.96	8.07	4.99	8.62	5.00	9.95	5.00
TPH by SW8015 Mod	***Extracted:***	04.29.2020 17:00		04.29.2020 17:00		04.29.2020 17:00		04.29.2020 17:00		04.29.2020 17:00		04.29.2020 17:00	
	Analyzed:	04.30.2020 08:59		04.30.2020 09:20		04.30.2020 09:41		04.30.2020 08:59		04.30.2020 09:20		04.30.2020 09:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0
Diesel Range Organics (DRO)		<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0
Total TPH		<49.8	49.8	<50	50	<49.9	49.9	<49.8	49.8	<50	50	<50	50

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager

Analytical Report 660184

for

TRC Solutions, Inc

Project Manager: Russell Sebring

COG Plains Gath

04.30.2020

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

04.30.2020

Project Manager: **Russell Sebring**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **660184**
COG Plains Gath
Project Address: Jal, NM

Russell Sebring:

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) 660184. 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. 660184 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,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Sample Cross Reference 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL-13 @ 1.5'	S	04.29.2020 12:15	1.5 ft	660184-001
FL-14 @ 1.5'	S	04.29.2020 11:45	1.5 ft	660184-002
FL-15 @ 1.5'	S	04.29.2020 11:15	1.5 ft	660184-003
FL-16 @ 1.5'	S	04.29.2020 10:45	1.5 ft	660184-004
FL-17 @ 1.5'	S	04.29.2020 10:15	1.5 ft	660184-005
FL-18 @ 1.5'	S	04.29.2020 10:00	1.5 ft	660184-006

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: COG Plains Gath

Project ID:
Work Order Number(s): *660184*

Report Date: *04.30.2020*
Date Received: *04.29.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id:	**FL-13 @ 1.5'**	Matrix:	Soil	Date Received:	04.29.2020 16:50
Lab Sample Id:	660184-001	Date Collected:	04.29.2020 12:15	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.29.2020 17:35	Basis:	Wet Weight
Seq Number:	3124620				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**44.8**	4.95	mg/kg	04.29.2020 20:05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.29.2020 17:00	Basis:	Wet Weight
Seq Number:	3124630				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.30.2020 08:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.30.2020 08:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.30.2020 08:59	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.30.2020 08:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-130	04.30.2020 08:59	
o-Terphenyl	84-15-1	92	%	70-130	04.30.2020 08:59	

Certificate of Analytical Results 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id:	**FL-13 @ 1.5'**	Matrix:	Soil	Date Received:	04.29.2020 16:50
Lab Sample Id:	660184-001	Date Collected:	04.29.2020 12:15	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.29.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.30.2020 11:57	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.30.2020 11:57	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.30.2020 11:57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.30.2020 11:57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.30.2020 11:57	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.30.2020 11:57	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.30.2020 11:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	04.30.2020 11:57	
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.30.2020 11:57	

Certificate of Analytical Results 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id:	**FL-14 @ 1.5'**	Matrix:	Soil	Date Received:	04.29.2020 16:50
Lab Sample Id:	660184-002	Date Collected:	04.29.2020 11:45	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.29.2020 17:35	Basis:	Wet Weight
Seq Number:	3124620				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**54.1**	4.98	mg/kg	04.29.2020 20:21		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.29.2020 17:00	Basis:	Wet Weight
Seq Number:	3124630				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.30.2020 09:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.30.2020 09:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.30.2020 09:20	U	1
Total TPH	PHC635	<50	50	mg/kg	04.30.2020 09:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	04.30.2020 09:20	
o-Terphenyl	84-15-1	95	%	70-130	04.30.2020 09:20	

Certificate of Analytical Results 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id:	**FL-14 @ 1.5'**	Matrix:	Soil	Date Received:	04.29.2020 16:50
Lab Sample Id:	660184-002	Date Collected:	04.29.2020 11:45	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.29.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.30.2020 12:18	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.30.2020 12:18	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.30.2020 12:18	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.30.2020 12:18	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.30.2020 12:18	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.30.2020 12:18	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.30.2020 12:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.30.2020 12:18	
4-Bromofluorobenzene	460-00-4	104	%	70-130	04.30.2020 12:18	

Certificate of Analytical Results 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id:	**FL-15 @ 1.5'**	Matrix:	Soil	Date Received:	04.29.2020 16:50
Lab Sample Id:	660184-003	Date Collected:	04.29.2020 11:15	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.29.2020 17:35	Basis:	Wet Weight
Seq Number:	3124620				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.5**	4.96	mg/kg	04.29.2020 20:26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.29.2020 17:00	Basis:	Wet Weight
Seq Number:	3124630				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.30.2020 09:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.30.2020 09:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.30.2020 09:41	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.30.2020 09:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	04.30.2020 09:41	
o-Terphenyl	84-15-1	92	%	70-130	04.30.2020 09:41	

