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APPROVED

By CHernandez at 1:06 pm, Nov 05, 2018

See email
correspondence.

October 1, 2018

Olivia Yu
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1625 French Drive
Hobbs, NM 88240

Ryan Mann
Hobbs Field Office
New Mexico State Land Office
2827 North Dal Paso Street, Suite 117
Hobbs, NM 88240

**Re: Site Assessment Summary and Proposed Remediation Plan
White Falcon 16 State #023H
API No. 30-025-43699
GPS: Latitude 32.13689 Longitude -103.377934
UL "D", Sec. 16, T25S, R35E
Lea County, NM
NMOCD Ref. No. 1RP-4881**

TRC Environmental Corporation (TRC), on behalf of COG Operating, LLC (COG), has prepared this *Site Assessment Summary and Proposed Remediation Plan* for the Release Site known as the **White Falcon 16 State #023H**. Details of the release are summarized below:

RELEASE DETAILS			
Type of Release:	Produced Water	Volume of Release:	53 bbls
		Volume Recovered:	15 bbls
Source of Release:	Flowline	Date of Release: 11/18/17	Date of Discovery: 11/18/17
Was Immediate Notice Given?	Yes	If, YES, to Whom?	NMOCD District I/NMSLO
Was a Watercourse Reached?	No	If YES, Volume Impacting the Watercourse:	NA
Surface Owner:	State	Mineral Owner:	State
Describe Cause of Problem and Remedial Action Taken:			
A third party contractor struck a buried poly flowline coming from the White Falcon 16 State #001 H Battery while digging. The line was repaired and put back in service.			

Topographical and Aerial Maps are provided as Attachments #1 and #2. General Site Photographs are provided as Attachment #8. A Copy of the Initial Release Notification and Corrective Action (NMODC Form C-141) is provided as Attachment #9.

REGULATORY FRAMEWORK

Surface impacts from unauthorized releases of crude oil, gases, produced water, condensate or other oil field waste which occur during normal oilfield operations are generally regulated by the New Mexico Oil Conservation Division (NMOCD) in accordance with 19.15.29 of the New Mexico Administrative Code (NMAC). 19.15.29 NMAC establishes reporting, site assessment, remediation and closure procedures based on the type and volume of the release and site characterizations, including proximity to sensitive receptors and depth to groundwater, which may be used to determine a Total Ranking Score as follows:

SITE RANKING CRITERIA		
General Site Characteristics		Score
Within 300 ft. of any continuously flowing or significant watercourse; Within 200 ft. of any lakebed, sinkhole, or playa lake; Within 300 ft. of an occupied permanent residence, school, hospital, or institution; Within 500 ft. of a spring or private, domestic fresh water well; Within 1,000 ft. of any fresh water well;	Yes	20
Within the incorporated municipal boundaries or within a municipal well field; Within 300 ft. of a wetland; Within the area overlying a subsurface mine; Within an unstable area; or Within a 100-year floodplain.	No	0
Minimum distance between any point within the horizontal boundary of the release and groundwater:	≤ 50 ft.	20
	51-100 ft.	10
	> 100 ft.	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 in the 1 Mile radius of the Release Site and identify any registered water wells within 1/2 Mile 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. Depth to groundwater information is provided as Attachment #4.

TOTAL RANKING SCORE		
Ranking Score Criteria		Score
Within 300 ft. of any continuously flowing or significant watercourse?	No	0
Within 200 ft. of any lakebed, sinkhole, or playa lake?	No	0
Within 300 ft. of an occupied permanent residence, school, hospital, or institution?	No	0
Within 500 ft. of a spring or private, domestic fresh water well?	No	0
Within 1,000 ft. of any fresh water well?	No	0
Within the incorporated municipal boundaries or within a municipal well field?	No	0
Within 300 ft. of a wetland?	No	0
Within the area overlying a subsurface mine?	No	0
Within an unstable area?	No	0
Within a 100-year floodplain?	No	0
Inferred depth to groundwater	125'-150'	0
TOTAL RANKING SCORE FOR SITE		0

The NMOCD guidelines indicated the Site has a Total Ranking Score of **0 points**. The NMOCD Closure Criteria for Soil Impacted by a Release for a Site with a Total Ranking Score of **0 points** are as follows:

Closure Criteria for Soil Impacted by a Release	
Benzene	10 mg/kg
Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX)	50 mg/kg
Total Petroleum Hydrocarbons (TPH)	2,500 mg/kg
Combined GRO and DRO	1,000 mg/kg
Chloride @ >4 ft. bgs	20,000 mg/kg

INITIAL SITE ASSESSMENT

On **June 25, 2018**, an initial site investigation was conducted at the Site. During the initial site investigation, **seven (7) soil samples** were collected from **three (3) locations** (SP-1 through SP-3) within the release margins in an effort to determine the vertical extent of soil impacts. In addition, **one (1) soil sample** was collected from the inferred southern edge of the release margins in an effort to determine the horizontal extent of soil impacts. The collected soil samples were submitted to an NMOCD-approved laboratory for analysis of chloride. Laboratory analytical results indicated soil was affected above the NMOCD Closure Criteria in sample point SP-3 at eight (8) ft. bgs. On **August 17, 2018**, a geoprobe was utilized to collect **three (3) additional soil samples** from the area characterized by sample point SP-3. In addition, three (3) soil samples were collected from the remaining inferred edges of the release margins. The collected soil samples were submitted to an NMOCD-approved laboratory for analysis of chloride. A table summarizing laboratory analytical results from soil samples collected during the initial site assessment is provided below:

