



June 15, 2018

Mike Bratcher
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 2
811 S. First Street
Artesia, NM 88210

Henryetta Price
Carlsbad Field Office
United States Department of the Interior
Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220

**Re: Remediation Summary and Closure Report
Skelly Unit #986
API No. 30-15-36446
GPS: 32.8227997, -103.8610764
UL "F", Sec. 22, T17S, R31E
Eddy Co, NM
NMOCD Ref. No. 2RP-4588**

TRC Environmental Corporation (TRC), on behalf of COG Operating, LLC (COG), has prepared this *Remediation Summary and Closure Report* for the release site known as the Skelly Unit #986. Details of the release are summarized below:

RELEASE DETAILS			
Type of Release: Crude Oil and Produced Water	Volume of Release: 3 bbls Produced Water, 6 bbls Crude Oil		
	Volume Recovered: 2.5 bbls Produced Water, 5.5 Crude Oil		
Source of Release: Flowline	Date of Release: 01/19/18	Date of Discovery: 01/19/18	
Was Immediate Notice Given? Not Required	If YES, to Whom? If yes, to Whom?		
Was a Watercourse Reached? No	Volume Impacted the Watercourse: Not Applicable		
Cause of Problem and Remedial Action Taken:			
This release was caused by a corroded seal on the Balon® valve.			

A Site Location Map is provided as Attachment #1. A copy of the initial Release Notification and Corrective Action (NMOCD Form C-141) is provided as Attachment #6.

REGULATORY FRAMEWORK

Crude oil facilities in New Mexico are generally regulated by the New Mexico Oil Conservation Division (NMOCD). Impact of soil due to a surface release is addressed in the NMOCD guidance document titled *Guidelines for Remediation of Leaks, Spills and Releases*, dated August 13, 1993.

The guidance document provides direction for initial response actions, site assessment, sampling procedures, and provides a total ranking score based on the depth to groundwater, distance to private and domestic water sources, and the distance to the nearest surface water body as follows:

RANKING SCORE CRITERIA		
General Site Characteristics		Score
Depth to Groundwater	< 50 Feet	20
	50-99 Feet	10
	> 100 Feet	0
Well Head Protection Area, <1,000 Feet from water source, or <200 Feet from private domestic water source	Yes	20
	No	0
Distance to Surface Water Body	< 200 Feet	20
	200 - 1,000 Feet	10
	> 1,000 Feet	0

A search of a groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) was conducted to determine the average depth to groundwater within the Section and identify any registered water wells within 1,000 ft. of the release site. If none were identified, the approximate depth to groundwater was extrapolated from a Depth to Groundwater Map utilized by the NMOCD. The results of the groundwater database search are provided as Attachment #3.

TOTAL RANKING SCORE FOR SITE		
Ranking Score Criteria		Score
Depth to Groundwater	325 Feet	0
Well Head Protection Area, <1,000 Feet from water source, or <200 Feet from private domestic water source	No	0
Distance to Surface Water Body	> 1,000 Feet	0
TOTAL RANKING SCORE FOR SITE		0

The NMOCD guidelines indicated the Site has an initial ranking score of 0 points. The NMOCD Recommended Remediation Action Levels (RRAL) for a Site with a ranking score of 0 points are as follows:

RECOMMENDED REMEDIATION ACTION LEVELS	
Benzene	10 mg/kg
Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX)	50 mg/kg
Total Petroleum Hydrocarbons (TPH)	5,000 mg/kg
Chloride	600 mg/kg

INITIAL INVESTIGATION

On March 7, 2018, TRC conducted an initial investigation at the Site. During the initial investigation, a series of hand-augered soil bores (SP-1 and SP-2) were advanced within the release margins in an effort to determine the vertical extent of soil impact. During the advancement of the soil bores, ten (10) soil samples were collected. In addition, four (4) soil samples were collected from the edges of the inferred release margins in an effort to determine the horizontal extent of soil impact. The collected soil samples were submitted to an NMOCD-approved laboratory for analysis of benzene, BTEX, TPH and chloride concentrations. A table summarizing laboratory analytical results from soil samples collected during the initial investigation is provided below:

Sample ID	Depth	Soil Status	SW 846-8021b		SW-846 8015M				E300
			Benzene	Total BTEX	TPH GRO C ₆ -C ₁₀	TPH DRO C ₁₀ -C ₂₈	TPH ORO C ₂₈ -C ₃₅	TOTAL TPH C ₆ -C ₃₅	CHLORIDE
SP-1 @ Surf.	Surf.	Excavated	<0.0189	<0.0189	<3.79	204	42.3	246.3	3,070
SP-1 @ 6"	6"	Excavated	<0.0177	<0.0177	6.64	342	58.3	406.94	2,060
SP-1 @ 1'	1'	Excavated	<0.0193	<0.0193	<3.85	160	39.0	199	1,320
SP-1 @ 2'	2'	Excavated	<0.0196	<0.0196	<3.93	156	43.7	199.7	1,320
SP-1 @ 3'	3'	Excavated	<0.0185	0.1296	12.2	731	102	845.2	1,180
SP-1 @ 4'	4'	In-Situ	<0.0186	<0.0186	<3.71	254	29.9	283.9	545
SP-2 @ Surf.	Surf.	Excavated	<0.965	19.98	658	19,000	3,150	22,808	3,360
SP-2 @ 1'	1'	In-Situ	<0.0185	<0.0185	<3.70	82.1	20.1	102.2	34.0
SP-2 @ 2'	2'	In-Situ	<0.0188	<0.0188	<3.76	84.1	17.2	101.3	52.4
SP-2 @ 3'	3'	In-Situ	<0.0189	<0.0189	<3.77	99.3	19.0	118.3	125
N @ 6"	6"	Excavated	<0.0183	<0.0183	<3.66	60.6	22.4	83.0	1,610
E @ 6"	6"	In-Situ	<0.0174	<0.0174	<3.47	152	37.3	189.3	48.4
S @ 6"	6"	In-Situ	<0.0189	0.0208	<3.77	18.8	<14.9	18.8	35.2
W @ 6"	6"	In-Situ	<0.0190	<0.0190	<3.80	46.7	21.2	67.9	58.1
NMOCD RRAL			10	50	-	-	-	5,000	600

Laboratory analytical reports are provided as Attachment #4. A "Site & Confirmation Sample Location Map" is provided as Attachment #2.

SUMMARY OF SOIL REMEDIATION ACTIVITIES

Utilizing a backhoe, impacted soil within the release margins was excavated to a depth of approximately four (4) feet below ground surface (bgs) in the area represented by sample point SP-1 and to a depth of approximately one (1) foot bgs in the area represented by sample point SP-2. The floor and sidewalls of the excavated areas were advanced until field observations and/or field tests suggested impacted soil affected above the NMOCD RRAL had been removed. Excavated soil was temporarily stockpiled on-site, atop an impermeable liner, pending final disposition. Upon completing excavation activities, nine (9) excavation confirmation soil samples were collected from the floor and sidewalls of the excavated areas. The collected soil samples were submitted to the laboratory for analysis of benzene, BTEX, TPH and chloride. Stockpiled soil was transported to an NMOCD-approved disposal facility. A table summarizing laboratory analytical results from confirmation soil samples is provided below:

Sample ID	Depth	Soil Status	SW 846-8021b		SW-846 8015M				E300
			Benzene	Total BTEX	TPH GRO C ₆ -C ₁₀	TPH DRO C ₁₀ -C ₂₈	TPH ORO C ₂₈ -C ₃₅	TOTAL TPH C ₆ -C ₃₅	CHLORIDE
SP-2 NSW	6"	In-Situ	<0.00202	<0.00202	<25.0	<25.0	<25.0	<25.0	86.1
SP-2 WSW	6"	In-Situ	<0.00199	<0.00199	<25.0	<25.0	<25.0	<25.0	<5.00
SP-2 SSW	6"	In-Situ	<0.00199	<0.00199	<24.9	<24.9	<24.9	<24.9	16.0
SP-2 FL @1'	1'	In-Situ	<0.00200	<0.00200	<24.9	<24.9	<24.9	<24.9	43.7
SP-1 NSW	2'	In-Situ	<0.00200	<0.00200	<25.0	<25.0	<25.0	<25.0	101
SP-1 WSW	2'	In-Situ	<0.00200	<0.00200	<25.0	<25.0	<25.0	<25.0	12.3
SP-1 SSW	2'	In-Situ	<0.00199	<0.00199	<25.0	<25.0	<25.0	<25.0	20.7
SP-1 ESW	2'	In-Situ	<0.00200	<0.00200	<25.0	<25.0	<25.0	<25.0	20.6
SP-1 FL @4'	4'	In-Situ	<0.00202	<0.00202	<24.9	<24.9	<24.9	<24.9	222
NMOCD RRAL			10	50	-	-	-	5,000	600

Upon receiving laboratory analytical results from confirmation soil samples, the excavated area was backfilled with locally sourced, non-impacted "like" material. A Photographic Log is provided as Attachment #5.

EXCAVATION/REMEDATION DETAIL SUMMARY			
Type of Remediation:	Dig and Haul		
Date Remediation Activities Began:	April 24, 2018		
Excavation Dimensions:	Length: 50'	Width: 10-25'	Depth: 1-4'
Soil Transportation Start Date:	April 27, 2018	Backfill Date:	May 28, 2018
Total Yards Transported to Disposal:	300 YDS	Disposal Facility:	R360 Halfway Facility

LIMITATIONS

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

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

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

SITE CLOSURE REQUEST

Impacted material affected above the NMOCD RRAL was excavated and transported to an NMOCD-approved disposal facility. Laboratory analytical results from excavation confirmation soil samples indicated concentrations of BTEX, TPH and chloride were below the NMOCD RRAL. Upon receiving laboratory analytical results from confirmation soil samples, the excavated area was backfilled with locally sourced, non-impacted "like" material. TRC on behalf of COG Operating, LLC respectfully requests the NMOCD and BLM grant closure approval for the Skelly Unit #986 release which occurred on January 19, 2018.

If you have any questions, or if additional is required, please feel free to contact Becky Haskell or either of the undersigned by phone or email.

Respectfully,

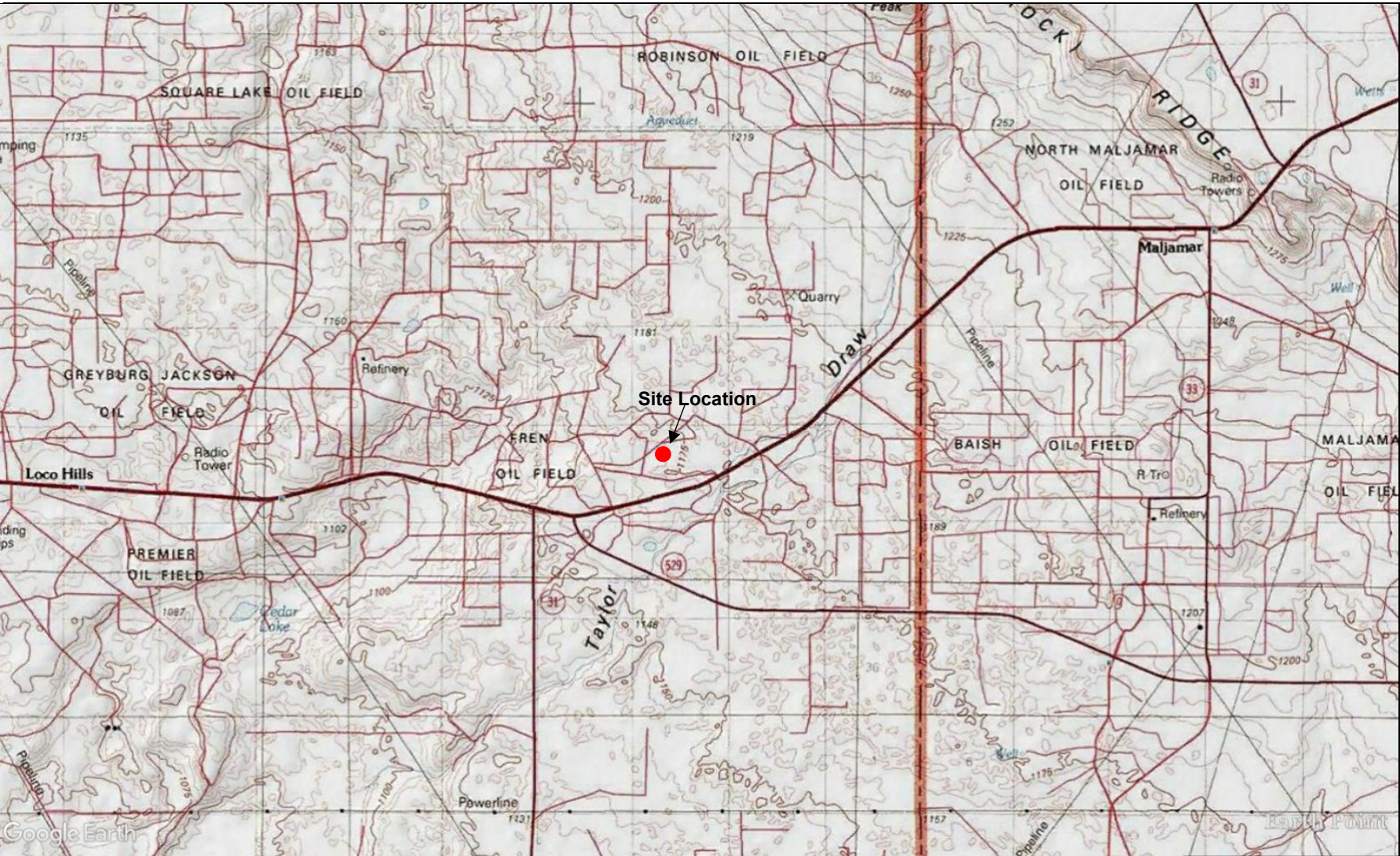


Joel Lowry
Senior Project Manager
TRC Environmental Corp.