Certificate of Analytical Results 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id:	**FL-15 @ 1.5'**	Matrix:	Soil	Date Received:	04.29.2020 16:50
Lab Sample Id:	660184-003	Date Collected:	04.29.2020 11:15	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.29.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 12:38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 12:38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.30.2020 12:38	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.30.2020 12:38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 12:38	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.30.2020 12:38	U	1
Total BTEX		<0.002	0.002	mg/kg	04.30.2020 12:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.30.2020 12:38	
4-Bromofluorobenzene	460-00-4	106	%	70-130	04.30.2020 12:38	

Certificate of Analytical Results 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id:	**FL-16 @ 1.5'**	Matrix:	Soil	Date Received:	04.29.2020 16:50
Lab Sample Id:	660184-004	Date Collected:	04.29.2020 10:45	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.29.2020 17:35	Basis:	Wet Weight
Seq Number:	3124620				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.07**	4.99	mg/kg	04.29.2020 20:32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.29.2020 17:00	Basis:	Wet Weight
Seq Number:	3124630				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.30.2020 08:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.30.2020 08:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.30.2020 08:59	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.30.2020 08:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	04.30.2020 08:59	
o-Terphenyl	84-15-1	76	%	70-130	04.30.2020 08:59	

Certificate of Analytical Results 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id:	**FL-16 @ 1.5'**	Matrix:	Soil	Date Received:	04.29.2020 16:50
Lab Sample Id:	660184-004	Date Collected:	04.29.2020 10:45	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.29.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.30.2020 12:59	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.30.2020 12:59	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.30.2020 12:59	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	04.30.2020 12:59	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.30.2020 12:59	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.30.2020 12:59	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.30.2020 12:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	04.30.2020 12:59	
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.30.2020 12:59	

Certificate of Analytical Results 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id:	**FL-17 @ 1.5'**	Matrix:	Soil	Date Received:	04.29.2020 16:50
Lab Sample Id:	660184-005	Date Collected:	04.29.2020 10:15	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.29.2020 17:35	Basis:	Wet Weight
Seq Number:	3124620				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.62**	5.00	mg/kg	04.29.2020 20:37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.29.2020 17:00	Basis:	Wet Weight
Seq Number:	3124630				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.30.2020 09:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.30.2020 09:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.30.2020 09:20	U	1
Total TPH	PHC635	<50	50	mg/kg	04.30.2020 09:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	04.30.2020 09:20	
o-Terphenyl	84-15-1	86	%	70-130	04.30.2020 09:20	

Certificate of Analytical Results 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id:	**FL-17 @ 1.5'**	Matrix:	Soil	Date Received:	04.29.2020 16:50
Lab Sample Id:	660184-005	Date Collected:	04.29.2020 10:15	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.29.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 13:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 13:19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.30.2020 13:19	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.30.2020 13:19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 13:19	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.30.2020 13:19	U	1
Total BTEX		<0.002	0.002	mg/kg	04.30.2020 13:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	04.30.2020 13:19	
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.30.2020 13:19	

Certificate of Analytical Results 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id:	**FL-18 @ 1.5'**	Matrix:	Soil	Date Received:	04.29.2020 16:50
Lab Sample Id:	660184-006	Date Collected:	04.29.2020 10:00	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.29.2020 17:35	Basis:	Wet Weight
Seq Number:	3124620				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9.95**	5.00	mg/kg	04.29.2020 20:53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.29.2020 17:00	Basis:	Wet Weight
Seq Number:	3124630				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.30.2020 09:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.30.2020 09:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.30.2020 09:41	U	1
Total TPH	PHC635	<50	50	mg/kg	04.30.2020 09:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	04.30.2020 09:41	
o-Terphenyl	84-15-1	88	%	70-130	04.30.2020 09:41	

Certificate of Analytical Results 660184

TRC Solutions, Inc, Midland, TX

COG Plains Gath

Sample Id:	**FL-18 @ 1.5'**	Matrix:	Soil	Date Received:	04.29.2020 16:50
Lab Sample Id:	660184-006	Date Collected:	04.29.2020 10:00	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.29.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 13:39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 13:39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.30.2020 13:39	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.30.2020 13:39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 13:39	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.30.2020 13:39	U	1
Total BTEX		<0.002	0.002	mg/kg	04.30.2020 13:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	04.30.2020 13:39	
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.30.2020 13:39	

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. **ND** Not Detected.