Concentrations of BTEX, TPH and/or Chloride in Soil											
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E 300
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₅ (mg/kg)	TPH C ₆ -C ₃₅ (mg/kg)	Chloride (mg/kg)
SP-1 @ 1'	6/25/2018	1'	In-Situ	-	-	-	-	-	-	-	836
SP-1 @ 4'	6/25/2018	4'	In-Situ	-	-	-	-	-	-	-	3,060
SP-1 @ 8'	6/25/2018	8'	In-Situ	-	-	-	-	-	-	-	193
SP-2 @ 1'	6/25/2018	1'	In-Situ	-	-	-	-	-	-	-	65.3
SP-3 @ 1'	6/25/2018	1'	In-Situ	-	-	-	-	-	-	-	1,550
SP-3 @ 4'	6/25/2018	4'	In-Situ	-	-	-	-	-	-	-	1,580
SP-3 @ 8'	6/25/2018	8'	In-Situ	-	-	-	-	-	-	-	11,400
S @ 6"	6/25/2018	6"	In-Situ	-	-	-	-	-	-	-	251
SB-1 @ 8'	8/17/2018	8'	In-Situ	-	-	-	-	-	-	-	6,540
SB-1 @ 10'	8/17/2018	10'	In-Situ	-	-	-	-	-	-	-	314
SB-1 @ 12'	8/17/2018	12'	In-Situ	-	-	-	-	-	-	-	7.14
N @ 6"	8/17/2018	6"	In-Situ	-	-	-	-	-	-	-	5.17
W @ 6"	8/17/2018	6"	In-Situ	-	-	-	-	-	-	-	25.1
E @ 6'	8/17/2018	6"	In-Situ	-	-	-	-	-	-	-	<4.95
Closure Criteria				10	50	-	-	1,000	-	2,500	<4' 600 >4' 20,000

Field Data, if applicable, is provided as Attachment #5. Laboratory analytical reports are provided as Attachment #6. A "Site & Sample Location Map" is provided as Attachment #3.

REMEDIATION PLAN

Based on laboratory analytical results, site characteristics and field observations made during the initial site assessment, COG proposes the following remediation activities designed to advance the Release Site toward an approved closure:

- Utilizing mechanical equipment, excavate impacted soil within the release margins in the area characterized by sample points SP-1, SP-3 and SB-1 to a depth of approximately four (4) ft. bgs, or until laboratory analytical results from confirmation soil samples indicate concentrations of chloride are below the applicable NMOCD Closure Criteria. Select soil samples will be analyzed for concentrations of BTEX and TPH.
- Excavate impacted soil within the release margins in the area characterized by sample point SP-2 to a depth of approximately one (1) ft. bgs, or until laboratory analytical results from confirmation soil samples indicate concentrations of chloride are below the applicable NMOCD Closure Criteria.
- Excavated soil will be temporarily stockpiled on-site, atop a poly liner, pending transportation under manifest to a NMOCD-approved disposal facility.
- Upon receiving favorable laboratory analytical results from confirmation soil samples (below the NMOCD Closure Criteria) excavated areas will be backfilled with locally sourced, non-impacted "like" material, at or near original relative positions. The affected area will be contoured and/or compacted to achieve erosion control, stability and preservation of surface water flow to the extent practicable.

SAMPLING PLAN

Upon completion of excavation activities, representative five-point composite excavation confirmation soil samples will be collected from the excavation sidewalls **in each cardinal direction**, representing no more than **50 linear ft**. A minimum of one (1) representative five-point composite excavation confirmation soil sample will be collected from the base of the excavated area representing every **600 square feet**. Additional "discrete" confirmation soil samples will be collected from wet or visibly stained areas inferred to have been affected by the release, as necessary.

TIMELINE AND ESTIMATED VOLUME OF SOIL TO BE REMEDIATED

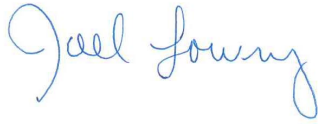
Remediation activities are expected to be completed within **90 days** of receiving necessary approval(s) of this *Site Assessment Summary and Proposed Remediation Plan*. Based on laboratory analytical results, site characteristics and field observations made during the initial site assessment it is estimated approximately **220 cubic yards** of soil has been affected above the NMOCD Closure Criteria.

RESTORATION, RECLAMATION AND RE-VEGETATION

Areas affected by the release and associated remediation activities will be substantially restored to the condition which existed prior to the release to the maximum extent practicable. Excavated areas will be backfilled with locally sourced, non-impacted "like" material placed at or near original relative positions. The affected area will be contoured and/or compacted to achieve erosion control, stability and preservation of surface water flow to the extent practicable. Affected areas not on production pads and/or lease roads will be reseeded with an approved seed mixture during the first favorable growing season following closure of the site in accordance with the applicable regulatory agency.