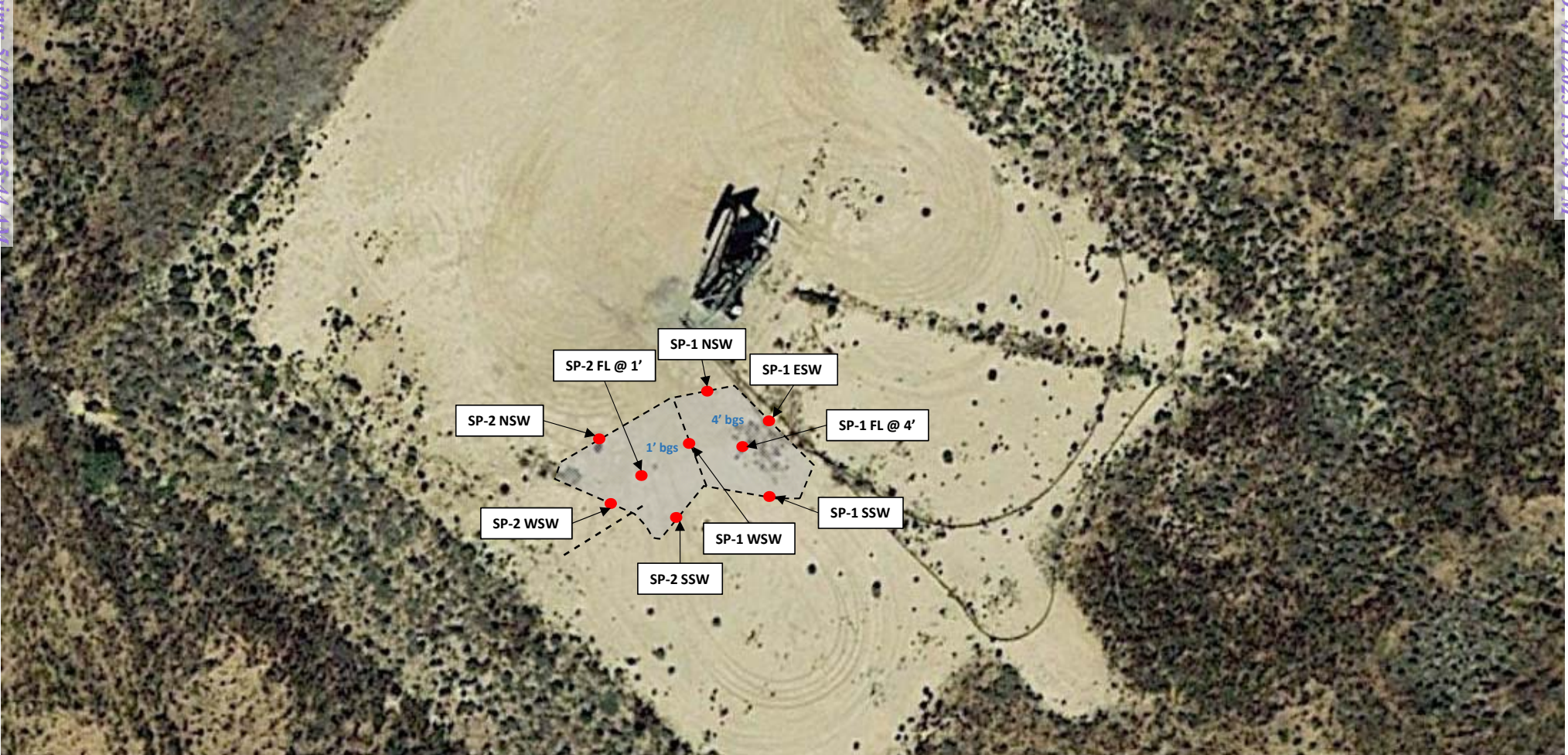


Curt Stanley
Senior Project Manager
TRC Environmental Corp.

Attachments:	Attachment #1-	Figure 1 - Site Location Map
	Attachment #2-	Figure 2 - Site & Confirmation Sample Location Map
	Attachment #3-	Groundwater Database Search
	Attachment #4-	Laboratory Analytical Reports
	Attachment #5-	Photographic Log
	Attachment #6-	Release Notification and Corrective Action (FORM C-141)



LEGEND: Site Location	Figure 1 Site Location Map COG Operating, LLC Skelly Unit #986 Eddy Co, NM	Scale 1" = 9,000'		TRC Results you can rely on
		Drafted by: BC Checked by: JL		
		Draft: MAY 29, 2018		
		GPS: 32.8227997, -103.8610764		
		UL "F", Sec. 22, T17S, R31E		
		TRC Proj. No: 299890		



LEGEND: ● Confirmation Sample Location ➡➡➡ Remediated Area	Figure 2 Site & Confirmation Sample Location Map COG Operating, LLC Skelly Unit #986 Eddy County, New Mexico	Scale 1" = ~50'		 2057 Commerce Drive Midland, Texas 79703 432.520.7720
		Drafted by: ZC	Checked by: JL	
		Draft: June 5, 2018		
		Lat. N 32.8227997 Long. W 103.8610764		
		UL "F", Sec. 22, T17S, R31E		
		TRC Proj. No.: 299890		



(quarters are smallest to largest) (NAD83 UTM in meters)

PLSS Search:

Range: 31E

5/29/18 8:57 AM

<http://nmwrr.ose.state.nm.us/nmwrr/ReportProxy?queryData=%7B%22report%22%3A%22waterColumn%22%2C%0A%22BasinDiv%22%3A%22true%22%2C%0A>



Certificate of Analysis Summary 578790

TRC Solutions, Inc, Midland, TX

Project Name: Skelly Unit 986

Project Id:

Contact: Joel Lowry

Project Location: Eddy Co. NM

Date Received in Lab: Thu Mar-08-18 05:45 pm

Report Date: 12-MAR-18

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	578790-001	578790-002	578790-003	578790-004	578790-005	578790-006
	Field Id:	SP-1 @ Surface	SP-1 @ 6"	SP-1 @ 1'	SP-1 @ 2'	SP-1 @ 3'	SP-1 @ 4'
	Depth:	Surf- ft	6- ft	1- ft	2- ft	3- ft	4- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Mar-07-18 10:45	Mar-07-18 10:50	Mar-07-18 10:57	Mar-07-18 10:59	Mar-07-18 11:07	Mar-07-18 11:09
BTEX by EPA 8021B	Extracted:	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00
	Analyzed:	Mar-10-18 13:41	Mar-10-18 23:36	Mar-11-18 00:03	Mar-11-18 00:30	Mar-11-18 00:57	Mar-10-18 06:27
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.0189 0.0189	<0.0177 0.0177	<0.0193 0.0193	<0.0196 0.0196	<0.0185 0.0185	<0.0186 0.0186
Toluene		<0.0189 0.0189	<0.0177 0.0177	<0.0193 0.0193	<0.0196 0.0196	<0.0185 0.0185	<0.0186 0.0186
Ethylbenzene		<0.0189 0.0189	<0.0177 0.0177	<0.0193 0.0193	<0.0196 0.0196	0.0426 0.0185	<0.0186 0.0186
m,p-Xylenes		<0.0379 0.0379	<0.0355 0.0355	<0.0385 0.0385	<0.0393 0.0393	0.0870 0.0370	<0.0371 0.0371
o-Xylene		<0.0189 0.0189	<0.0177 0.0177	<0.0193 0.0193	<0.0196 0.0196	<0.0185 0.0185	<0.0186 0.0186
Xylenes, Total		<0.0189 0.0189	<0.0177 0.0177	<0.0193 0.0193	<0.0196 0.0196	0.087 0.0185	<0.0186 0.0186
Total BTEX		<0.0189 0.0189	<0.0177 0.0177	<0.0193 0.0193	<0.0196 0.0196	0.1296 0.0185	<0.0186 0.0186
Chloride by EPA 300	Extracted:	Mar-10-18 09:30	Mar-10-18 09:30	Mar-10-18 09:30	Mar-10-18 09:30	Mar-10-18 09:30	Mar-10-18 09:30
	Analyzed:	Mar-10-18 14:30	Mar-10-18 15:48	Mar-10-18 17:52	Mar-10-18 18:29	Mar-10-18 19:19	Mar-10-18 19:44
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		3070 250	2060 D 125	1320 D 125	1320 D 125	1180 D 125	545 D 125
DRO-ORO By SW8015B SUB: TX104704215-18-24	Extracted:	Mar-10-18 12:00	Mar-10-18 12:03	Mar-10-18 12:06	Mar-10-18 12:09	Mar-10-18 12:12	Mar-11-18 14:12
	Analyzed:	Mar-10-18 22:31	Mar-10-18 22:52	Mar-10-18 23:13	Mar-10-18 22:10	Mar-10-18 23:35	Mar-11-18 18:14
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Diesel Range Organics (DRO)		204 14.9	342 14.9	160 14.9	156 15.0	731 14.9	254 14.9
Oil Range Hydrocarbons (ORO)		42.3 14.9	58.3 14.9	39.0 14.9	43.7 15.0	102 14.9	29.9 14.9
TPH GRO by EPA 8015 Mod.	Extracted:	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00
	Analyzed:	Mar-10-18 13:41	Mar-10-18 23:36	Mar-11-18 00:03	Mar-11-18 00:30	Mar-11-18 00:57	Mar-10-18 06:27
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
TPH-GRO		<3.79 3.79	6.64 3.55	<3.85 3.85	<3.93 3.93	12.2 3.70	<3.71 3.71

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

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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 578790

TRC Solutions, Inc, Midland, TX

Project Name: Skelly Unit 986

Project Id:

Contact: Joel Lowry

Project Location: Eddy Co. NM

Date Received in Lab: Thu Mar-08-18 05:45 pm

Report Date: 12-MAR-18

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	578790-007	578790-008	578790-009	578790-010	578790-011	578790-012
	<i>Field Id:</i>	SP-2 @ Surf	SP-2 @ 1'	SP-2 @ 2'	SP-2 @ 3'	N @ 6"	E @ 6"
	<i>Depth:</i>	1- ft	1- ft	2- ft	3- ft	6- ft	6- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-07-18 11:35	Mar-07-18 11:39	Mar-07-18 11:44	Mar-07-18 11:49	Mar-07-18 12:00	Mar-07-18 12:05
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00
	<i>Analyzed:</i>	Mar-11-18 03:46	Mar-10-18 10:59	Mar-10-18 11:26	Mar-10-18 12:20	Mar-10-18 09:11	Mar-10-18 09:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.965 0.965	<0.0185 0.0185	<0.0188 0.0188	<0.0189 0.0189	<0.0183 0.0183	<0.0174 0.0174
Toluene		1.06 0.965	<0.0185 0.0185	<0.0188 0.0188	<0.0189 0.0189	<0.0183 0.0183	<0.0174 0.0174
Ethylbenzene		6.85 0.965	<0.0185 0.0185	<0.0188 0.0188	<0.0189 0.0189	<0.0183 0.0183	<0.0174 0.0174
m,p-Xylenes		7.82 1.93	<0.0370 0.0370	<0.0376 0.0376	<0.0377 0.0377	<0.0366 0.0366	<0.0347 0.0347
o-Xylene		4.25 0.965	<0.0185 0.0185	<0.0188 0.0188	<0.0189 0.0189	<0.0183 0.0183	<0.0174 0.0174
Xylenes, Total		12.07 0.965	<0.0185 0.0185	<0.0188 0.0188	<0.0189 0.0189	<0.0183 0.0183	<0.0174 0.0174
Total BTEX		19.98 0.965	<0.0185 0.0185	<0.0188 0.0188	<0.0189 0.0189	<0.0183 0.0183	<0.0174 0.0174
Chloride by EPA 300	<i>Extracted:</i>	Mar-10-18 09:30	Mar-10-18 09:30	Mar-10-18 09:30	Mar-10-18 09:30	Mar-10-18 09:30	Mar-10-18 09:30
	<i>Analyzed:</i>	Mar-10-18 20:09	Mar-10-18 20:33	Mar-10-18 20:46	Mar-10-18 21:48	Mar-10-18 22:40	Mar-10-18 23:10
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		3360 D 250	34.0 25.0	52.4 25.0	125 25.0	1610 D 125	48.4 25.0
DRO-ORO By SW8015B SUB: TX104704215-18-24	<i>Extracted:</i>	Mar-11-18 14:15	Mar-11-18 14:18	Mar-11-18 14:21	Mar-11-18 14:24	Mar-11-18 14:27	Mar-11-18 14:30
	<i>Analyzed:</i>	Mar-12-18 13:05	Mar-11-18 18:35	Mar-11-18 19:39	Mar-11-18 20:00	Mar-11-18 20:21	Mar-11-18 20:42
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Diesel Range Organics (DRO)		19000 150	82.1 14.9	84.1 14.9	99.3 14.9	60.6 15.0	152 15.0
Oil Range Hydrocarbons (ORO)		3150 150	20.1 14.9	17.2 14.9	19.0 14.9	22.4 15.0	37.3 15.0
TPH GRO by EPA 8015 Mod.	<i>Extracted:</i>	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00	Mar-09-18 14:00
	<i>Analyzed:</i>	Mar-11-18 03:46	Mar-10-18 10:59	Mar-10-18 11:26	Mar-10-18 12:20	Mar-10-18 09:11	Mar-10-18 09:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
TPH-GRO		658 193	<3.70 3.70	<3.76 3.76	<3.77 3.77	<3.66 3.66	<3.47 3.47