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

QC Summary 660184

TRC Solutions, Inc

COG Plains Gath

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124620 — Matrix: Solid — Date Prep: 04.29.2020
MB Sample Id: 7702367-1-BLK — LCS Sample Id: 7702367-1-BKS — LCSD Sample Id: 7702367-1-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	247	99	249	100	90-110	1	20	mg/kg	04.29.2020 19:55	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124620 — Matrix: Soil — Date Prep: 04.29.2020
Parent Sample Id: 660055-006 — MS Sample Id: 660055-006 S — MSD Sample Id: 660055-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	59.5	251	314	101	320	104	90-110	2	20	mg/kg	04.29.2020 21:24	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124620 — Matrix: Soil — Date Prep: 04.29.2020
Parent Sample Id: 660184-001 — MS Sample Id: 660184-001 S — MSD Sample Id: 660184-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	44.8	248	285	97	275	93	90-110	4	20	mg/kg	04.29.2020 20:11	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124630 — Matrix: Solid — Date Prep: 04.29.2020
MB Sample Id: 7702337-1-BLK — LCS Sample Id: 7702337-1-BKS — LCSD Sample Id: 7702337-1-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)	<50.0	1000	968	97	956	96	70-130	1	20	mg/kg	04.29.2020 11:52	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	1030	103	70-130	6	20	mg/kg	04.29.2020 11:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		101		100		70-130	%	04.29.2020 11:52
o-Terphenyl	105		111		107		70-130	%	04.29.2020 11:52

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124630 — Matrix: Solid — Date Prep: 04.29.2020
MB Sample Id: 7702337-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.29.2020 11:31	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 660184

TRC Solutions, Inc

COG Plains Gath

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3124630 Matrix: Soil Date Prep: 04.29.2020
Parent Sample Id: 660041-021 MS Sample Id: 660041-021 S MSD Sample Id: 660041-021 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)	<49.9	997	1040	104	1050	105	70-130	1	20	mg/kg	04.29.2020 12:56	
Diesel Range Organics (DRO)	<49.9	997	1110	111	1140	114	70-130	3	20	mg/kg	04.29.2020 12:56	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		92		70-130	%	04.29.2020 12:56
o-Terphenyl	101		105		70-130	%	04.29.2020 12:56

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3124691 Matrix: Solid Date Prep: 04.29.2020
MB Sample Id: 7702432-1-BLK LCS Sample Id: 7702432-1-BKS LCSD Sample Id: 7702432-1-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	0.0905	91	0.0982	98	70-130	8	35	mg/kg	04.30.2020 09:12	
Toluene	<0.00200	0.100	0.0858	86	0.0950	95	70-130	10	35	mg/kg	04.30.2020 09:12	
Ethylbenzene	<0.00200	0.100	0.0857	86	0.0965	97	70-130	12	35	mg/kg	04.30.2020 09:12	
m,p-Xylenes	<0.00400	0.200	0.163	82	0.186	93	70-130	13	35	mg/kg	04.30.2020 09:12	
o-Xylene	<0.00200	0.100	0.0835	84	0.0947	95	70-130	13	35	mg/kg	04.30.2020 09:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		101		101		70-130	%	04.30.2020 09:12
4-Bromofluorobenzene	92		93		100		70-130	%	04.30.2020 09:12

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3124691 Matrix: Soil Date Prep: 04.29.2020
Parent Sample Id: 659619-034 MS Sample Id: 659619-034 S MSD Sample Id: 659619-034 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0990	0.0936	95	0.107	108	70-130	13	35	mg/kg	04.30.2020 09:53	
Toluene	<0.00198	0.0990	0.0849	86	0.101	102	70-130	17	35	mg/kg	04.30.2020 09:53	
Ethylbenzene	<0.00198	0.0990	0.0820	83	0.0995	100	70-130	19	35	mg/kg	04.30.2020 09:53	
m,p-Xylenes	<0.00396	0.198	0.156	79	0.192	96	70-130	21	35	mg/kg	04.30.2020 09:53	
o-Xylene	<0.00198	0.0990	0.0816	82	0.0976	98	70-130	18	35	mg/kg	04.30.2020 09:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		102		70-130	%	04.30.2020 09:53
4-Bromofluorobenzene	100		106		70-130	%	04.30.2020 09:53

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

XENCO LABORATORIES

Chain of Custody

Work Order No: 660184

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Page 1 of ____

Project Manager:	Russell Sebring	Bill to: (if different)	Ike Tavarez
Company Name:	TRC Midland	Company Name:	COG - Midland
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	432.250.4465	Email:	RSebring@TRCcompanies.com

Work Order Comments

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

Project Name:	COG-Plains Gath. ~~[illegible]~~ Stgn	Turn Around	
Project Number:		Routine ☐	
Project Location	Lea NM	Rush: 24 HR	
Sampler's Name:	Russell Sebring	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	2.3/2.0	Thermometer ID	R9
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.3
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chloride	TPH	BTEX	Sample Comments
	FL-13 @ 1.5'	S	29APR2020	1215	1.5'	1	✓	✓	✓	
	FL-14 @ 1.5'	↓	↓	1145	1.5'	1	✓	✓	✓	
	FL-15 @ 1.5'	↓	↓	1115	1.5'	1	✓	✓	✓	
	FL-16 @ 1.5'	↓	↓	1045	1.5'	1	✓	✓	✓	
	FL-17 @ 1.5'	↓	↓	1015	1.5'	1	✓	✓	✓	
	FL-18 @ 1.5'	↓	↓	1000	1.5'	1	✓	✓	✓	