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

Respectfully,

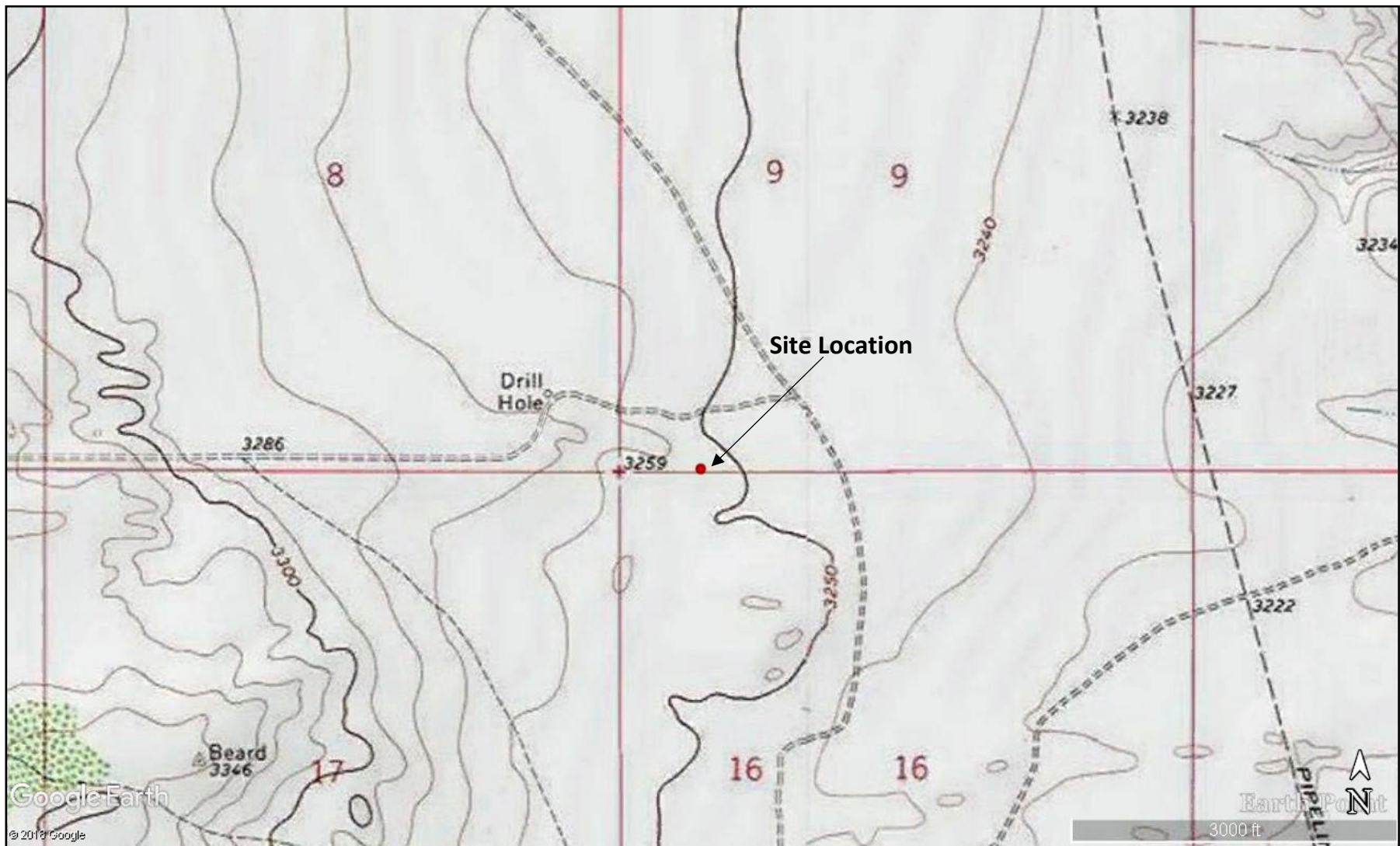




Joel Lowry
Senior Project Manager
TRC Environmental Corp.