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

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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 578790

TRC Solutions, Inc, Midland, TX

Project Name: Skelly Unit 986

Project Id:

Contact: Joel Lowry

Project Location: Eddy Co. NM

Date Received in Lab: Thu Mar-08-18 05:45 pm

Report Date: 12-MAR-18

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	578790-013	578790-014				
	Field Id:	S @ 6"	W @ 6"				
	Depth:	6- ft	6- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	Mar-07-18 12:10	Mar-07-18 12:15				
BTEX by EPA 8021B	Extracted:	Mar-09-18 14:00	Mar-09-18 14:00				
	Analyzed:	Mar-10-18 10:04	Mar-10-18 10:32				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		<0.0189 0.0189	<0.0190 0.0190				
Toluene		<0.0189 0.0189	<0.0190 0.0190				
Ethylbenzene		0.0208 0.0189	<0.0190 0.0190				
m,p-Xylenes		<0.0377 0.0377	<0.0380 0.0380				
o-Xylene		<0.0189 0.0189	<0.0190 0.0190				
Xylenes, Total		<0.0189 0.0189	<0.019 0.019				
Total BTEX		0.0208 0.0189	<0.019 0.019				
Chloride by EPA 300	Extracted:	Mar-10-18 09:30	Mar-10-18 09:30				
	Analyzed:	Mar-10-18 23:25	Mar-10-18 23:38				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		35.2 25.0	58.1 25.0				
DRO-ORO By SW8015B	Extracted:	Mar-11-18 14:33	Mar-11-18 14:36				
SUB: TX104704215-18-24	Analyzed:	Mar-11-18 21:04	Mar-11-18 21:25				
	Units/RL:	mg/kg RL	mg/kg RL				
Diesel Range Organics (DRO)		18.8 14.9	46.7 15.0				
Oil Range Hydrocarbons (ORO)		<14.9 14.9	21.2 15.0				
TPH GRO by EPA 8015 Mod.	Extracted:	Mar-09-18 14:00	Mar-09-18 14:00				
	Analyzed:	Mar-10-18 10:04	Mar-10-18 10:32				
	Units/RL:	mg/kg RL	mg/kg RL				
TPH-GRO		<3.77 3.77	<3.80 3.80				

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

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

Kelsey Brooks
Project Manager

Analytical Report 578790

for
TRC Solutions, Inc

Project Manager: Joel Lowry

Skelly Unit 986

12-MAR-18

Collected By: Client



6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-18-24), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):

Texas (T104704295-17-16), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)

Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-18-14)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

Xenco-Atlanta (LELAP Lab ID #04176)



12-MAR-18

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

Reference: XENCO Report No(s): **578790**
Skelly Unit 986
Project Address: Eddy Co. NM

Joel Lowry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 578790. 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. 578790 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Kelsey Brooks

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 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP-1 @ Surface	S	03-07-18 10:45	Surf ft	578790-001
SP-1 @ 6"	S	03-07-18 10:50	6 ft	578790-002
SP-1 @ 1'	S	03-07-18 10:57	1 ft	578790-003
SP-1 @ 2'	S	03-07-18 10:59	2 ft	578790-004
SP-1 @ 3'	S	03-07-18 11:07	3 ft	578790-005
SP-1 @ 4'	S	03-07-18 11:09	4 ft	578790-006
SP-2 @ Surf	S	03-07-18 11:35	1 ft	578790-007
SP-2 @ 1'	S	03-07-18 11:39	1 ft	578790-008
SP-2 @ 2'	S	03-07-18 11:44	2 ft	578790-009
SP-2 @ 3'	S	03-07-18 11:49	3 ft	578790-010
N @ 6"	S	03-07-18 12:00	6 ft	578790-011
E @ 6"	S	03-07-18 12:05	6 ft	578790-012
S @ 6"	S	03-07-18 12:10	6 ft	578790-013
W @ 6"	S	03-07-18 12:15	6 ft	578790-014



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Skelly Unit 986

Project ID:
Work Order Number(s): 578790

Report Date: 12-MAR-18
Date Received: 03/08/2018

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3043314 BTEX by EPA 8021B

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

Batch: LBA-3043344 BTEX by EPA 8021B

Sample 578790-007 was diluted due to turbidity.

Batch: LBA-3043346 Chloride by EPA 300

Lab Sample ID 578790-004 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 578790-002, -003, -004, -005, -006, -007, -008, -009.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: **SP-1 @ Surface**

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-001

Date Collected: 03.07.18 10.45

Sample Depth: Surf ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 03.10.18 09.30

Basis: Wet Weight

Seq Number: 3043343

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3070	250	mg/kg	03.10.18 14.30		10

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: ISU

% Moisture:

Analyst: ISU

Date Prep: 03.10.18 12.00

Basis: Wet Weight

Seq Number: 3043382

SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	204	14.9	mg/kg	03.10.18 22.31		1
Oil Range Hydrocarbons (ORO)	PHCG2835	42.3	14.9	mg/kg	03.10.18 22.31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	03.10.18 22.31	
o-Terphenyl	84-15-1	115	%	70-135	03.10.18 22.31	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043314

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0189	0.0189	mg/kg	03.10.18 13.41	U	1
Toluene	108-88-3	<0.0189	0.0189	mg/kg	03.10.18 13.41	U	1
Ethylbenzene	100-41-4	<0.0189	0.0189	mg/kg	03.10.18 13.41	U	1
m,p-Xylenes	179601-23-1	<0.0379	0.0379	mg/kg	03.10.18 13.41	U	1
o-Xylene	95-47-6	<0.0189	0.0189	mg/kg	03.10.18 13.41	U	1
Xylenes, Total	1330-20-7	<0.0189	0.0189	mg/kg	03.10.18 13.41	U	1
Total BTEX		<0.0189	0.0189	mg/kg	03.10.18 13.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	68-120	03.10.18 13.41	
a,a,a-Trifluorotoluene	98-08-8	93	%	71-121	03.10.18 13.41	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: **SP-1 @ Surface**

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-001

Date Collected: 03.07.18 10.45

Sample Depth: Surf ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043319

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.79	3.79	mg/kg	03.10.18 13.41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	76-123	03.10.18 13.41		
a,a,a-Trifluorotoluene	98-08-8	96	%	69-120	03.10.18 13.41		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: **SP-1 @ 6"**

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-002

Date Collected: 03.07.18 10.50

Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 03.10.18 09.30

Basis: Wet Weight

Seq Number: 3043346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2060	125	mg/kg	03.10.18 16.00	D	5

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: ISU

% Moisture:

Analyst: ISU

Date Prep: 03.10.18 12.03

Basis: Wet Weight

Seq Number: 3043382

SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	342	14.9	mg/kg	03.10.18 22.52		1
Oil Range Hydrocarbons (ORO)	PHCG2835	58.3	14.9	mg/kg	03.10.18 22.52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	03.10.18 22.52	
o-Terphenyl	84-15-1	97	%	70-135	03.10.18 22.52	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043344

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0177	0.0177	mg/kg	03.10.18 23.36	U	1
Toluene	108-88-3	<0.0177	0.0177	mg/kg	03.10.18 23.36	U	1
Ethylbenzene	100-41-4	<0.0177	0.0177	mg/kg	03.10.18 23.36	U	1
m,p-Xylenes	179601-23-1	<0.0355	0.0355	mg/kg	03.10.18 23.36	U	1
o-Xylene	95-47-6	<0.0177	0.0177	mg/kg	03.10.18 23.36	U	1
Xylenes, Total	1330-20-7	<0.0177	0.0177	mg/kg	03.10.18 23.36	U	1
Total BTEX		<0.0177	0.0177	mg/kg	03.10.18 23.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	68-120	03.10.18 23.36	
a,a,a-Trifluorotoluene	98-08-8	92	%	71-121	03.10.18 23.36	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: **SP-1 @ 6"**

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-002

Date Collected: 03.07.18 10.50

Sample Depth: 6 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043345

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	6.64	3.55	mg/kg	03.10.18 23.36		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	76-123	03.10.18 23.36		
a,a,a-Trifluorotoluene	98-08-8	94	%	69-120	03.10.18 23.36		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

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

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-003

Date Collected: 03.07.18 10.57

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 03.10.18 09.30

Basis: Wet Weight

Seq Number: 3043346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1320	125	mg/kg	03.10.18 18.04	D	5

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: ISU

% Moisture:

Analyst: ISU

Date Prep: 03.10.18 12.06

Basis: Wet Weight

Seq Number: 3043382

SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	160	14.9	mg/kg	03.10.18 23.13		1
Oil Range Hydrocarbons (ORO)	PHCG2835	39.0	14.9	mg/kg	03.10.18 23.13		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	03.10.18 23.13	
o-Terphenyl	84-15-1	100	%	70-135	03.10.18 23.13	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043344

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0193	0.0193	mg/kg	03.11.18 00.03	U	1
Toluene	108-88-3	<0.0193	0.0193	mg/kg	03.11.18 00.03	U	1
Ethylbenzene	100-41-4	<0.0193	0.0193	mg/kg	03.11.18 00.03	U	1
m,p-Xylenes	179601-23-1	<0.0385	0.0385	mg/kg	03.11.18 00.03	U	1
o-Xylene	95-47-6	<0.0193	0.0193	mg/kg	03.11.18 00.03	U	1
Xylenes, Total	1330-20-7	<0.0193	0.0193	mg/kg	03.11.18 00.03	U	1
Total BTEX		<0.0193	0.0193	mg/kg	03.11.18 00.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	68-120	03.11.18 00.03	
a,a,a-Trifluorotoluene	98-08-8	91	%	71-121	03.11.18 00.03	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

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

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-003

Date Collected: 03.07.18 10.57

Sample Depth: 1 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043345

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.85	3.85	mg/kg	03.11.18 00.03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	76-123	03.11.18 00.03		
a,a,a-Trifluorotoluene	98-08-8	96	%	69-120	03.11.18 00.03		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: SP-1 @ 2'

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-004

Date Collected: 03.07.18 10.59

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 03.10.18 09.30

Basis: Wet Weight

Seq Number: 3043346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1320	125	mg/kg	03.10.18 18.42	D	5

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: ISU

% Moisture:

Analyst: ISU

Date Prep: 03.10.18 12.09

Basis: Wet Weight

Seq Number: 3043382

SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	156	15.0	mg/kg	03.10.18 22.10		1
Oil Range Hydrocarbons (ORO)	PHCG2835	43.7	15.0	mg/kg	03.10.18 22.10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	03.10.18 22.10	
o-Terphenyl	84-15-1	101	%	70-135	03.10.18 22.10	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043344

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0196	0.0196	mg/kg	03.11.18 00.30	U	1
Toluene	108-88-3	<0.0196	0.0196	mg/kg	03.11.18 00.30	U	1
Ethylbenzene	100-41-4	<0.0196	0.0196	mg/kg	03.11.18 00.30	U	1
m,p-Xylenes	179601-23-1	<0.0393	0.0393	mg/kg	03.11.18 00.30	U	1
o-Xylene	95-47-6	<0.0196	0.0196	mg/kg	03.11.18 00.30	U	1
Xylenes, Total	1330-20-7	<0.0196	0.0196	mg/kg	03.11.18 00.30	U	1
Total BTEX		<0.0196	0.0196	mg/kg	03.11.18 00.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	68-120	03.11.18 00.30	
a,a,a-Trifluorotoluene	98-08-8	94	%	71-121	03.11.18 00.30	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

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

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-004

Date Collected: 03.07.18 10.59

Sample Depth: 2 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043345

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.93	3.93	mg/kg	03.11.18 00.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	90	%	76-123	03.11.18 00.30		
a,a,a-Trifluorotoluene	98-08-8	92	%	69-120	03.11.18 00.30		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

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

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-005

Date Collected: 03.07.18 11.07

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 03.10.18 09.30

Basis: Wet Weight

Seq Number: 3043346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1180	125	mg/kg	03.10.18 19.31	D	5

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: ISU

% Moisture:

Analyst: ISU

Date Prep: 03.10.18 12.12

Basis: Wet Weight

Seq Number: 3043382

SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	731	14.9	mg/kg	03.10.18 23.35		1
Oil Range Hydrocarbons (ORO)	PHCG2835	102	14.9	mg/kg	03.10.18 23.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	03.10.18 23.35	
o-Terphenyl	84-15-1	90	%	70-135	03.10.18 23.35	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043344

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0185	0.0185	mg/kg	03.11.18 00.57	U	1
Toluene	108-88-3	<0.0185	0.0185	mg/kg	03.11.18 00.57	U	1
Ethylbenzene	100-41-4	0.0426	0.0185	mg/kg	03.11.18 00.57		1
m,p-Xylenes	179601-23-1	0.0870	0.0370	mg/kg	03.11.18 00.57		1
o-Xylene	95-47-6	<0.0185	0.0185	mg/kg	03.11.18 00.57	U	1
Xylenes, Total	1330-20-7	0.087	0.0185	mg/kg	03.11.18 00.57		1
Total BTEX		0.1296	0.0185	mg/kg	03.11.18 00.57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	68-120	03.11.18 00.57	
a,a,a-Trifluorotoluene	98-08-8	94	%	71-121	03.11.18 00.57	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