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010:** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 [signature]	[signature]	4/29/20 1050	2		
3			4		
5			6		

Revised Date 022619 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 04.29.2020 04.50.00 PM

Work Order #: 660184

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**N/A**	
#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?	**No**	
#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**	BTEX was in bulk container
#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)?	**N/A**	
#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: Brianna Teel Date: 04.29.2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 04.30.2020
Jessica Kramer

Certificate of Analysis Summary 660316

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gathering System

Project Id:

Contact: Russell Sebring

Project Location: Jal, NM

Date Received in Lab: Thu 04.30.2020 15:49

Report Date: 05.01.2020 16:57

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	660316-001		660316-002		660316-003		660316-004		660316-005		660316-006	
	Field Id:	FL-8 @ 3.5'		FL-9 @ 3.5'		FL-10 @ 3.5'		FL-11 @ 2.5'		FL-12 @ 2.5'		SWE-4	
	Depth:	3.5- ft		3.5- ft		3.5- ft		2.5- ft		2.5- ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.30.2020 11:30		04.30.2020 11:00		04.30.2020 10:30		04.30.2020 10:00		04.30.2020 09:30		04.30.2020 12:00	
BTEX by EPA 8021B	***Extracted:***	04.30.2020 17:00		04.30.2020 17:00		04.30.2020 17:00		04.30.2020 17:00		04.30.2020 17:00		04.30.2020 17:00	
	Analyzed:	04.30.2020 17:13		04.30.2020 17:33		04.30.2020 17:54		04.30.2020 18:14		04.30.2020 18:35		04.30.2020 18:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00199	0.00199	0.00222	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00398	0.00398	<0.00400	0.00400	<0.00402	0.00402	<0.00398	0.00398	<0.00400	0.00400	<0.00399	0.00399
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00199	0.00199	<0.002	0.002	<0.00201	0.00201	<0.00199	0.00199	<0.002	0.002	<0.002	0.002
Total BTEX		<0.00199	0.00199	0.00222	0.002	<0.00201	0.00201	<0.00199	0.00199	<0.002	0.002	<0.002	0.002
Chloride by EPA 300	***Extracted:***	04.30.2020 18:00		04.30.2020 18:00		04.30.2020 18:00		04.30.2020 18:00		04.30.2020 18:00		04.30.2020 18:00	
	Analyzed:	05.01.2020 01:45		05.01.2020 02:01		05.01.2020 02:06		05.01.2020 02:22		05.01.2020 02:27		05.01.2020 02:32	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		58.9 X	5.03	62.0	4.98	43.3	4.99	62.9	4.98	37.5	4.97	64.5	5.01
TPH by SW8015 Mod	***Extracted:***	04.30.2020 16:30		04.30.2020 16:30		04.30.2020 16:30		04.30.2020 16:30		04.30.2020 16:30		04.30.2020 16:30	
	Analyzed:	05.01.2020 04:59		05.01.2020 05:57		05.01.2020 06:16		05.01.2020 06:35		05.01.2020 06:54		05.01.2020 07:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0
Total TPH		<50	50	<49.8	49.8	<50	50	<49.9	49.9	<49.8	49.8	<50	50

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager

Certificate of Analysis Summary 660316

TRC Solutions, Inc, Midland, TX

Project Name: COG-Plains Gathering System

Project Id:

Contact: Russell Sebring

Project Location: Jal, NM

Date Received in Lab: Thu 04.30.2020 15:49

Report Date: 05.01.2020 16:57

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	660316-007		660316-008		660316-009		660316-010					
	Field Id:	SWE-5		SWS-2		SWW-2		SWW-3					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	04.30.2020 12:15		04.30.2020 12:30		04.30.2020 12:45		04.30.2020 13:00					
BTEX by EPA 8021B	***Extracted:***	04.30.2020 17:00		04.30.2020 17:00		04.30.2020 17:00		04.30.2020 17:00					
	Analyzed:	04.30.2020 19:15		04.30.2020 19:36		04.30.2020 19:56		04.30.2020 20:17					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.0199	0.0199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200				
Toluene		<0.0199	0.0199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200				
Ethylbenzene		<0.0199	0.0199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200				
m,p-Xylenes		<0.0398	0.0398	<0.00400	0.00400	<0.00403	0.00403	<0.00399	0.00399				
o-Xylene		<0.0199	0.0199	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200				
Total Xylenes		<0.0199	0.0199	<0.002	0.002	<0.00202	0.00202	<0.002	0.002				
Total BTEX		<0.0199	0.0199	<0.002	0.002	<0.00202	0.00202	<0.002	0.002				
Chloride by EPA 300	***Extracted:***	04.30.2020 18:00		04.30.2020 18:00		04.30.2020 18:00		04.30.2020 18:00					
	Analyzed:	05.01.2020 02:37		05.01.2020 02:43		05.01.2020 02:48		05.01.2020 02:53					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		48.3	4.98	39.0	5.04	17.8	4.96	10.4	4.96				
TPH by SW8015 Mod	***Extracted:***	04.30.2020 16:30		04.30.2020 16:30		04.30.2020 16:30		04.30.2020 16:30					
	Analyzed:	05.01.2020 07:32		05.01.2020 07:51		05.01.2020 08:10		05.01.2020 08:29					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<49.9	49.9	<50.0	50.0	<49.9	49.9				
Diesel Range Organics (DRO)		<49.9	49.9	<49.9	49.9	<50.0	50.0	<49.9	49.9				
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<49.9	49.9	<50.0	50.0	<49.9	49.9				
Total TPH		<49.9	49.9	<49.9	49.9	<50	50	<49.9	49.9				