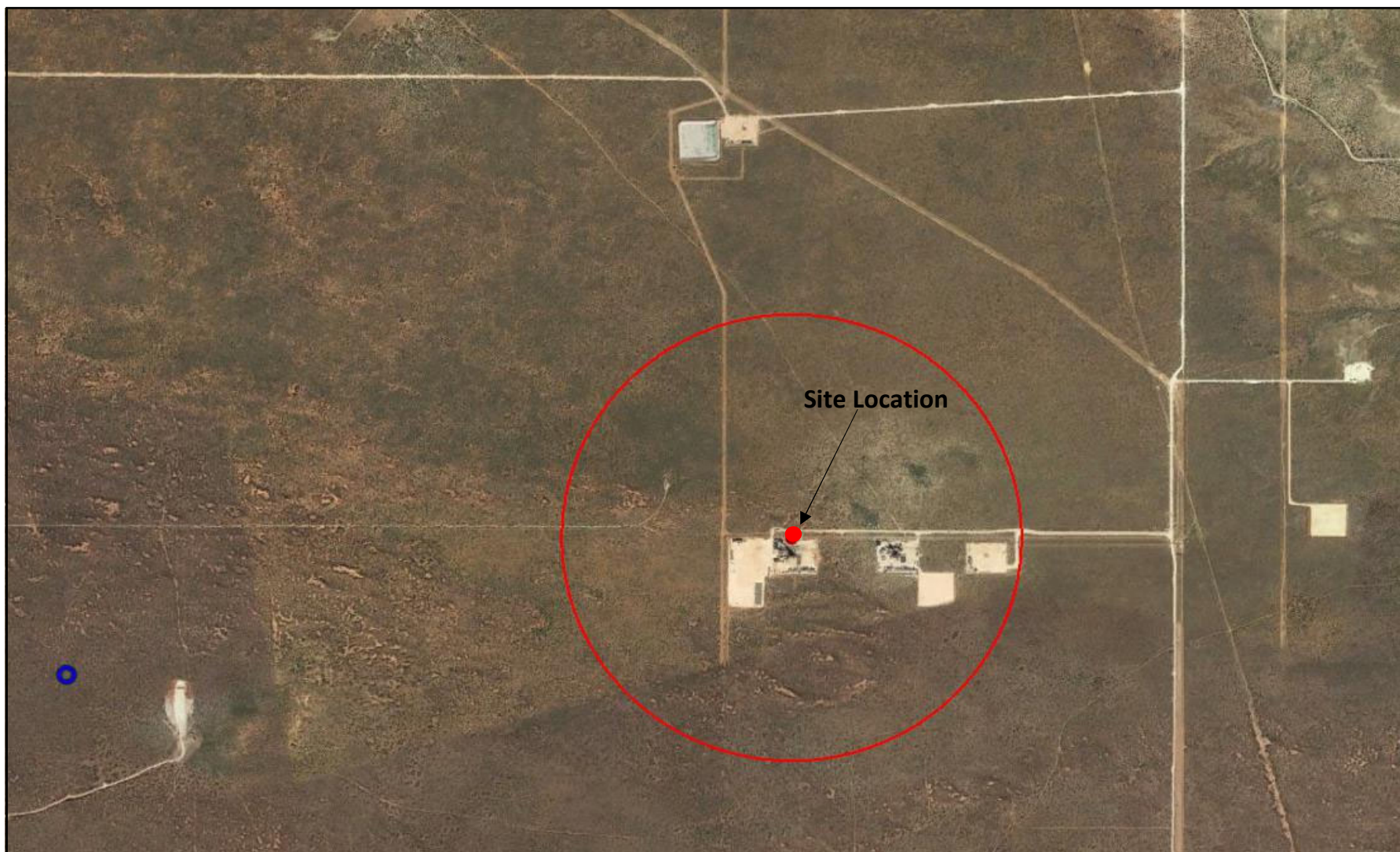


Curt Stanley
Senior Project Manager
TRC Environmental Corp.

Attachments:	Attachment #1-	Figure 1 - Topographical Map
	Attachment #2-	Figure 2 - Aerial Map
	Attachment #3-	Figure 3 - Site & Sample Location Map
	Attachment #4-	Depth to Groundwater Information
	Attachment #5-	Field Data
	Attachment #6-	Laboratory Analytical Reports
	Attachment #7-	Soil Profile
	Attachment #8-	General Site Photographs
	Attachment #9-	Release Notification and Corrective Action (FORM C-141)



LEGEND:  Site Location	Figure 1 Topographical Map COG Operating, LLC White Falcon 16 State #023H Lea County, NM	Scale: 1" = ~1,500'	 Results you can rely on
		Drafted by: ZC Checked by: JL	
		Draft: September 19, 2018	
		GPS: 32.13689 -103.377934	
		UL "D", Sec. 16, T25S, R35E	
		TRC Proj. No: 293170	



LEGEND:

- | | | | |
|---|---------------------|---|-------------------------|
|  | Site Location |  | Non-Industrial Building |
|  | Fresh Water Well |  | Municipal Well Field |
|  | 100-Year Floodplain |  | Subsurface Mine |
|  | High/Critical Karst |  | 1/2 Mile Radius |

Figure 2

Aerial Map
 COG Operating, LLC
 White Falcon 16 State #023H
 Lea County, NM

Scale: 1" = ~2,000'

Drafted by: ZC | Checked by: JL

Draft: September 19, 2018

GPS: 32.13689 -103.377934

UL "D", Sec. 16, T25S, R35E

TRC Proj. No: 293170





LEGEND:



-  Inferred Release Margins
-  Sample Point

Figure 3

Site & Sample Location Map
COG Operating, LLC
White Falcon 16 State #023H
Lea County, NM

Scale: 1" = 65'

Drafted by: ZC | Checked by: JL

Draft: September 19, 2018

GPS: 32.13689 -103.377934

UL "D", Sec. 16, T25S, R35E

TRC Proj. No: 293170





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

No wells found.

UTMAD83 Radius Search (in meters):