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

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-005

Date Collected: 03.07.18 11.07

Sample Depth: 3 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043345

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	12.2	3.70	mg/kg	03.11.18 00.57		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	76-123	03.11.18 00.57		
a,a,a-Trifluorotoluene	98-08-8	94	%	69-120	03.11.18 00.57		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

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

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-006

Date Collected: 03.07.18 11.09

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 03.10.18 09.30

Basis: Wet Weight

Seq Number: 3043346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	545	125	mg/kg	03.10.18 19.56	D	5

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 03.11.18 14.12

Basis: Wet Weight

Seq Number: 3043400

SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	254	14.9	mg/kg	03.11.18 18.14		1
Oil Range Hydrocarbons (ORO)	PHCG2835	29.9	14.9	mg/kg	03.11.18 18.14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	03.11.18 18.14	
o-Terphenyl	84-15-1	87	%	70-135	03.11.18 18.14	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043314

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0186	0.0186	mg/kg	03.10.18 06.27	U	1
Toluene	108-88-3	<0.0186	0.0186	mg/kg	03.10.18 06.27	U	1
Ethylbenzene	100-41-4	<0.0186	0.0186	mg/kg	03.10.18 06.27	U	1
m,p-Xylenes	179601-23-1	<0.0371	0.0371	mg/kg	03.10.18 06.27	U	1
o-Xylene	95-47-6	<0.0186	0.0186	mg/kg	03.10.18 06.27	U	1
Xylenes, Total	1330-20-7	<0.0186	0.0186	mg/kg	03.10.18 06.27	U	1
Total BTEX		<0.0186	0.0186	mg/kg	03.10.18 06.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	68-120	03.10.18 06.27	
a,a,a-Trifluorotoluene	98-08-8	95	%	71-121	03.10.18 06.27	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

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

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-006

Date Collected: 03.07.18 11.09

Sample Depth: 4 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043319

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.71	3.71	mg/kg	03.10.18 06.27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	76-123	03.10.18 06.27		
a,a,a-Trifluorotoluene	98-08-8	96	%	69-120	03.10.18 06.27		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: SP-2 @ Surf

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-007

Date Collected: 03.07.18 11.35

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 03.10.18 09.30

Basis: Wet Weight

Seq Number: 3043346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3360	250	mg/kg	03.10.18 20.21	D	10

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 03.11.18 14.15

Basis: Wet Weight

Seq Number: 3043400

SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	19000	150	mg/kg	03.12.18 13.05		10
Oil Range Hydrocarbons (ORO)	PHCG2835	3150	150	mg/kg	03.12.18 13.05		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	03.12.18 13.05	
o-Terphenyl	84-15-1	73	%	70-135	03.12.18 13.05	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043344

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.965	0.965	mg/kg	03.11.18 03.46	U	50
Toluene	108-88-3	1.06	0.965	mg/kg	03.11.18 03.46		50
Ethylbenzene	100-41-4	6.85	0.965	mg/kg	03.11.18 03.46		50
m,p-Xylenes	179601-23-1	7.82	1.93	mg/kg	03.11.18 03.46		50
o-Xylene	95-47-6	4.25	0.965	mg/kg	03.11.18 03.46		50
Xylenes, Total	1330-20-7	12.07	0.965	mg/kg	03.11.18 03.46		50
Total BTEX		19.98	0.965	mg/kg	03.11.18 03.46		50

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	68-120	03.11.18 03.46	
a,a,a-Trifluorotoluene	98-08-8	82	%	71-121	03.11.18 03.46	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: **SP-2 @ Surf**

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-007

Date Collected: 03.07.18 11.35

Sample Depth: 1 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043345

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	658	193	mg/kg	03.11.18 03.46		50
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	76-123	03.11.18 03.46		
a,a,a-Trifluorotoluene	98-08-8	98	%	69-120	03.11.18 03.46		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: **SP-2 @ 1'** Matrix: Soil Date Received: 03.08.18 17.45
 Lab Sample Id: 578790-008 Date Collected: 03.07.18 11.39 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: RNL % Moisture:
 Analyst: RNL Date Prep: 03.10.18 09.30 Basis: Wet Weight
 Seq Number: 3043346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	34.0	25.0	mg/kg	03.10.18 20.33		1

Analytical Method: DRO-ORO By SW8015B Prep Method: SW8015P
 Tech: ARL % Moisture:
 Analyst: ISU Date Prep: 03.11.18 14.18 Basis: Wet Weight
 Seq Number: 3043400 SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	82.1	14.9	mg/kg	03.11.18 18.35		1
Oil Range Hydrocarbons (ORO)	PHCG2835	20.1	14.9	mg/kg	03.11.18 18.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.11.18 18.35	
o-Terphenyl	84-15-1	94	%	70-135	03.11.18 18.35	

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
 Tech: MIT % Moisture:
 Analyst: MIT Date Prep: 03.09.18 14.00 Basis: Wet Weight
 Seq Number: 3043314

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0185	0.0185	mg/kg	03.10.18 10.59	U	1
Toluene	108-88-3	<0.0185	0.0185	mg/kg	03.10.18 10.59	U	1
Ethylbenzene	100-41-4	<0.0185	0.0185	mg/kg	03.10.18 10.59	U	1
m,p-Xylenes	179601-23-1	<0.0370	0.0370	mg/kg	03.10.18 10.59	U	1
o-Xylene	95-47-6	<0.0185	0.0185	mg/kg	03.10.18 10.59	U	1
Xylenes, Total	1330-20-7	<0.0185	0.0185	mg/kg	03.10.18 10.59	U	1
Total BTEX		<0.0185	0.0185	mg/kg	03.10.18 10.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	68-120	03.10.18 10.59	
a,a,a-Trifluorotoluene	98-08-8	95	%	71-121	03.10.18 10.59	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

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

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-008

Date Collected: 03.07.18 11.39

Sample Depth: 1 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043319

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.70	3.70	mg/kg	03.10.18 10.59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	117	%	76-123	03.10.18 10.59		
a,a,a-Trifluorotoluene	98-08-8	99	%	69-120	03.10.18 10.59		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: SP-2 @ 2'

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-009

Date Collected: 03.07.18 11.44

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 03.10.18 09.30

Basis: Wet Weight

Seq Number: 3043346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	52.4	25.0	mg/kg	03.10.18 20.46		1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 03.11.18 14.21

Basis: Wet Weight

Seq Number: 3043400

SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	84.1	14.9	mg/kg	03.11.18 19.39		1
Oil Range Hydrocarbons (ORO)	PHCG2835	17.2	14.9	mg/kg	03.11.18 19.39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	03.11.18 19.39	
o-Terphenyl	84-15-1	99	%	70-135	03.11.18 19.39	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043314

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0188	0.0188	mg/kg	03.10.18 11.26	U	1
Toluene	108-88-3	<0.0188	0.0188	mg/kg	03.10.18 11.26	U	1
Ethylbenzene	100-41-4	<0.0188	0.0188	mg/kg	03.10.18 11.26	U	1
m,p-Xylenes	179601-23-1	<0.0376	0.0376	mg/kg	03.10.18 11.26	U	1
o-Xylene	95-47-6	<0.0188	0.0188	mg/kg	03.10.18 11.26	U	1
Xylenes, Total	1330-20-7	<0.0188	0.0188	mg/kg	03.10.18 11.26	U	1
Total BTEX		<0.0188	0.0188	mg/kg	03.10.18 11.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	68-120	03.10.18 11.26	
a,a,a-Trifluorotoluene	98-08-8	96	%	71-121	03.10.18 11.26	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

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

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-009

Date Collected: 03.07.18 11.44

Sample Depth: 2 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043319

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.76	3.76	mg/kg	03.10.18 11.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	113	%	76-123	03.10.18 11.26		
a,a,a-Trifluorotoluene	98-08-8	97	%	69-120	03.10.18 11.26		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: SP-2 @ 3'

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-010

Date Collected: 03.07.18 11.49

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 03.10.18 09.30

Basis: Wet Weight

Seq Number: 3043347

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	125	25.0	mg/kg	03.10.18 21.48		1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 03.11.18 14.24

Basis: Wet Weight

Seq Number: 3043400

SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	99.3	14.9	mg/kg	03.11.18 20.00		1
Oil Range Hydrocarbons (ORO)	PHCG2835	19.0	14.9	mg/kg	03.11.18 20.00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	03.11.18 20.00	
o-Terphenyl	84-15-1	107	%	70-135	03.11.18 20.00	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043314

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0189	0.0189	mg/kg	03.10.18 12.20	U	1
Toluene	108-88-3	<0.0189	0.0189	mg/kg	03.10.18 12.20	U	1
Ethylbenzene	100-41-4	<0.0189	0.0189	mg/kg	03.10.18 12.20	U	1
m,p-Xylenes	179601-23-1	<0.0377	0.0377	mg/kg	03.10.18 12.20	U	1
o-Xylene	95-47-6	<0.0189	0.0189	mg/kg	03.10.18 12.20	U	1
Xylenes, Total	1330-20-7	<0.0189	0.0189	mg/kg	03.10.18 12.20	U	1
Total BTEX		<0.0189	0.0189	mg/kg	03.10.18 12.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	68-120	03.10.18 12.20	
a,a,a-Trifluorotoluene	98-08-8	90	%	71-121	03.10.18 12.20	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

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

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-010

Date Collected: 03.07.18 11.49

Sample Depth: 3 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043319

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.77	3.77	mg/kg	03.10.18 12.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	76-123	03.10.18 12.20		
a,a,a-Trifluorotoluene	98-08-8	86	%	69-120	03.10.18 12.20		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: N @ 6" Matrix: Soil Date Received: 03.08.18 17.45
 Lab Sample Id: 578790-011 Date Collected: 03.07.18 12.00 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: RNL % Moisture:
 Analyst: RNL Date Prep: 03.10.18 09.30 Basis: Wet Weight
 Seq Number: 3043347

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1610	125	mg/kg	03.10.18 22.55	D	5

Analytical Method: DRO-ORO By SW8015B Prep Method: SW8015P
 Tech: ARL % Moisture:
 Analyst: ISU Date Prep: 03.11.18 14.27 Basis: Wet Weight
 Seq Number: 3043400 SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	60.6	15.0	mg/kg	03.11.18 20.21		1
Oil Range Hydrocarbons (ORO)	PHCG2835	22.4	15.0	mg/kg	03.11.18 20.21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	03.11.18 20.21	
o-Terphenyl	84-15-1	94	%	70-135	03.11.18 20.21	

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
 Tech: MIT % Moisture:
 Analyst: MIT Date Prep: 03.09.18 14.00 Basis: Wet Weight
 Seq Number: 3043314

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0183	0.0183	mg/kg	03.10.18 09.11	U	1
Toluene	108-88-3	<0.0183	0.0183	mg/kg	03.10.18 09.11	U	1
Ethylbenzene	100-41-4	<0.0183	0.0183	mg/kg	03.10.18 09.11	U	1
m,p-Xylenes	179601-23-1	<0.0366	0.0366	mg/kg	03.10.18 09.11	U	1
o-Xylene	95-47-6	<0.0183	0.0183	mg/kg	03.10.18 09.11	U	1
Xylenes, Total	1330-20-7	<0.0183	0.0183	mg/kg	03.10.18 09.11	U	1
Total BTEX		<0.0183	0.0183	mg/kg	03.10.18 09.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	68-120	03.10.18 09.11	
a,a,a-Trifluorotoluene	98-08-8	93	%	71-121	03.10.18 09.11	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: N @ 6"
Lab Sample Id: 578790-011

Matrix: Soil
Date Collected: 03.07.18 12.00

Date Received: 03.08.18 17.45
Sample Depth: 6 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Tech: MIT

Analyst: MIT

Seq Number: 3043319

Date Prep: 03.09.18 14.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.66	3.66	mg/kg	03.10.18 09.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	76-123	03.10.18 09.11		
a,a,a-Trifluorotoluene	98-08-8	99	%	69-120	03.10.18 09.11		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: E @ 6"
Lab Sample Id: 578790-012

Matrix: Soil
Date Collected: 03.07.18 12.05

Date Received: 03.08.18 17.45
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Tech: RNL

Analyst: RNL

Seq Number: 3043347

Date Prep: 03.10.18 09.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	48.4	25.0	mg/kg	03.10.18 23.10		1

Analytical Method: DRO-ORO By SW8015B

Tech: ARL

Analyst: ISU

Seq Number: 3043400

Date Prep: 03.11.18 14.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	152	15.0	mg/kg	03.11.18 20.42		1
Oil Range Hydrocarbons (ORO)	PHCG2835	37.3	15.0	mg/kg	03.11.18 20.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	03.11.18 20.42	
o-Terphenyl	84-15-1	102	%	70-135	03.11.18 20.42	