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager

Analytical Report 660316

for

TRC Solutions, Inc

Project Manager: Russell Sebring

COG-Plains Gathering System

05.01.2020

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

05.01.2020

Project Manager: **Russell Sebring**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **660316**
COG-Plains Gathering System
Project Address: Jal, NM

Russell Sebring:

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) 660316. 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. 660316 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,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Sample Cross Reference 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL-8 @ 3.5'	S	04.30.2020 11:30	3.5 ft	660316-001
FL-9 @ 3.5'	S	04.30.2020 11:00	3.5 ft	660316-002
FL-10 @ 3.5'	S	04.30.2020 10:30	3.5 ft	660316-003
FL-11 @ 2.5'	S	04.30.2020 10:00	2.5 ft	660316-004
FL-12 @ 2.5'	S	04.30.2020 09:30	2.5 ft	660316-005
SWE-4	S	04.30.2020 12:00		660316-006
SWE-5	S	04.30.2020 12:15		660316-007
SWS-2	S	04.30.2020 12:30		660316-008
SWW-2	S	04.30.2020 12:45		660316-009
SWW-3	S	04.30.2020 13:00		660316-010

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: COG-Plains Gathering System

Project ID:
Work Order Number(s): *660316*

Report Date: *05.01.2020*
Date Received: *04.30.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3124691 BTEX by EPA 8021B

Surrogate 1,4-Difluorobenzene recovered above QC limits. Matrix interferences is suspected. Samples affected are: 660316-002.

Batch: LBA-3124709 Chloride by EPA 300

Lab Sample ID 660316-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 660316-001, -002, -003, -004, -005, -006, -007, -008, -009, -010.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL-8 @ 3.5'**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-001	Date Collected:	04.30.2020 11:30	Sample Depth:	3.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.30.2020 18:00	Basis:	Wet Weight
Seq Number:	3124709				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**58.9**	5.03	mg/kg	05.01.2020 01:45	X	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.30.2020 16:30	Basis:	Wet Weight
Seq Number:	3124735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.01.2020 04:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.01.2020 04:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.01.2020 04:59	U	1
Total TPH	PHC635	<50	50	mg/kg	05.01.2020 04:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	05.01.2020 04:59	
o-Terphenyl	84-15-1	80	%	70-130	05.01.2020 04:59	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL-8 @ 3.5'**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-001	Date Collected:	04.30.2020 11:30	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.30.2020 17:13	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.30.2020 17:13	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.30.2020 17:13	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.30.2020 17:13	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.30.2020 17:13	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.30.2020 17:13	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.30.2020 17:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	04.30.2020 17:13	
1,4-Difluorobenzene	540-36-3	105	%	70-130	04.30.2020 17:13	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL-9 @ 3.5'**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-002	Date Collected:	04.30.2020 11:00	Sample Depth:	3.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.30.2020 18:00	Basis:	Wet Weight
Seq Number:	3124709				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**62.0**	4.98	mg/kg	05.01.2020 02:01		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.30.2020 16:30	Basis:	Wet Weight
Seq Number:	3124735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	05.01.2020 05:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	05.01.2020 05:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	05.01.2020 05:57	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	05.01.2020 05:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	05.01.2020 05:57	
o-Terphenyl	84-15-1	79	%	70-130	05.01.2020 05:57	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL-9 @ 3.5'**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-002	Date Collected:	04.30.2020 11:00	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 17:33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 17:33	U	1
Ethylbenzene	100-41-4	**0.00222**	0.00200	mg/kg	04.30.2020 17:33		1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.30.2020 17:33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 17:33	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.30.2020 17:33	U	1
Total BTEX		**0.00222**	0.002	mg/kg	04.30.2020 17:33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	77	%	70-130	04.30.2020 17:33	
1,4-Difluorobenzene	540-36-3	138	%	70-130	04.30.2020 17:33	**