Easting (X): 652993

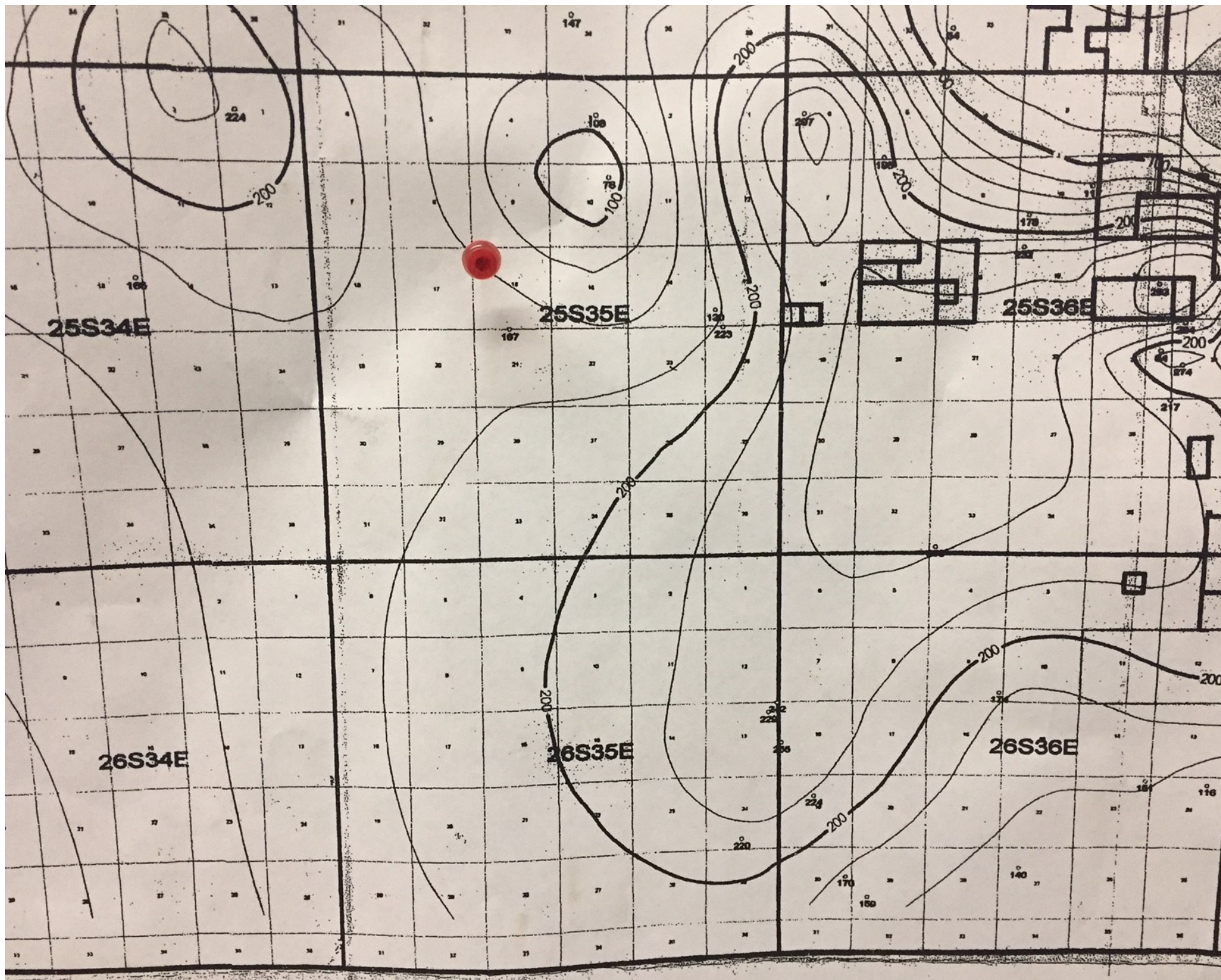
Northing (Y): 3556758.69

Radius: 1610

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

9/14/18 1:29 PM

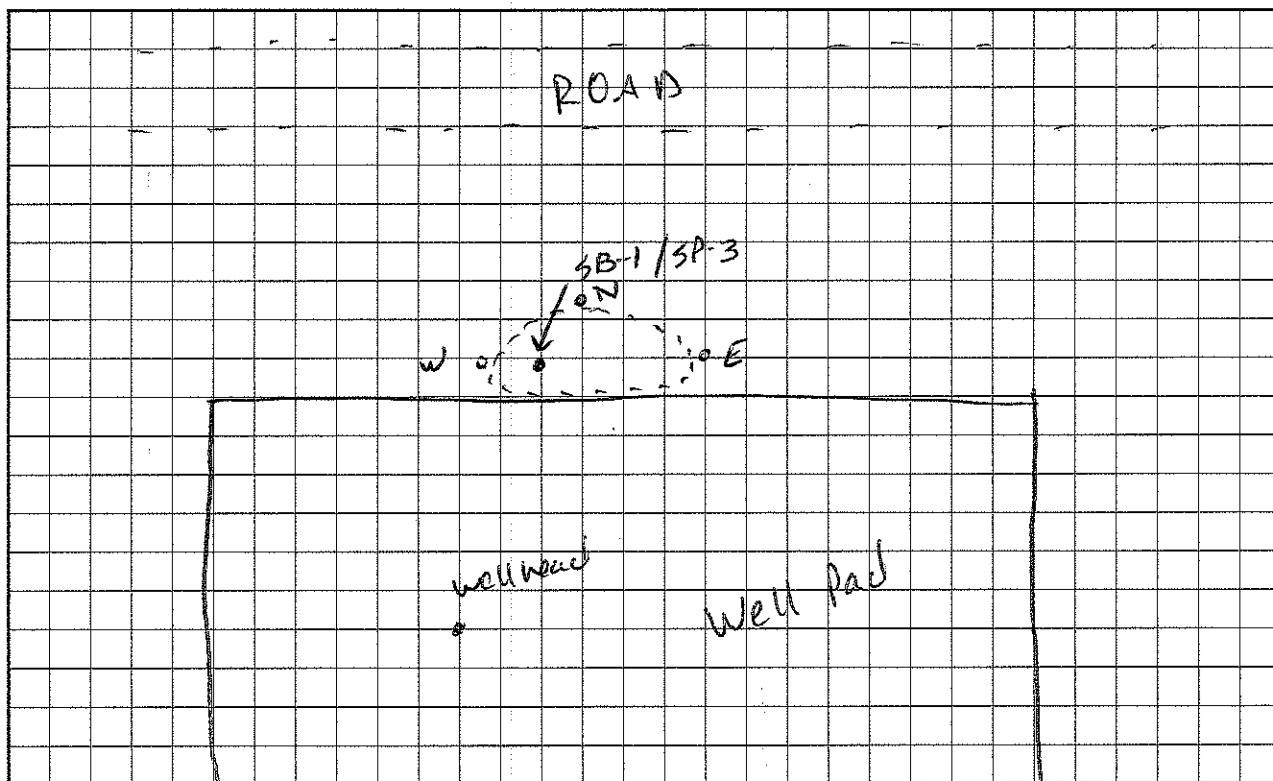
WELLS WITH WELL LOG INFORMATION



Site Name: White Falcon 16 State #02311

Date: 8/17/2018

Field Observation Log



ID	CI-	Odor/PID
SB-106'	72,600	None
SB-108'	72,600	None
SB-1010'	260	None
SB-1012'	2120	None
GPS:		