Analytical Method: BTEX by EPA 8021B

Tech: MIT

Analyst: MIT

Seq Number: 3043314

Date Prep: 03.09.18 14.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0174	0.0174	mg/kg	03.10.18 09.37	U	1
Toluene	108-88-3	<0.0174	0.0174	mg/kg	03.10.18 09.37	U	1
Ethylbenzene	100-41-4	<0.0174	0.0174	mg/kg	03.10.18 09.37	U	1
m,p-Xylenes	179601-23-1	<0.0347	0.0347	mg/kg	03.10.18 09.37	U	1
o-Xylene	95-47-6	<0.0174	0.0174	mg/kg	03.10.18 09.37	U	1
Xylenes, Total	1330-20-7	<0.0174	0.0174	mg/kg	03.10.18 09.37	U	1
Total BTEX		<0.0174	0.0174	mg/kg	03.10.18 09.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	68-120	03.10.18 09.37	
a,a,a-Trifluorotoluene	98-08-8	96	%	71-121	03.10.18 09.37	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: E @ 6"
Lab Sample Id: 578790-012

Matrix: Soil
Date Collected: 03.07.18 12.05

Date Received: 03.08.18 17.45
Sample Depth: 6 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Tech: MIT

Analyst: MIT

Seq Number: 3043319

Date Prep: 03.09.18 14.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.47	3.47	mg/kg	03.10.18 09.37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	76-123	03.10.18 09.37		
a,a,a-Trifluorotoluene	98-08-8	96	%	69-120	03.10.18 09.37		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: S @ 6"
Lab Sample Id: 578790-013

Matrix: Soil
Date Collected: 03.07.18 12.10

Date Received: 03.08.18 17.45
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Tech: RNL

Analyst: RNL

Seq Number: 3043347

Date Prep: 03.10.18 09.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	35.2	25.0	mg/kg	03.10.18 23.25		1

Analytical Method: DRO-ORO By SW8015B

Tech: ARL

Analyst: ISU

Seq Number: 3043400

Date Prep: 03.11.18 14.33

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	18.8	14.9	mg/kg	03.11.18 21.04		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	03.11.18 21.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	03.11.18 21.04	
o-Terphenyl	84-15-1	98	%	70-135	03.11.18 21.04	

Analytical Method: BTEX by EPA 8021B

Tech: MIT

Analyst: MIT

Seq Number: 3043314

Date Prep: 03.09.18 14.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0189	0.0189	mg/kg	03.10.18 10.04	U	1
Toluene	108-88-3	<0.0189	0.0189	mg/kg	03.10.18 10.04	U	1
Ethylbenzene	100-41-4	0.0208	0.0189	mg/kg	03.10.18 10.04		1
m,p-Xylenes	179601-23-1	<0.0377	0.0377	mg/kg	03.10.18 10.04	U	1
o-Xylene	95-47-6	<0.0189	0.0189	mg/kg	03.10.18 10.04	U	1
Xylenes, Total	1330-20-7	<0.0189	0.0189	mg/kg	03.10.18 10.04	U	1
Total BTEX		0.0208	0.0189	mg/kg	03.10.18 10.04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	68-120	03.10.18 10.04	
a,a,a-Trifluorotoluene	98-08-8	97	%	71-121	03.10.18 10.04	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: S @ 6"
Lab Sample Id: 578790-013

Matrix: Soil
Date Collected: 03.07.18 12.10

Date Received: 03.08.18 17.45
Sample Depth: 6 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043319

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.77	3.77	mg/kg	03.10.18 10.04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	76-123	03.10.18 10.04		
a,a,a-Trifluorotoluene	98-08-8	95	%	69-120	03.10.18 10.04		



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: **W @ 6"**
Lab Sample Id: 578790-014

Matrix: Soil
Date Collected: 03.07.18 12.15

Date Received: 03.08.18 17.45
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Tech: RNL

Analyst: RNL

Seq Number: 3043347

Date Prep: 03.10.18 09.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	58.1	25.0	mg/kg	03.10.18 23.38		1

Analytical Method: DRO-ORO By SW8015B

Tech: ARL

Analyst: ISU

Seq Number: 3043400

Date Prep: 03.11.18 14.36

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-24

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	46.7	15.0	mg/kg	03.11.18 21.25		1
Oil Range Hydrocarbons (ORO)	PHCG2835	21.2	15.0	mg/kg	03.11.18 21.25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	03.11.18 21.25	
o-Terphenyl	84-15-1	100	%	70-135	03.11.18 21.25	

Analytical Method: BTEX by EPA 8021B

Tech: MIT

Analyst: MIT

Seq Number: 3043314

Date Prep: 03.09.18 14.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0190	0.0190	mg/kg	03.10.18 10.32	U	1
Toluene	108-88-3	<0.0190	0.0190	mg/kg	03.10.18 10.32	U	1
Ethylbenzene	100-41-4	<0.0190	0.0190	mg/kg	03.10.18 10.32	U	1
m,p-Xylenes	179601-23-1	<0.0380	0.0380	mg/kg	03.10.18 10.32	U	1
o-Xylene	95-47-6	<0.0190	0.0190	mg/kg	03.10.18 10.32	U	1
Xylenes, Total	1330-20-7	<0.019	0.019	mg/kg	03.10.18 10.32	U	1
Total BTEX		<0.019	0.019	mg/kg	03.10.18 10.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	68-120	03.10.18 10.32	
a,a,a-Trifluorotoluene	98-08-8	95	%	71-121	03.10.18 10.32	



Certificate of Analytical Results 578790

TRC Solutions, Inc, Midland, TX

Skelly Unit 986

Sample Id: W @ 6"

Matrix: Soil

Date Received: 03.08.18 17.45

Lab Sample Id: 578790-014

Date Collected: 03.07.18 12.15

Sample Depth: 6 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 03.09.18 14.00

Basis: Wet Weight

Seq Number: 3043319

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.80	3.80	mg/kg	03.10.18 10.32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	76-123	03.10.18 10.32		
a,a,a-Trifluorotoluene	98-08-8	98	%	69-120	03.10.18 10.32		



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



TRC Solutions, Inc
Skelly Unit 986

Analytical Method: Chloride by EPA 300

Seq Number: 3043343

MB Sample Id: 7640526-1-BLK

Matrix: Solid

LCS Sample Id: 7640526-1-BKS

Prep Method: E300P

Date Prep: 03.10.18

LCSD Sample Id: 7640526-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<25.0	250	262	105	262	105	90-110	0	20	mg/kg	03.10.18 11:49	

Analytical Method: Chloride by EPA 300

Seq Number: 3043346

MB Sample Id: 7640527-1-BLK

Matrix: Solid

LCS Sample Id: 7640527-1-BKS

Prep Method: E300P

Date Prep: 03.10.18

LCSD Sample Id: 7640527-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<25.0	250	258	103	262	105	90-110	2	20	mg/kg	03.10.18 15:23	

Analytical Method: Chloride by EPA 300

Seq Number: 3043347

MB Sample Id: 7640528-1-BLK

Matrix: Solid

LCS Sample Id: 7640528-1-BKS

Prep Method: E300P

Date Prep: 03.10.18

LCSD Sample Id: 7640528-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<25.0	250	258	103	258	103	90-110	0	20	mg/kg	03.10.18 21:23	

Analytical Method: Chloride by EPA 300

Seq Number: 3043343

Parent Sample Id: 578782-001

Matrix: Soil

MS Sample Id: 578782-001 S

Prep Method: E300P

Date Prep: 03.10.18

MSD Sample Id: 578782-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8890	250	9090	80	8770	0	80-120	4	20	mg/kg	03.10.18 12:26	X
Chloride	8890	250	8770	0	8770	0	80-120	4	20	mg/kg	03.10.18 12:38	X

Analytical Method: Chloride by EPA 300

Seq Number: 3043346

Parent Sample Id: 578790-002

Matrix: Soil

MS Sample Id: 578790-002 S

Prep Method: E300P

Date Prep: 03.10.18

MSD Sample Id: 578790-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1630	250	2290	264	2320	276	80-120	1	20	mg/kg	03.10.18 16:13	X

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

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

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

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



TRC Solutions, Inc
Skelly Unit 986

Analytical Method: Chloride by EPA 300

Seq Number: 3043346

Parent Sample Id: 578790-004

Matrix: Soil

MS Sample Id: 578790-004 S

Prep Method: E300P

Date Prep: 03.10.18

MSD Sample Id: 578790-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1160	250	1610	180	1610	180	80-120	0	20	mg/kg	03.10.18 18:54	X

Analytical Method: Chloride by EPA 300

Seq Number: 3043347

Parent Sample Id: 578790-010

Matrix: Soil

MS Sample Id: 578790-010 S

Prep Method: E300P

Date Prep: 03.10.18

MSD Sample Id: 578790-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	125	250	400	110	394	108	80-120	2	20	mg/kg	03.10.18 22:13	

Analytical Method: DRO-ORO By SW8015B

Seq Number: 3043382

MB Sample Id: 7640523-1-BLK

Matrix: Solid

LCS Sample Id: 7640523-1-BKS

Prep Method: SW8015P

Date Prep: 03.10.18

LCSD Sample Id: 7640523-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	<15.0	1000	1100	110	1170	117	70-135	6	35	mg/kg	03.10.18 12:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		108		117		70-135	%	03.10.18 12:27
o-Terphenyl	100		104		115		70-135	%	03.10.18 12:27

Analytical Method: DRO-ORO By SW8015B

Seq Number: 3043400

MB Sample Id: 7640612-1-BLK

Matrix: Solid

LCS Sample Id: 7640612-1-BKS

Prep Method: SW8015P

Date Prep: 03.11.18

LCSD Sample Id: 7640612-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	<15.0	1000	1220	122	1210	121	70-135	1	35	mg/kg	03.11.18 14:19	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		118		123		70-135	%	03.11.18 14:19
o-Terphenyl	104		114		119		70-135	%	03.11.18 14:19

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

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

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

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



TRC Solutions, Inc

Skelly Unit 986

Analytical Method: DRO-ORO By SW8015B

Seq Number: 3043382

Parent Sample Id: 578782-001

Matrix: Soil

MS Sample Id: 578782-001 S

Prep Method: SW8015P

Date Prep: 03.10.18

MSD Sample Id: 578782-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	25.9	996	1300	128	1240	122	70-135	5	35	mg/kg	03.10.18 17:12	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		105		70-135	%	03.10.18 17:12
o-Terphenyl	101		97		70-135	%	03.10.18 17:12

Analytical Method: BTEX by EPA 8021B

Seq Number: 3043314

MB Sample Id: 7640482-1-BLK

Matrix: Solid

LCS Sample Id: 7640482-1-BKS

Prep Method: SW5030B

Date Prep: 03.09.18

LCSD Sample Id: 7640482-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0200	2.00	1.87	94	1.82	91	55-120	3	20	mg/kg	03.09.18 20:57	
Toluene	<0.0200	2.00	1.77	89	1.79	90	77-120	1	20	mg/kg	03.09.18 20:57	
Ethylbenzene	<0.0200	2.00	1.73	87	1.82	91	77-120	5	20	mg/kg	03.09.18 20:57	
m,p-Xylenes	<0.0400	4.00	3.46	87	3.64	91	78-120	5	20	mg/kg	03.09.18 20:57	
o-Xylene	<0.0200	2.00	1.75	88	1.82	91	78-120	4	20	mg/kg	03.09.18 20:57	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	88		84		89		68-120	%	03.09.18 20:57
a,a,a-Trifluorotoluene	86		77		77		71-121	%	03.09.18 20:57

Analytical Method: BTEX by EPA 8021B

Seq Number: 3043344

MB Sample Id: 7640501-1-BLK

Matrix: Solid

LCS Sample Id: 7640501-1-BKS

Prep Method: SW5030B

Date Prep: 03.09.18

LCSD Sample Id: 7640501-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0200	2.00	1.76	88	1.82	91	55-120	3	20	mg/kg	03.10.18 17:45	
Toluene	<0.0200	2.00	1.79	90	1.74	87	77-120	3	20	mg/kg	03.10.18 17:45	
Ethylbenzene	<0.0200	2.00	1.78	89	1.74	87	77-120	2	20	mg/kg	03.10.18 17:45	
m,p-Xylenes	<0.0400	4.00	3.58	90	3.49	87	78-120	3	20	mg/kg	03.10.18 17:45	
o-Xylene	<0.0200	2.00	1.80	90	1.75	88	78-120	3	20	mg/kg	03.10.18 17:45	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	84		87		83		68-120	%	03.10.18 17:45
a,a,a-Trifluorotoluene	80		75		78		71-121	%	03.10.18 17:45

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

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

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

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



TRC Solutions, Inc
Skelly Unit 986

Analytical Method: BTEX by EPA 8021B

Seq Number: 3043314

Parent Sample Id: 578782-002

Matrix: Soil

MS Sample Id: 578782-002 S

Prep Method: SW5030B

Date Prep: 03.09.18

MSD Sample Id: 578782-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0177	1.77	1.48	84	1.44	82	54-120	3	25	mg/kg	03.10.18 00:34	
Toluene	<0.0177	1.77	1.53	86	1.51	86	57-120	1	25	mg/kg	03.10.18 00:34	
Ethylbenzene	<0.0177	1.77	1.55	88	1.60	91	58-131	3	25	mg/kg	03.10.18 00:34	
m,p-Xylenes	<0.0355	3.55	3.08	87	3.23	92	62-124	5	25	mg/kg	03.10.18 00:34	
o-Xylene	<0.0177	1.77	1.54	87	1.60	91	62-124	4	25	mg/kg	03.10.18 00:34	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	92		98		68-120	%	03.10.18 00:34
a,a,a-Trifluorotoluene	88		84		71-121	%	03.10.18 00:34