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL-10 @ 3.5'**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-003	Date Collected:	04.30.2020 10:30	Sample Depth:	3.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.30.2020 18:00	Basis:	Wet Weight
Seq Number:	3124709				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.3**	4.99	mg/kg	05.01.2020 02:06		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.30.2020 16:30	Basis:	Wet Weight
Seq Number:	3124735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.01.2020 06:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.01.2020 06:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.01.2020 06:16	U	1
Total TPH	PHC635	<50	50	mg/kg	05.01.2020 06:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	05.01.2020 06:16	
o-Terphenyl	84-15-1	79	%	70-130	05.01.2020 06:16	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL-10 @ 3.5'**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-003	Date Collected:	04.30.2020 10:30	Sample Depth:	3.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.30.2020 17:54	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.30.2020 17:54	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.30.2020 17:54	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.30.2020 17:54	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.30.2020 17:54	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.30.2020 17:54	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.30.2020 17:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	04.30.2020 17:54	
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.30.2020 17:54	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL-11 @ 2.5'**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-004	Date Collected:	04.30.2020 10:00	Sample Depth:	2.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.30.2020 18:00	Basis:	Wet Weight
Seq Number:	3124709				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**62.9**	4.98	mg/kg	05.01.2020 02:22		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.30.2020 16:30	Basis:	Wet Weight
Seq Number:	3124735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	05.01.2020 06:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	05.01.2020 06:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	05.01.2020 06:35	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	05.01.2020 06:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	05.01.2020 06:35	
o-Terphenyl	84-15-1	80	%	70-130	05.01.2020 06:35	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL-11 @ 2.5'**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-004	Date Collected:	04.30.2020 10:00	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.30.2020 18:14	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.30.2020 18:14	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.30.2020 18:14	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.30.2020 18:14	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.30.2020 18:14	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.30.2020 18:14	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.30.2020 18:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	04.30.2020 18:14	
4-Bromofluorobenzene	460-00-4	82	%	70-130	04.30.2020 18:14	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL-12 @ 2.5'**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-005	Date Collected:	04.30.2020 09:30	Sample Depth:	2.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.30.2020 18:00	Basis:	Wet Weight
Seq Number:	3124709				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**37.5**	4.97	mg/kg	05.01.2020 02:27		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.30.2020 16:30	Basis:	Wet Weight
Seq Number:	3124735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	05.01.2020 06:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	05.01.2020 06:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	05.01.2020 06:54	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	05.01.2020 06:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	05.01.2020 06:54	
o-Terphenyl	84-15-1	80	%	70-130	05.01.2020 06:54	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**FL-12 @ 2.5'**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-005	Date Collected:	04.30.2020 09:30	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 18:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 18:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.30.2020 18:35	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.30.2020 18:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 18:35	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.30.2020 18:35	U	1
Total BTEX		<0.002	0.002	mg/kg	04.30.2020 18:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.30.2020 18:35	
4-Bromofluorobenzene	460-00-4	99	%	70-130	04.30.2020 18:35	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWE-4**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-006	Date Collected:	04.30.2020 12:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.30.2020 18:00	Basis:	Wet Weight
Seq Number:	3124709				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**64.5**	5.01	mg/kg	05.01.2020 02:32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.30.2020 16:30	Basis:	Wet Weight
Seq Number:	3124735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.01.2020 07:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.01.2020 07:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.01.2020 07:13	U	1
Total TPH	PHC635	<50	50	mg/kg	05.01.2020 07:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	05.01.2020 07:13	
o-Terphenyl	84-15-1	80	%	70-130	05.01.2020 07:13	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWE-4**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-006	Date Collected:	04.30.2020 12:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 18:55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 18:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.30.2020 18:55	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.30.2020 18:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 18:55	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.30.2020 18:55	U	1
Total BTEX		<0.002	0.002	mg/kg	04.30.2020 18:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	04.30.2020 18:55	
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.30.2020 18:55	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWE-5**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-007	Date Collected:	04.30.2020 12:15		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.30.2020 18:00	Basis:	Wet Weight
Seq Number:	3124709				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**48.3**	4.98	mg/kg	05.01.2020 02:37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.30.2020 16:30	Basis:	Wet Weight
Seq Number:	3124735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	05.01.2020 07:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	05.01.2020 07:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	05.01.2020 07:32	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	05.01.2020 07:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	05.01.2020 07:32	
o-Terphenyl	84-15-1	80	%	70-130	05.01.2020 07:32	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWE-5**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-007	Date Collected:	04.30.2020 12:15		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0199	0.0199	mg/kg	04.30.2020 19:15	U	10
Toluene	108-88-3	<0.0199	0.0199	mg/kg	04.30.2020 19:15	U	10
Ethylbenzene	100-41-4	<0.0199	0.0199	mg/kg	04.30.2020 19:15	U	10
m,p-Xylenes	179601-23-1	<0.0398	0.0398	mg/kg	04.30.2020 19:15	U	10
o-Xylene	95-47-6	<0.0199	0.0199	mg/kg	04.30.2020 19:15	U	10
Total Xylenes	1330-20-7	<0.0199	0.0199	mg/kg	04.30.2020 19:15	U	10
Total BTEX		<0.0199	0.0199	mg/kg	04.30.2020 19:15	U	10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	04.30.2020 19:15	
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.30.2020 19:15	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWS-2**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-008	Date Collected:	04.30.2020 12:30		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.30.2020 18:00	Basis:	Wet Weight
Seq Number:	3124709				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**39.0**	5.04	mg/kg	05.01.2020 02:43		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.30.2020 16:30	Basis:	Wet Weight
Seq Number:	3124735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	05.01.2020 07:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	05.01.2020 07:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	05.01.2020 07:51	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	05.01.2020 07:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	05.01.2020 07:51	
o-Terphenyl	84-15-1	82	%	70-130	05.01.2020 07:51	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWS-2**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-008	Date Collected:	04.30.2020 12:30		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 19:36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 19:36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.30.2020 19:36	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.30.2020 19:36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 19:36	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.30.2020 19:36	U	1
Total BTEX		<0.002	0.002	mg/kg	04.30.2020 19:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	04.30.2020 19:36	
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.30.2020 19:36	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWW-2**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-009	Date Collected:	04.30.2020 12:45		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.30.2020 18:00	Basis:	Wet Weight
Seq Number:	3124709				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**17.8**	4.96	mg/kg	05.01.2020 02:48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.30.2020 16:30	Basis:	Wet Weight
Seq Number:	3124735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.01.2020 08:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.01.2020 08:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.01.2020 08:10	U	1
Total TPH	PHC635	<50	50	mg/kg	05.01.2020 08:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	05.01.2020 08:10	
o-Terphenyl	84-15-1	81	%	70-130	05.01.2020 08:10	