ID	CI-	Odor/PID
NP6"	2120	None
GPS:		

ID	CI-	Odor/PID
WP6"	2120	None
GPS:		

ID	CI-	Odor/PID
EP6"	2120	None
GPS:		

ID	CI-	Odor/PID
GPS:		

ID	CI-	Odor/PID
GPS:		

ID	CI-	Odor/PID
GPS:		

ID	CI-	Odor/PID
GPS:		

ID	CI-	Odor/PID
GPS:		

Analytical Report 590553

for
TRC Solutions, Inc

Project Manager: Joel Lowry

White Falcon 16 State 023H

02-JUL-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-26), 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 (T104704400-18-15)
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)



02-JUL-18

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

Reference: XENCO Report No(s): **590553**
White Falcon 16 State 023H
Project Address: Lea Co., NM

Joel Lowry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 590553. 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. 590553 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,

Julian Martinez

Odessa Laboratory Director

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 590553



TRC Solutions, Inc, Midland, TX

White Falcon 16 State 023H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP-1 @ 1'	S	06-25-18 15:00	1 ft	590553-001
SP-1 @ 4'	S	06-25-18 15:10	4 ft	590553-002
SP-1 @ 8'	S	06-25-18 15:20	8 ft	590553-003
SP-2 @ 1'	S	06-25-18 15:30	1 ft	590553-004
SP-3 @ 1'	S	06-25-18 15:40	1 ft	590553-005
SP-3 @ 4'	S	06-25-18 15:50	4 ft	590553-006
SP-3 @ 8'	S	06-25-18 16:00	8 ft	590553-007
SP @ 6"	S	06-25-18 16:10	6 ft	590553-008



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: White Falcon 16 State 023H

Project ID:

Work Order Number(s): 590553

Report Date: 02-JUL-18

Date Received: 06/27/2018

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3055169 Inorganic Anions by EPA 300

Lab Sample ID 590553-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 590553-001, -002, -003, -004, -005, -006, -007, -008.

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



Certificate of Analysis Summary 590553

TRC Solutions, Inc, Midland, TX

Project Name: White Falcon 16 State 023H



Project Id:

Contact: Joel Lowry

Project Location: Lea Co., NM

Date Received in Lab: Wed Jun-27-18 10:15 am

Report Date: 02-JUL-18

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	590553-001	590553-002	590553-003	590553-004	590553-005	590553-006
	<i>Field Id:</i>	SP-1 @1'	SP-1 @4'	SP-1 @8'	SP-2 @1'	SP-3 @1'	SP-3 @4'
	<i>Depth:</i>	1- ft	4- ft	8- ft	1- ft	1- ft	4- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Jun-25-18 15:00	Jun-25-18 15:10	Jun-25-18 15:20	Jun-25-18 15:30	Jun-25-18 15:40	Jun-25-18 15:50
Chloride by EPA 300	<i>Extracted:</i>	Jun-29-18 10:30	Jun-29-18 10:30	Jun-29-18 10:30	Jun-29-18 10:30	Jun-29-18 10:30	Jun-29-18 10:30
	<i>Analyzed:</i>	Jun-29-18 13:13	Jun-29-18 13:29	Jun-29-18 13:34	Jun-29-18 13:40	Jun-29-18 13:45	Jun-29-18 14:01
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		836 4.99	3060 24.9	193 4.94	65.3 4.97	1550 24.8	1580 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.

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Julian Martinez
Odessa Laboratory Director



Certificate of Analysis Summary 590553

TRC Solutions, Inc, Midland, TX

Project Name: White Falcon 16 State 023H



Project Id:

Contact: Joel Lowry

Project Location: Lea Co., NM

Date Received in Lab: Wed Jun-27-18 10:15 am

Report Date: 02-JUL-18

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	590553-007	590553-008				
	Field Id:	SP-3 @8'	SP @ 6"				
	Depth:	8- ft	6- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	Jun-25-18 16:00	Jun-25-18 16:10				
Chloride by EPA 300	Extracted:	Jun-29-18 10:30	Jun-29-18 10:30				
	Analyzed:	Jun-29-18 14:07	Jun-29-18 14:12				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		11400 99.4	251 4.92				

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.
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Julian Martinez
Odessa Laboratory Director

- 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 **SQL** 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



BS / BSD Recoveries



Project Name: White Falcon 16 State 023H

Work Order #: 590553

Project ID:

Analyst: SCM

Date Prepared: 06/29/2018

Date Analyzed: 06/29/2018

Lab Batch ID: 3055169

Sample: 7657603-1-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	<4.99	250	250	100	250	246	98	2	90-110	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries



Project Name: White Falcon 16 State 023H

Work Order # : 590553

Project ID:

Lab Batch ID: 3055169

QC- Sample ID: 590546-003 S

Batch #: 1 Matrix: Soil

Date Analyzed: 06/29/2018

Date Prepared: 06/29/2018

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	<4.92	246	247	100	246	243	99	2	90-110	20	

Lab Batch ID: 3055169

QC- Sample ID: 590553-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 06/29/2018

Date Prepared: 06/29/2018

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	836	250	1020	74	250	1020	74	0	90-110	20	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.