Analytical Method: BTEX by EPA 8021B

Seq Number: 3043344

Parent Sample Id: 578782-003

Matrix: Soil

MS Sample Id: 578782-003 S

Prep Method: SW5030B

Date Prep: 03.09.18

MSD Sample Id: 578782-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0181	1.81	1.55	86	1.57	84	54-120	1	25	mg/kg	03.10.18 21:20	
Toluene	<0.0181	1.81	1.57	87	1.61	87	57-120	3	25	mg/kg	03.10.18 21:20	
Ethylbenzene	<0.0181	1.81	1.66	92	1.70	91	58-131	2	25	mg/kg	03.10.18 21:20	
m,p-Xylenes	<0.0361	3.61	3.33	92	3.38	91	62-124	1	25	mg/kg	03.10.18 21:20	
o-Xylene	<0.0181	1.81	1.66	92	1.68	90	62-124	1	25	mg/kg	03.10.18 21:20	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	94		91		68-120	%	03.10.18 21:20
a,a,a-Trifluorotoluene	86		84		71-121	%	03.10.18 21:20

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3043319

MB Sample Id: 7640497-1-BLK

Matrix: Solid

LCS Sample Id: 7640497-1-BKS

Prep Method: SW5030B

Date Prep: 03.09.18

LCSD Sample Id: 7640497-1-BSO

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<4.00	20.0	18.7	94	18.9	95	35-129	1	20	mg/kg	03.09.18 21:51	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	89		95		93		76-123	%	03.09.18 21:51
a,a,a-Trifluorotoluene	109		102		90		69-120	%	03.09.18 21:51

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

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

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

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



TRC Solutions, Inc
Skelly Unit 986

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3043345

MB Sample Id: 7640505-1-BLK

Matrix: Solid

LCS Sample Id: 7640505-1-BKS

Prep Method: SW5030B

Date Prep: 03.09.18

LCSD Sample Id: 7640505-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<4.00	20.0	18.3	92	19.1	96	35-129	4	20	mg/kg	03.10.18 18:38	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
4-Bromofluorobenzene	87		95		96		76-123	%	03.10.18 18:38			
a,a,a-Trifluorotoluene	120		96		90		69-120	%	03.10.18 18:38			

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3043319

Parent Sample Id: 578782-002

Matrix: Soil

MS Sample Id: 578782-002 S

Prep Method: SW5030B

Date Prep: 03.09.18

MSD Sample Id: 578782-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<3.87	19.3	14.6	76	14.4	76	35-129	1	20	mg/kg	03.10.18 01:27	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date			
4-Bromofluorobenzene			105		102		76-123	%	03.10.18 01:27			
a,a,a-Trifluorotoluene			83		83		69-120	%	03.10.18 01:27			

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3043345

Parent Sample Id: 578782-003

Matrix: Soil

MS Sample Id: 578782-003 S

Prep Method: SW5030B

Date Prep: 03.09.18

MSD Sample Id: 578782-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<3.45	17.2	12.7	74	14.3	76	35-129	12	20	mg/kg	03.10.18 22:15	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date			
4-Bromofluorobenzene			102		103		76-123	%	03.10.18 22:15			
a,a,a-Trifluorotoluene			78		80		69-120	%	03.10.18 22:15			

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

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

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

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

CHAIN OF CUSTODY

Page 1 of 2

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

www.xenco.com

Phoenix, Arizona (480-355-0900)

Xenco Job #

578790

Client / Reporting Information				Project Information				Analytical Information				Matrix Codes			
Company Name / Branch: TRC Environmental Corporation				Project Name/Number: Kelly Unit 986											
Company Address: 2057 Commerce Drive Midland, TX 79703				Project Location: Eddy Co, NM											
Email: jlowry@trcsolutions.com				Invoice To: COG Operating CIO Becky Haskell											
Phone No: 432-466-4450				Invoice:											
Project Contact: Joel Lowry															
Sampler's Name: Joel Lowry															
No.	Field ID / Point of Collection	Sample Depth	Collection	Date	Time	Matrix	# of bottles	NaOH/Zn	HCl	HNO3	H2SO4	NaOH	MeOH	NONE	Field Comments
1	SP-1 @ Surface	SWIFT	3/7/18	10:45	S	1									TPH 8015 M Ext
2	SP-1 @ 6"	6"	3/7/18	10:50	S	1									Chloride E 300
3	SP-1 @ 1'	1'	3/7/18	10:57	S	1									
4	SP-1 @ 2'	2'	3/7/18	10:59	S	1									
5	SP-1 @ 3'	3'	3/7/18	11:07	S	1									
6	SP-1 @ 4'	4'	3/7/18	11:09	S	1									
7	SP-2 @ SURF	SURF	3/7/18	11:35	S	1									
8	SP-2 @ 1'	1'	3/7/18	11:39	S	1									
9	SP-2 @ 2'	2'	3/7/18	11:44	S	1									
10	SP-2 @ 3'	3'	3/7/18	11:49	S	1									
Turnaround Time (Business days)															
☐ Same Day TAT ☐ 5 Day TAT ☐ Level II Std QC ☐ Level IV (Full Data Pkg /raw data) ☒ Next Day EMERGENCY ☐ 7 Day TAT ☐ Level III Std QC+ Forms ☐ TRRP Level IV ☐ 2 Day EMERGENCY ☒ Contract TAT ☐ Level 3 (CLP Forms) ☐ UST / RG -411 ☐ 3 Day EMERGENCY ☐ TRRP Checklist															
TAT Starts Day received by Lab, if received by 5:00 pm															
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY															
Relinquished by Sampler:															
Date Time: _____ Received By: _____ Relinquished by: _____ Date Time: _____ Relinquished by: _____ Date Time: _____ Relinquished by: _____ Date Time: _____															
On Ice ☐ Cooler Temp. _____ Thermo. Corr. Factor _____ Preserved where applicable _____ Custody Seal # _____															

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order for client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.



Setting the Standard since 1990
 Stafford, Texas (281-240-4200)
 Dallas Texas (214-902-0300)

CHAIN OF CUSTODY

Page 2 of 2

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

Phoenix, Arizona (480-355-0900)

www.xenco.com

Client / Reporting Information				Project Information				Analytical Information				Matrix Codes			
Company Name / Branch: TRC Environmental Corporation Company Address: 2057 Commerce Drive Midland, TX 79703 Email: lowry@trcsolutions.com Phone No: 432-486-4450 Project Contact: Joel Lowry Sampler's Name: Joel Lowry				Project Name/Number: Skelly Unit 986 Project Location: Eddy Co, NM Invoice To: COG Operating CIO Becky Haskell Invoice: 				Analytical Information TPH 8015 M Ext Chloride E 300 BTEX 8021B				Matrix Codes W = Water S = Soil/Sed/Solid GW = Ground Water DW = Drinking Water P = Product SW = Surface water SL = Sludge OW = Ocean/Sea Water WI = Wipe O = Oil WW = Waste Water A = Air			
Collection		Data Deliverable Information		Data Deliverable Information		Data Deliverable Information		Data Deliverable Information		Data Deliverable Information		Data Deliverable Information			
No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	NaOH/Zn	HCl	Acetate	HNO3	H2SO4	NaOH	MeOH	NONE	
11	N @ 6"	6"	3.7.18	12:00	S	1									
12	E @ 6"	6"	3.7.18	12:05	S	1									
13	S @ 6"	6"	3.7.18	12:10	S	1									
14	W @ 6"	6"	3.7.18	12:15	S	1									
5															
6															
7															
8															
9															
10															

Turnaround Time (Business days)		Notes:	
☐ Same Day TAT	☐ 5 Day TAT	Level II Std QC	
☒ Next Day EMERGENCY	☐ 7 Day TAT	Level III Std QC+ Forms	
☐ 2 Day EMERGENCY	☒ Contract TAT	Level 3 (CLP Forms)	
☐ 3 Day EMERGENCY		TRRP Checklist	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY			
TAT Starts Day received by Lab, if received by 5:00 pm			
Relinquished by Sampler:	Date Time:	Received By:	Date Time:
1. <i>Joel Lowry</i>		2.	
Relinquished by:	Date Time:	Relinquished By:	Date Time:
3.		4.	
Relinquished by:	Date Time:	Received By:	Date Time:
5. <i>3/8/18 5:45</i>		6. <i>5/1/18 12:00</i>	

On Ice Cooler Temp. Thermo. Corr. Factor			
Custody Seal #	Preserved where applicable	On Ice	1.3/1.3

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

IOS Number **1057349**

Date/Time: 03/09/18 15:21 Created by: Brenda Ward
 Lab# From: **Lubbock** Delivery Priority:
 Lab# To: **Houston** Air Bill No.: 771768273134

Please send report to: Kelsey Brooks
 Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424
 Phone:
 E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
578790-001	S	SP-1 @ Surface	03/07/18 10:45	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-002	S	SP-1 @ 6"	03/07/18 10:50	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-003	S	SP-1 @ 1'	03/07/18 10:57	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-004	S	SP-1 @ 2'	03/07/18 10:59	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-005	S	SP-1 @ 3'	03/07/18 11:07	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-006	S	SP-1 @ 4'	03/07/18 11:09	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-007	S	SP-2 @ Surf	03/07/18 11:35	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-008	S	SP-2 @ 1'	03/07/18 11:39	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-009	S	SP-2 @ 2'	03/07/18 11:44	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-010	S	SP-2 @ 3'	03/07/18 11:49	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-011	S	N @ 6"	03/07/18 12:00	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-012	S	E @ 6"	03/07/18 12:05	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-013	S	S @ 6"	03/07/18 12:10	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	
578790-014	S	W @ 6"	03/07/18 12:15	SW8015B_DROORO	DRO-ORO By SW8015B	03/12/18	03/21/18	KEB	PHCC10C28 PHCC28C35	

Inter Office Shipment or Sample Comments:

Relinquished By 
 Brenda Ward

Received By: 
 Jean Quila

Date Relinquished: 03/09/2018

Date Received: 03/10/2018 09:00

Cooler Temperature: 1.5



XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 1057349

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : hou068

Sent By: Brenda Ward

Date Sent: 03/09/2018 03:21 PM

Received By: Jean Quila

Date Received: 03/10/2018 09:00 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	1.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Jean Quila

Date: 03/10/2018



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 03/08/2018 05:45:00 PM

Work Order #: 578790

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-3

Sample Receipt Checklist**Comments**

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Brenda Ward
Brenda Ward

Date: 03/09/2018

Checklist reviewed by:

Kelsey Brooks
Kelsey Brooks

Date: 03/12/2018

Analytical Report 583953

for
TRC Solutions, Inc

Project Manager: Joel Lowry

Skelly Unit 986

04-MAY-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-25), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-17-16), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-17-12)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-17-16)

Xenco-Odessa (EPA Lab Code: TX00158): Texas (T104704400-18-14)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



04-MAY-18

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

Reference: XENCO Report No(s): **583953**
Skelly Unit 986
Project Address: Eddy Co.. NM

Joel Lowry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 583953. 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. 583953 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Kelsey Brooks

Project Manager

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 583953****TRC Solutions, Inc, Midland, TX**

Skelly Unit 986

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP-2 NSW	S	04-25-18 12:40	6 In	583953-001
SP-2 WSW	S	04-25-18 12:50	6 In	583953-002
SP-2 SSW	S	04-25-18 13:10	6 In	583953-003
SP-2 FL @1'	S	04-25-18 13:15	1 In	583953-004
SP-1 NSW	S	04-25-18 13:20	2 In	583953-005
SP-1 WSW	S	04-25-18 13:30	2 In	583953-006
SP-1 SSW	S	04-25-18 13:35	2 In	583953-007
SP-1 ESW	S	04-25-18 13:40	2 In	583953-008
SP-1 FL @4'	S	04-25-18 13:50	4 In	583953-009



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Skelly Unit 986

Project ID:
Work Order Number(s): 583953

Report Date: 04-MAY-18
Date Received: 04/27/2018

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3048631 BTEX by EPA 8021B

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

Batch: LBA-3048967 BTEX by EPA 8021B

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



Certificate of Analysis Summary 583953

TRC Solutions, Inc, Midland, TX

Project Name: Skelly Unit 986



Project Id:

Contact: Joel Lowry

Project Location: Eddy Co., NM

Date Received in Lab: Fri Apr-27-18 10:30 am

Report Date: 04-MAY-18

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	583953-001	583953-002	583953-003	583953-004	583953-005	583953-006
	<i>Field Id:</i>	SP-2 NSW	SP-2 WSW	SP-2 SSW	SP-2 FL @1'	SP-1 NSW	SP-1 WSW
	<i>Depth:</i>	6- In	6- In	6- In	1- In	2- In	2- In
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Apr-25-18 12:40	Apr-25-18 12:50	Apr-25-18 13:10	Apr-25-18 13:15	Apr-25-18 13:20	Apr-25-18 13:30
BTEX by EPA 8021B	<i>Extracted:</i>	May-02-18 08:00	May-02-18 08:00	May-02-18 08:00	May-02-18 08:00	May-02-18 08:00	May-02-18 15:00
	<i>Analyzed:</i>	May-02-18 14:37	May-02-18 14:59	May-02-18 15:18	May-02-18 15:39	May-02-18 16:03	May-03-18 22:15
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00403 0.00403	<0.00398 0.00398	<0.00398 0.00398	<0.00401 0.00401	<0.00399 0.00399	<0.00401 0.00401
o-Xylene		<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.002 0.002	<0.002 0.002	<0.002 0.002
Total BTEX		<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.002 0.002	<0.002 0.002	<0.002 0.002
Chloride by EPA 300	<i>Extracted:</i>	Apr-30-18 15:30	Apr-30-18 15:30	May-01-18 12:00	May-01-18 12:00	May-01-18 12:00	May-01-18 12:00
	<i>Analyzed:</i>	May-01-18 04:38	Apr-30-18 19:10	May-01-18 16:05	May-01-18 16:29	May-01-18 16:35	May-01-18 16:53
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		86.1 4.99	<5.00 5.00	16.0 4.95	43.7 4.95	101 5.00	12.3 4.96
TPH by Texas1005	<i>Extracted:</i>	Apr-28-18 12:00	Apr-28-18 12:00	Apr-28-18 12:00	Apr-28-18 12:00	Apr-28-18 12:00	Apr-28-18 12:00
	<i>Analyzed:</i>	Apr-29-18 08:14	Apr-29-18 08:39	Apr-29-18 09:07	Apr-29-18 09:36	Apr-29-18 10:56	Apr-29-18 11:22
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Range Hydrocarbons		<25.0 25.0	<25.0 25.0	<24.9 24.9	<24.9 24.9	<25.0 25.0	<25.0 25.0
C12-C28 Range Hydrocarbons		<25.0 25.0	<25.0 25.0	<24.9 24.9	<24.9 24.9	<25.0 25.0	<25.0 25.0
C28-C35 Range Hydrocarbons		<25.0 25.0	<25.0 25.0	<24.9 24.9	<24.9 24.9	<25.0 25.0	<25.0 25.0
Total TPH		<25 25	<25 25	<24.9 24.9	<24.9 24.9	<25 25	<25 25

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

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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 583953

TRC Solutions, Inc, Midland, TX

Project Name: Skelly Unit 986



Project Id:

Contact: Joel Lowry

Project Location: Eddy Co., NM

Date Received in Lab: Fri Apr-27-18 10:30 am

Report Date: 04-MAY-18

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	583953-007	583953-008	583953-009			
	<i>Field Id:</i>	SP-1 SSW	SP-1 ESW	SP-1 FL @4'			
	<i>Depth:</i>	2- In	2- In	4- In			
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	Apr-25-18 13:35	Apr-25-18 13:40	Apr-25-18 13:50			
BTEX by EPA 8021B	<i>Extracted:</i>	May-02-18 15:00	May-02-18 15:00	May-02-18 15:00			
	<i>Analyzed:</i>	May-03-18 22:36	May-03-18 22:58	May-03-18 21:53			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202			
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202			
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202			
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00403 0.00403			
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202			
Total Xylenes		<0.00199 0.00199	<0.002 0.002	<0.00202 0.00202			
Total BTEX		<0.00199 0.00199	<0.002 0.002	<0.00202 0.00202			
Chloride by EPA 300	<i>Extracted:</i>	May-01-18 12:00	May-01-18 12:00	May-01-18 12:00			
	<i>Analyzed:</i>	May-01-18 16:59	May-01-18 17:05	May-01-18 17:11			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		20.7 4.99	20.6 4.97	222 4.95			
TPH by Texas1005	<i>Extracted:</i>	Apr-28-18 12:00	Apr-28-18 12:00	Apr-28-18 12:00			
	<i>Analyzed:</i>	Apr-29-18 11:50	Apr-29-18 12:18	Apr-29-18 12:45			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
C6-C12 Range Hydrocarbons		<25.0 25.0	<25.0 25.0	<24.9 24.9			
C12-C28 Range Hydrocarbons		<25.0 25.0	<25.0 25.0	<24.9 24.9			
C28-C35 Range Hydrocarbons		<25.0 25.0	<25.0 25.0	<24.9 24.9			
Total TPH		<25 25	<25 25	<24.9 24.9			

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

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

Kelsey Brooks
Project Manager



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



Form 2 - Surrogate Recoveries

Project Name: Skelly Unit 986

Work Orders : 583953,

Lab Batch #: 3048347

Sample: 583953-001 / SMP

Project ID:

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/29/18 08:14

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	50.1	49.9	100	70-130	
1-Chlorooctane	95.4	99.8	96	70-130	

Lab Batch #: 3048347

Sample: 583953-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/29/18 08:39

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	52.6	50.0	105	70-130	
1-Chlorooctane	98.2	99.9	98	70-130	

Lab Batch #: 3048347

Sample: 583953-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/29/18 09:07

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	59.7	49.9	120	70-130	
1-Chlorooctane	113	99.7	113	70-130	

Lab Batch #: 3048347

Sample: 583953-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/29/18 09:36

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	52.2	49.9	105	70-130	
1-Chlorooctane	96.2	99.7	96	70-130	

Lab Batch #: 3048347

Sample: 583953-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/29/18 10:56

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	55.5	50.0	111	70-130	
1-Chlorooctane	103	99.9	103	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Skelly Unit 986

Work Orders : 583953,

Lab Batch #: 3048347

Sample: 583953-006 / SMP

Project ID:

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/29/18 11:22

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	54.3	49.9	109	70-130	
1-Chlorooctane	106	99.8	106	70-130	

Lab Batch #: 3048347

Sample: 583953-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/29/18 11:50

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	56.2	49.9	113	70-130	
1-Chlorooctane	107	99.8	107	70-130	

Lab Batch #: 3048347

Sample: 583953-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/29/18 12:18

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	56.5	50.0	113	70-130	
1-Chlorooctane	108	100	108	70-130	

Lab Batch #: 3048347

Sample: 583953-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/29/18 12:45

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	59.3	49.8	119	70-130	
1-Chlorooctane	109	99.6	109	70-130	

Lab Batch #: 3048631

Sample: 583953-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/02/18 14:37

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	70-130	
4-Bromofluorobenzene	0.0296	0.0300	99	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Skelly Unit 986

Work Orders : 583953,

Lab Batch #: 3048631

Sample: 583953-002 / SMP

Project ID:

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/02/18 14:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	70-130	
4-Bromofluorobenzene	0.0305	0.0300	102	70-130	

Lab Batch #: 3048631

Sample: 583953-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/02/18 15:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	70-130	
4-Bromofluorobenzene	0.0290	0.0300	97	70-130	

Lab Batch #: 3048631

Sample: 583953-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/02/18 15:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	70-130	
4-Bromofluorobenzene	0.0297	0.0300	99	70-130	

Lab Batch #: 3048631

Sample: 583953-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/02/18 16:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	70-130	
4-Bromofluorobenzene	0.0291	0.0300	97	70-130	

Lab Batch #: 3048967

Sample: 583953-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/03/18 21:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	70-130	
4-Bromofluorobenzene	0.0307	0.0300	102	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Skelly Unit 986

Work Orders : 583953,

Lab Batch #: 3048967

Sample: 583953-006 / SMP

Project ID:

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/03/18 22:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	70-130	
4-Bromofluorobenzene	0.0297	0.0300	99	70-130	

Lab Batch #: 3048967

Sample: 583953-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/03/18 22:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	70-130	
4-Bromofluorobenzene	0.0297	0.0300	99	70-130	

Lab Batch #: 3048967

Sample: 583953-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/03/18 22:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	70-130	
4-Bromofluorobenzene	0.0287	0.0300	96	70-130	

Lab Batch #: 3048347

Sample: 7643677-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/29/18 03:18

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	54.3	50.0	109	70-130	
1-Chlorooctane	99.4	100	99	70-130	

Lab Batch #: 3048631

Sample: 7643879-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/02/18 09:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	70-130	
4-Bromofluorobenzene	0.0259	0.0300	86	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Skelly Unit 986

Work Orders : 583953,

Lab Batch #: 3048967

Sample: 7644079-1-BLK / BLK

Project ID:

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/03/18 21:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	70-130	
4-Bromofluorobenzene	0.0289	0.0300	96	70-130	

Lab Batch #: 3048347

Sample: 7643677-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/29/18 03:46

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	63.7	50.0	127	70-130	
1-Chlorooctane	125	100	125	70-130	

Lab Batch #: 3048631

Sample: 7643879-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/02/18 07:21

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	70-130	
4-Bromofluorobenzene	0.0305	0.0300	102	70-130	

Lab Batch #: 3048967

Sample: 7644079-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/03/18 19:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	70-130	
4-Bromofluorobenzene	0.0315	0.0300	105	70-130	

Lab Batch #: 3048347

Sample: 7643677-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/29/18 04:11

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	60.6	50.0	121	70-130	
1-Chlorooctane	111	100	111	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Skelly Unit 986

Work Orders : 583953,

Project ID:

Lab Batch #: 3048631

Sample: 7643879-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/02/18 07:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	70-130	
4-Bromofluorobenzene	0.0310	0.0300	103	70-130	

Lab Batch #: 3048967

Sample: 7644079-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/03/18 19:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	70-130	
4-Bromofluorobenzene	0.0307	0.0300	102	70-130	

Lab Batch #: 3048347

Sample: 583941-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/29/18 05:06

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	59.7	49.9	120	70-130	
1-Chlorooctane	115	99.8	115	70-130	

Lab Batch #: 3048631

Sample: 584460-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/02/18 08:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	70-130	
4-Bromofluorobenzene	0.0289	0.0300	96	70-130	

Lab Batch #: 3048967

Sample: 584189-007 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/03/18 20:06

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	70-130	
4-Bromofluorobenzene	0.0277	0.0300	92	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Skelly Unit 986

Work Orders : 583953,

Lab Batch #: 3048347

Sample: 583941-001 SD / MSD

Project ID:

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/29/18 05:32

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
o-Terphenyl	60.6	49.9	121	70-130	
1-Chlorooctane	116	99.8	116	70-130	

Lab Batch #: 3048631

Sample: 584460-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/02/18 08:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	70-130	
4-Bromofluorobenzene	0.0296	0.0300	99	70-130	

Lab Batch #: 3048967

Sample: 584189-007 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/03/18 20:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	70-130	
4-Bromofluorobenzene	0.0317	0.0300	106	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Skelly Unit 986

Work Order #: 583953

Project ID:

Analyst: ALJ

Date Prepared: 05/02/2018

Date Analyzed: 05/02/2018

Lab Batch ID: 3048631

Sample: 7643879-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.00200	0.0998	0.113	113	0.0994	0.114	115	1	70-130	35	
Toluene	<0.00200	0.0998	0.110	110	0.0994	0.110	111	0	70-130	35	
Ethylbenzene	<0.00200	0.0998	0.111	111	0.0994	0.112	113	1	70-130	35	
m,p-Xylenes	<0.00399	0.200	0.227	114	0.199	0.231	116	2	70-130	35	
o-Xylene	<0.00200	0.0998	0.113	113	0.0994	0.115	116	2	70-130	35	

Analyst: ALJ

Date Prepared: 05/02/2018

Date Analyzed: 05/03/2018

Lab Batch ID: 3048967

Sample: 7644079-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.00201	0.101	0.111	110	0.100	0.0985	99	12	70-130	35	
Toluene	<0.00201	0.101	0.108	107	0.100	0.0962	96	12	70-130	35	
Ethylbenzene	<0.00201	0.101	0.115	114	0.100	0.104	104	10	70-130	35	
m,p-Xylenes	<0.00402	0.201	0.237	118	0.200	0.214	107	10	70-130	35	
o-Xylene	<0.00201	0.101	0.121	120	0.100	0.108	108	11	70-130	35	

Relative Percent Difference RPD = $200 * |(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100 * (C)/[B]$ Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



Project Name: Skelly Unit 986

Work Order #: 583953

Project ID:

Analyst: SCM

Date Prepared: 04/30/2018

Date Analyzed: 05/01/2018

Lab Batch ID: 3048466

Sample: 7643729-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<5.00	250	273	109	250	258	103	6	90-110	20	

Analyst: SCM

Date Prepared: 05/01/2018

Date Analyzed: 05/01/2018

Lab Batch ID: 3048596

Sample: 7643803-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<5.00	250	268	107	250	263	105	2	90-110	20	

Analyst: ARM

Date Prepared: 04/28/2018

Date Analyzed: 04/29/2018

Lab Batch ID: 3048347

Sample: 7643677-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by Texas1005	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
C6-C12 Range Hydrocarbons	<25.0	1000	1090	109	1000	1130	113	4	75-125	20	
C12-C28 Range Hydrocarbons	<25.0	1000	1090	109	1000	1050	105	4	75-125	20	

Relative Percent Difference RPD = $200 * |(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100 * (C)/[B]$ Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries



Project Name: Skelly Unit 986

Work Order #: 583953

Project ID:

Lab Batch ID: 3048631

QC- Sample ID: 584460-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 05/02/2018

Date Prepared: 05/02/2018

Analyst: ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00199	0.0996	0.101	101	0.100	0.107	107	6	70-130	35	
Toluene	<0.00199	0.0996	0.0982	99	0.100	0.103	103	5	70-130	35	
Ethylbenzene	<0.00199	0.0996	0.101	101	0.100	0.107	107	6	70-130	35	
m,p-Xylenes	<0.00398	0.199	0.208	105	0.200	0.219	110	5	70-130	35	
o-Xylene	<0.00199	0.0996	0.102	102	0.100	0.108	108	6	70-130	35	