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TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWW-2**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-009	Date Collected:	04.30.2020 12:45		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.30.2020 19:56	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.30.2020 19:56	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.30.2020 19:56	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	04.30.2020 19:56	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.30.2020 19:56	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.30.2020 19:56	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.30.2020 19:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	04.30.2020 19:56	
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.30.2020 19:56	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWW-3**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-010	Date Collected:	04.30.2020 13:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	04.30.2020 18:00	Basis:	Wet Weight
Seq Number:	3124709				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.4**	4.96	mg/kg	05.01.2020 02:53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.30.2020 16:30	Basis:	Wet Weight
Seq Number:	3124735				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	05.01.2020 08:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	05.01.2020 08:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	05.01.2020 08:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	05.01.2020 08:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	05.01.2020 08:29	
o-Terphenyl	84-15-1	79	%	70-130	05.01.2020 08:29	

Certificate of Analytical Results 660316

TRC Solutions, Inc, Midland, TX

COG-Plains Gathering System

Sample Id:	**SWW-3**	Matrix:	Soil	Date Received:	04.30.2020 15:49
Lab Sample Id:	660316-010	Date Collected:	04.30.2020 13:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 17:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 20:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 20:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.30.2020 20:17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.30.2020 20:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 20:17	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.30.2020 20:17	U	1
Total BTEX		<0.002	0.002	mg/kg	04.30.2020 20:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	04.30.2020 20:17	
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.30.2020 20:17	

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. **ND** Not Detected.

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

QC Summary 660316

TRC Solutions, Inc

COG-Plains Gathering System

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124709 — Matrix: Solid — Date Prep: 04.30.2020
MB Sample Id: 7702467-1-BLK — LCS Sample Id: 7702467-1-BKS — LCSD Sample Id: 7702467-1-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	271	108	237	95	90-110	13	20	mg/kg	05.01.2020 00:20	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124709 — Matrix: Soil — Date Prep: 04.30.2020
Parent Sample Id: 660206-001 — MS Sample Id: 660206-001 S — MSD Sample Id: 660206-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	99.8	249	387	115	393	118	90-110	2	20	mg/kg	05.01.2020 00:36	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124709 — Matrix: Soil — Date Prep: 04.30.2020
Parent Sample Id: 660316-001 — MS Sample Id: 660316-001 S — MSD Sample Id: 660316-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	58.9	252	329	107	343	113	90-110	4	20	mg/kg	05.01.2020 01:50	X

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124735 — Matrix: Solid — Date Prep: 04.30.2020
MB Sample Id: 7702454-1-BLK — LCS Sample Id: 7702454-1-BKS — LCSD Sample Id: 7702454-1-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)	<50.0	1000	894	89	901	90	70-130	1	20	mg/kg	05.01.2020 04:20	
Diesel Range Organics (DRO)	<50.0	1000	944	94	963	96	70-130	2	20	mg/kg	05.01.2020 04:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	77		94		90		70-130	%	05.01.2020 04:20
o-Terphenyl	80		83		83		70-130	%	05.01.2020 04:20