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Phoenix, Arizona (480-355-0900)

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[illegible]

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenox, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenox 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 Xenox. A minimum charge of \$75 will be applied to each project. Xenox's liability will be limited to the cost of samples. Any samples received by Xenox but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.



Ref # 156148-434 FRD 09/16

41 MAF

TX-US LBB
79701

TRK# 6606 3917 2066
0201

WED - 27 JUN 10:30A
PRIORITY OVERNIGHT

3171016102001LV



FedEx
Express



DEPT:

REF:

(432) 563-1800

MIDLAND TX 79701

XENCO LABORATORIES
1211 W FLORIDA AVE

to
HOBBS, NM 88240
UNITED STATES US

**
MAIL SERVICES ETC, LLC
4008 N GRIMES

ORIGIN ID: HOBBS (575) 392-7550

SHIP DATE: 26JUN18
ACTWGT: 34.00 LB MAN
CAD: 0909328/CAFE3111
DIMS: 18x16x12 IN
BILL RECIPIENT

546C2/93DF/53C1



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 06/27/2018 10:15:00 AM

Work Order #: 590553

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Katie Lowe

Date: 06/27/2018

Checklist reviewed by:

Kelsey Brooks

Date: 06/29/2018

Analytical Report 596453

**for
TRC Solutions, Inc**

Project Manager: Joel Lowry

White Falcon 16 #23H

27-AUG-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-18-4)
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)



27-AUG-18

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

Reference: XENCO Report No(s): **596453**
White Falcon 16 #23H
Project Address: Lea Co.,NM

Joel Lowry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 596453. 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. 596453 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks

Project Manager

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

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



Sample Cross Reference 596453



TRC Solutions, Inc, Midland, TX

White Falcon 16 #23H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-1 @ 8'	S	08-17-18 12:00	8 ft	596453-001
SB-1 @ 10'	S	08-17-18 12:15	10 ft	596453-002
SB-1 @ 12'	S	08-17-18 12:30	12 ft	596453-003
N @ 6"	S	08-17-18 12:45	6 In	596453-004
W @ 6"	S	08-17-18 13:00	6 In	596453-005
E @ 6"	S	08-17-18 13:15	6 In	596453-006



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: White Falcon 16 #23H

Project ID:

Work Order Number(s): 596453

Report Date: 27-AUG-18

Date Received: 08/21/2018

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 596453

TRC Solutions, Inc, Midland, TX

Project Name: White Falcon 16 #23H



Project Id:

Contact: Joel Lowry

Project Location: Lea Co.,NM

Date Received in Lab: Tue Aug-21-18 10:35 am

Report Date: 27-AUG-18

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	596453-001	596453-002	596453-003	596453-004	596453-005	596453-006
	<i>Field Id:</i>	SB-1 @8'	SB-1 @ 10'	SB-1 @ 12'	N @ 6"	W @ 6"	E @ 6"
	<i>Depth:</i>	8- ft	10- ft	12- ft	6- In	6- In	6- In
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Aug-17-18 12:00	Aug-17-18 12:15	Aug-17-18 12:30	Aug-17-18 12:45	Aug-17-18 13:00	Aug-17-18 13:15
Chloride by EPA 300	<i>Extracted:</i>	Aug-21-18 17:30	Aug-21-18 15:00	Aug-21-18 15:00	Aug-21-18 15:00	Aug-22-18 09:00	Aug-22-18 09:00
	<i>Analyzed:</i>	Aug-21-18 23:13	Aug-21-18 20:02	Aug-21-18 20:07	Aug-21-18 20:13	Aug-22-18 10:38	Aug-22-18 12:05
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		6540 49.9	314 4.99	7.14 4.97	5.17 4.95	25.1 4.95	<4.95 4.95

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

- 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

SQL Sample 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



BS / BSD Recoveries



Project Name: White Falcon 16 #23H

Work Order #: 596453

Project ID:

Analyst: SCM

Date Prepared: 08/21/2018

Date Analyzed: 08/21/2018

Lab Batch ID: 3060815

Sample: 7660845-1-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	274	110	250	273	109	0	90-110	20	

Analyst: SCM

Date Prepared: 08/21/2018

Date Analyzed: 08/21/2018

Lab Batch ID: 3060822

Sample: 7660857-1-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	250	100	250	249	100	0	90-110	20	

Analyst: SCM

Date Prepared: 08/22/2018

Date Analyzed: 08/22/2018

Lab Batch ID: 3060861

Sample: 7660892-1-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	247	99	250	247	99	0	90-110	20	

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

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

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

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries



Project Name: White Falcon 16 #23H

Work Order # : 596453

Project ID:

Lab Batch ID: 3060815

QC- Sample ID: 596446-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 08/21/2018

Date Prepared: 08/21/2018

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	943	248	1140	79	248	1140	79	0	90-110	20	X

Lab Batch ID: 3060815

QC- Sample ID: 596446-005 S

Batch #: 1 Matrix: Soil

Date Analyzed: 08/21/2018

Date Prepared: 08/21/2018

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	123	248	368	99	248	370	100	1	90-110	20	

Lab Batch ID: 3060822

QC- Sample ID: 596446-008 S

Batch #: 1 Matrix: Soil

Date Analyzed: 08/21/2018

Date Prepared: 08/21/2018

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	351	250	584	93	250	586	94	0	90-110	20	

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

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

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

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



Form 3 - MS / MSD Recoveries



Project Name: White Falcon 16 #23H

Work Order #: 596453

Project ID:

Lab Batch ID: 3060822

QC- Sample ID: 596449-002 S

Batch #: 1 Matrix: Soil

Date Analyzed: 08/21/2018

Date Prepared: 08/21/2018

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	74.4	248	325	101	248	324	101	0	90-110	20	

Lab Batch ID: 3060861

QC- Sample ID: 596453-005 S

Batch #: 1 Matrix: Soil

Date Analyzed: 08/22/2018

Date Prepared: 08/22/2018

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	25.1	248	288	106	248	286	105	1	90-110	20	

Lab Batch ID: 3060861

QC- Sample ID: 596453-006 S

Batch #: 1 Matrix: Soil

Date Analyzed: 08/22/2018

Date Prepared: 08/22/2018

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	<4.95	248	250	101	248	250	101	0	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.