Lab Batch ID: 3048967

QC- Sample ID: 584189-007 S

Batch #: 1 Matrix: Soil

Date Analyzed: 05/03/2018

Date Prepared: 05/02/2018

Analyst: ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00200	0.0998	0.104	104	0.100	0.0869	87	18	70-130	35	
Toluene	<0.00200	0.0998	0.0860	86	0.100	0.0630	63	31	70-130	35	X
Ethylbenzene	<0.00200	0.0998	0.0484	48	0.100	0.0386	39	23	70-130	35	X
m,p-Xylenes	<0.00399	0.200	0.124	62	0.201	0.0908	45	31	70-130	35	X
o-Xylene	<0.00200	0.0998	0.0633	63	0.100	0.0472	47	29	70-130	35	X

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries



Project Name: Skelly Unit 986

Work Order #: 583953

Project ID:

Lab Batch ID: 3048466

QC- Sample ID: 583953-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 05/01/2018

Date Prepared: 04/30/2018

Analyst: SCM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	86.1	250	350	106	250	355	108	1	90-110	20	

Lab Batch ID: 3048466

QC- Sample ID: 583953-002 S

Batch #: 1 Matrix: Soil

Date Analyzed: 04/30/2018

Date Prepared: 04/30/2018

Analyst: SCM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	258	103	250	259	104	0	90-110	20	

Lab Batch ID: 3048596

QC- Sample ID: 584081-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 05/01/2018

Date Prepared: 05/01/2018

Analyst: SCM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	274	110	250	254	102	8	90-110	20	

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries



Project Name: Skelly Unit 986

Work Order #: 583953

Project ID:

Lab Batch ID: 3048596

QC- Sample ID: 584081-002 S

Batch #: 1 Matrix: Soil

Date Analyzed: 05/01/2018

Date Prepared: 05/01/2018

Analyst: SCM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<4.96	248	262	106	248	261	105	0	90-110	20	

Lab Batch ID: 3048347

QC- Sample ID: 583941-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 04/29/2018

Date Prepared: 04/28/2018

Analyst: ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by Texas1005 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Range Hydrocarbons	<25.0	998	1120	112	998	1110	111	1	75-125	20	
C12-C28 Range Hydrocarbons	<25.0	998	1090	109	998	1050	105	4	75-125	20	

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Client / Reporting Information						Project Information							Analytical Information								Matrix Codes						
Company Name / Branch: TREC Environmental Corporation						Project Name/Number: Skelley Unit 986																					
Company Address: 2057 Commerce Drive Midland, TX 79703						Project Location: Eddy Co. NM																					
Email: jlowry@trecsolutions.com						Phone No: 432-466-4450							Invoice To: COG Operating C/O Becky Haskell														
Project Contact: Joel Lowry						Invoice:																					
Sampler's Name Joel Lowry																											
No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH 8015 M Ext	Chloride E 300	BTEX 8021B										
1	SP-2 NSW	6"	4/25/2018	1240	S	1									X	X	X										
2	SP-2 WSW	6"	4/25/2018	1250	S	1									X	X	X										
3	SP-2 SSW	6"	4/25/2018	1310	S	1									X	X	X										
4	SP-2 FL @ 1'	1'	4/25/2018	1315	S	1									X	X	X										
5	SP-1 NSW	2'	4/25/2018	1320	S	1									X	X	X										
6	SP-1 WSW	2'	4/25/2018	1330	S	1									X	X	X										
7	SP-1 SSW	2'	4/25/2018	1335	S	1									X	X	X										
8	SP-1 ESW	2'	4/25/2018	1340	S	1									X	X	X										
9	SP-1 FL @ 4'	4'	4/25/2018	1350	S	1									X	X	X										
10																											
Turnaround Time (Business days)						Data Deliverable Information														Notes:							
☐ Same Day TAT						☐ 5 Day TAT						☐ Level II Std QC						☐ Level IV (Full Data Pkg /raw data)						jlowry@trecsolutions.com			
☐ Next Day EMERGENCY						☐ 7 Day TAT						☐ Level III Std QC+ Forms						☐ TRRP Level IV						rhaskell@concho.com			
☐ 2 Day EMERGENCY						☒ Contract TAT						☐ Level 3 (CLP Forms)						☐ UST / RG -411						zconder@trecsolution.com			
☐ 3 Day EMERGENCY												☐ TRRP Checklist															
TAT Starts Day received by Lab, if received by 5:00 pm																											
Relinquished by Sampler:						SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY														FED-EX / UPS:							
Date Time:						Received By:						Relinquished By:						Date Time:		Ret							
Relinquished by:						Date Time:						Received By:						Relinquished By:						Date Time:		Ret	
3						4/25/18 4:10 PM						3						4/25/18 10:30 AM						4		2	
Preserved where applicable																											
On Ice ☒						Cooler Temp. -0.4°						Thermo Corr. Factor															
Temp: 1.2						IR ID: R-8																					
CF: (0-6; -0.2°C)						(6-23; +0.2°C)																					
Corrected Temp: 1																											
Choice 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 amount stated on invoice.																											



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 04/27/2018 10:30:00 AM

Work Order #: 583953

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist**Comments**

#1 *Temperature of cooler(s)?	1	
#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	TPH received 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)?	No	
#18 Water VOC samples have zero headspace?	N/A	

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Katie Lowe

Date: 04/27/2018

Checklist reviewed by:

Kelsey Brooks

Date: 05/01/2018

Attachment #5 - Photographic Log



Figure 1 - View of the affected area, facing Northwest.



Figure 2 - View of the affected area and sample point SP-2, facing Northwest.

Attachment #5 - Photographic Log



Figure 3 - View of portion of the excavated area, facing Northwest.



Figure 4 - View of portion of the excavated area, facing Southwest.

Attachment #5 - Photographic Log



Figure 5 - View of affected area after remediation activities, facing East.

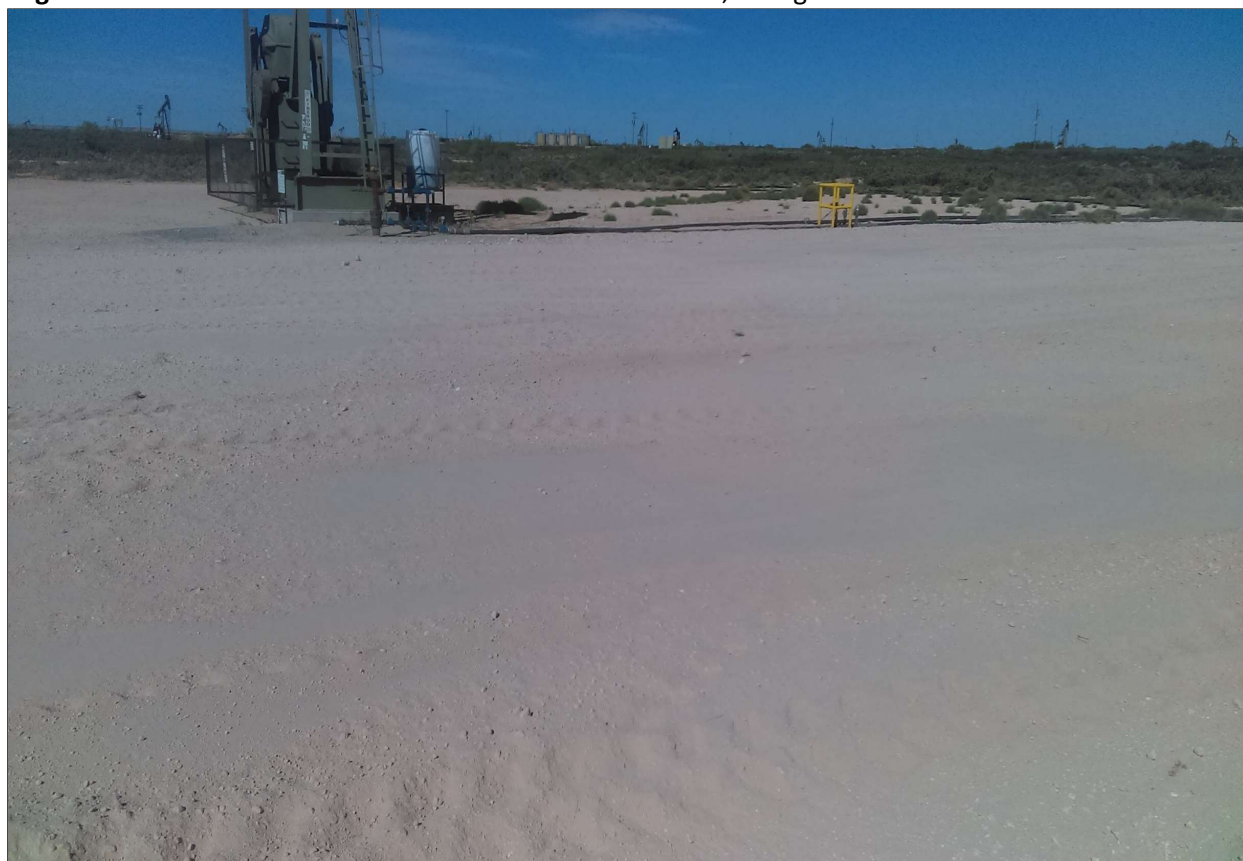


Figure 6 - View of affected area after remediation activities, facing Northeast.

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

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

NM OIL CONSERVATION
ARTESIA DISTRICT

JAN 24 2018

Form C-141
Revised April 3, 2017

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

RECEIVED

Release Notification and Corrective Action

NAB1802932450

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: COG Operating, LLC (OGRID# 229137)	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No.: 432-683-7443
Facility Name: Skelly Unit #986	Facility Type: Well

Surface Owner: Federal	Mineral Owner: Federal	API No.: 30-15-36446
-------------------------------	-------------------------------	-----------------------------

LOCATION OF RELEASE

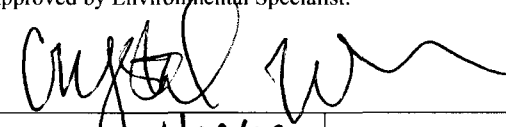
Unit Letter F	Section 22	Township 17S	Range 31E	Feet from the 1650	North/South Line North	Feet from the 1550	East/West Line West	County Eddy
-------------------------	----------------------	------------------------	---------------------	------------------------------	----------------------------------	------------------------------	-------------------------------	-----------------------

Latitude: 32.8227997 Longitude: -103.8610764 NAD83

NATURE OF RELEASE

Type of Release: Oil & Produced Water	Volume of Release: 3 bbls PW; 6 bbls Oil	Volume Recovered: 2.5 bbls PW; 5.5 bbls Oil
Source of Release: Flowline	Date and Hour of Occurrence: 1/19/2018	Date and Hour of Discovery: 1/19/2018 9:30 AM
Was Immediate Notice Given? ☐ Yes ☒ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* This release was caused by a corroded seal on the balon valve. The balon valve has been replaced.		
Describe Area Affected and Cleanup Action Taken.* This release occurred on the well pad and remained on location. A vacuum truck was dispatched to recover all freestanding fluids. Concho will have the spill area evaluated for any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		

OIL CONSERVATION DIVISION

Signature: 	Approved by Environmental Specialist: 	
Printed Name: Dakota Neel	Approval Date: 1/24/18	Expiration Date: N/A
Title: HSE Coordinator	Conditions of Approval: see attached	
E-mail Address: dneel2@concho.com	Attached ☒ SRP4588	
Date: 1/24/2018	Phone: 575-746-2010	

* Attach Additional Sheets If Necessary

1/26/18AB

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

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

Form C-141
Revised April 3, 2017
Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

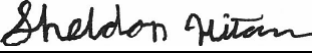
Name of Company: COG Operating, LLC (OGRID# 229137)	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No.: 432-683-7443
Facility Name: Skelly Unit #986 (2RP-4588)	Facility Type: Well
Surface Owner: Federal	Mineral Owner: Federal
API No.: 30-15-36446	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	22	17S	31E	1650	North	1550	West	Eddy

Latitude: 32.8227997 Longitude: -103.8610764 NAD83

NATURE OF RELEASE

Type of Release: Oil & Produced Water	Volume of Release: 3 bbls PW; 6 bbls Oil	Volume Recovered: 2.5 bbls PW; 5.5 bbls Oil
Source of Release: Flowline	Date and Hour of Occurrence: 1/19/2018	Date and Hour of Discovery: 1/19/2018 9:30 AM
Was Immediate Notice Given? ☐ Yes ☒ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* ☐ This release was caused by a corroded seal on the balon valve. The balon valve has been replaced.		
Describe Area Affected and Cleanup Action Taken.* This release occurred on the well pad and remained on location. A vacuum truck was dispatched to recover all freestanding fluids. Remediation activities were conducted in accordance with applicable NMOCD and BLM Guidelines. Impacted soil affected above the NMOCD Recommended Remediation Action Levels was excavated and transported to and NMOCD-approved disposal facility. Laboratory analytical results from excavation confirmation soil samples and associated delineation soil samples indicated BTEX, TPH and chloride concentrations were below the NMOCD RRAL. Upon collecting the required excavation confirmation soil samples, the excavated area was backfilled with locally sourced, non-impacted material. Please reference the Remediation Summary and Soil Closure Request, dated June 15, 2018, for additional details regarding remediation activities.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 		OIL CONSERVATION DIVISION
Printed Name: Sheldon Hitchcock		Approved by Environmental Specialist: 
Title: HSE Coordinator	Approval Date: 5/1/2023	Expiration Date: N/A
E-mail Address: slhitchcock@concho.com	Conditions of Approval:	Attached ☐
Date: 6/15/2018 Phone: 432-818-2372	none	

* Attach Additional Sheets If Necessary

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

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

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

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

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

CONDITIONS

Action 206397

CONDITIONS

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 206397
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	5/1/2023