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124735 — Matrix: Solid — Date Prep: 04.30.2020
MB Sample Id: 7702454-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	05.01.2020 04:01	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 660316

TRC Solutions, Inc

COG-Plains Gathering System

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3124735 Matrix: Soil Date Prep: 04.30.2020
Parent Sample Id: 660316-001 MS Sample Id: 660316-001 S MSD Sample Id: 660316-001 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)	<49.9	998	929	93	946	95	70-130	2	20	mg/kg	05.01.2020 05:18	
Diesel Range Organics (DRO)	<49.9	998	986	99	1010	101	70-130	2	20	mg/kg	05.01.2020 05:18	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		97		70-130	%	05.01.2020 05:18
o-Terphenyl	93		92		70-130	%	05.01.2020 05:18

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3124691 Matrix: Solid Date Prep: 04.30.2020
MB Sample Id: 7702432-1-BLK LCS Sample Id: 7702432-1-BKS LCSD Sample Id: 7702432-1-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	0.0905	91	0.0982	98	70-130	8	35	mg/kg	04.30.2020 09:12	
Toluene	<0.00200	0.100	0.0858	86	0.0950	95	70-130	10	35	mg/kg	04.30.2020 09:12	
Ethylbenzene	<0.00200	0.100	0.0857	86	0.0965	97	70-130	12	35	mg/kg	04.30.2020 09:12	
m,p-Xylenes	<0.00400	0.200	0.163	82	0.186	93	70-130	13	35	mg/kg	04.30.2020 09:12	
o-Xylene	<0.00200	0.100	0.0835	84	0.0947	95	70-130	13	35	mg/kg	04.30.2020 09:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		101		101		70-130	%	04.30.2020 09:12
4-Bromofluorobenzene	92		93		100		70-130	%	04.30.2020 09:12

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3124691 Matrix: Soil Date Prep: 04.30.2020
Parent Sample Id: 659619-034 MS Sample Id: 659619-034 S MSD Sample Id: 659619-034 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0990	0.0936	95	0.107	108	70-130	13	35	mg/kg	04.30.2020 09:53	
Toluene	<0.00198	0.0990	0.0849	86	0.101	102	70-130	17	35	mg/kg	04.30.2020 09:53	
Ethylbenzene	<0.00198	0.0990	0.0820	83	0.0995	100	70-130	19	35	mg/kg	04.30.2020 09:53	
m,p-Xylenes	<0.00396	0.198	0.156	79	0.192	96	70-130	21	35	mg/kg	04.30.2020 09:53	
o-Xylene	<0.00198	0.0990	0.0816	82	0.0976	98	70-130	18	35	mg/kg	04.30.2020 09:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		102		70-130	%	04.30.2020 09:53
4-Bromofluorobenzene	100		106		70-130	%	04.30.2020 09:53

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

XENCO LABORATORIES

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 660310

Page 1 of 1

Project Manager:	Russell Sebring	Bill to: (if different)	Ike Tavarez
Company Name:	TRC-Midland	Company Name:	COG-Midland
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	432.750.4465	Email:	RSebring@TRCcompanies.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project:

Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	COG-Plains Gathering System	Turn Around	
Project Number:		Routine ☐	
Project Location	Jal NM	Rush: 24 hr	
Sampler's Name:	Russell Sebring	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT

Temperature (°C):	0.6/0.3	Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Received Intact:	(Yes) No	Thermometer ID:	29		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.3		
Sample Custody Seals:	Yes No (N/A)	Total Containers:			

ANALYSIS REQUEST

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chloride	BTEX	TPH
	FL-8 @ 3.5'	S	30 Apr 2020	1130	3.5'	1	✓	✓	✓
	FL-9 @ 3.5'	↓	↓	1100	3.5'	1	✓	✓	✓
	FL-10 @ 3.5'			1030	3.5'	1	✓	✓	✓
	FL-11 @ 7.5'			1000	7.5'	1	✓	✓	✓
	FL-12 @ 7.5'			930	7.5'	1	✓	✓	✓
	SWE-4			1200	—	1	✓	✓	✓
	SWE-5			1215	—	1	✓	✓	✓
	SWS-2			1230	—	1	✓	✓	✓
	SWW-2			1245	—	1	✓	✓	✓
	SWW-3			1300	—	1	✓	✓	✓

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	[signature]	[signature]	4/30/20 1549	2			
3				4			
5				6			

Revised Date 022619 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 04.30.2020 03.49.00 PM

Work Order #: 660316

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.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**	BTEX was in bulk container
#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)?	**N/A**	
#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: Brianna Teel Date: 04.30.2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 05.01.2020
Jessica Kramer