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Dallas Texas (214-902-0300)

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Page 1 of 1

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Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

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Client / Reporting Information				Project Information										Analytical Information				Matrix Codes			
Company Name / Branch: TRC Environmental Corporation				Project Name/Number: White Falcon 16 #234										TPH 8015 M Ext Chloride E 300 BTEx 8021B				W = Water S = Soil/Sediment 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			
Company Address: 2057 Commerce Drive Midland, TX 79703				Project Location: Lea Co, NM																	
Email: jlowry@trcsolutions.com				Phone No: 432-466-4460										Invoice To: COG Operating CIO Becky Haskell							
Project Contact: Joel Lowry				Invoice:										Xenco Job # 596455							
Samples Name: Becky Griffin																					
No.	Field ID / Point of Collection	Sample Depth	Collection Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments						
1	SB-1 @ 8'	8ft	8/17/2018	12:00	S	1															
2	SB-1 @ 10'	10ft	8/17/2018	12:15	S	1															
3	SB-1 @ 12'	12ft	8/17/2018	12:30	S	1															
4	N @ 6"	6in	8/17/2018	12:45	S	1															
5	W @ 6"	6in	8/17/2018	1:00	S	1															
6	E @ 6"	6in	8/17/2018	1:15	S	1															
7																					
8																					
9																					
10																					
Data Deliverable Information																Notes:					
<input type="checkbox"/> Same Day TAT																<input type="checkbox"/> Level II Std QC		<input type="checkbox"/> Level IV (Full Data Pkg /raw data)			
<input type="checkbox"/> Next Day EMERGENCY																<input type="checkbox"/> 7 Day TAT		<input type="checkbox"/> Level III Std QC+ Forms		<input type="checkbox"/> TRRP Level IV	
<input type="checkbox"/> 2 Day EMERGENCY																<input checked="" type="checkbox"/> Contract TAT		<input type="checkbox"/> Level 3 (CLP Forms)		<input type="checkbox"/> UST / RG -411	
<input type="checkbox"/> 3 Day EMERGENCY																<input type="checkbox"/> TRRP Checklist					
TAT Starts Day received by Lab, if received by 5:00 pm																					
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																					
Relinquished by Sample		Date Time:		Received By:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:					
1. <i>[Signature]</i>		8-20-18 2:18		Becky Griffin		2. <i>[Signature]</i>		8-20-18 2:18		Becky Griffin		3. <i>[Signature]</i>		8-20-18 2:18		Becky Griffin					
3. Relinquished by:		Date Time:		Received By:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:					
Relinquished by:		Date Time:		Received By:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:					
5. Relinquished by:		Date Time:		Received By:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:					
6. Relinquished by:		Date Time:		Received By:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:					
6		6		6		6		6		6		6		6		6					

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.

IN ID: H08A (070) 392-1000
**
MAIL SERVICES ETC, LLC
4008 N GRIMES
HOBBS, NM 88240
UNITED STATES US

SHIP DATE: 20AUG18
ACTWGT: 13.00 LB MAN
CAD: 0909328/CAFE3210
DIMS: 15x11x9 IN
BILL RECIPIENT

TO XENCO LABORATORIES
XENCO LABORATORIES
1211 W FLORIDA AVE

MIDLAND TX 79701

(432) 563-1800

REF:

DEPT:

INV:
PO:



FedEx
Express



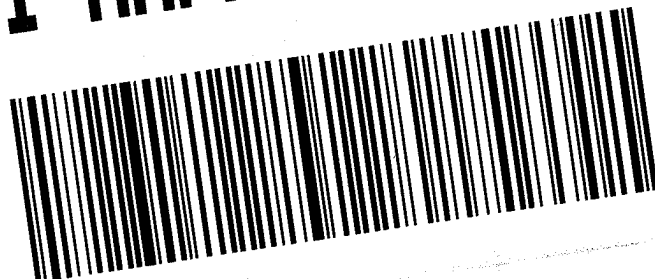
J18118042001uv

TUE - 21 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 6606 3917 6175
0201

41 MAFA

79701
TX-US LBB



Part # 156148-434 RRD 09/16



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 08/21/2018 10:35:00 AM

Work Order #: 596453

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Brianna Teel

Brianna Teel

Date: 08/21/2018

Checklist reviewed by:

Kelsey Brooks

Kelsey Brooks

Date: 08/21/2018

Site Name: White Falcon 16 State #23

Date: 8/17/2018

Soil Profile

Description	ft. bgs
	0
Caliche / Sand Mix	1
	2
Red Sand	3
"	4
	5
"	6
Red Sand w/ Clay	7
	8
	9
	10
	11
	12
	13
	14
Red / Brown Sand w/ Clay	15
	16 TO



Figure 1 - Photograph of the Site during initial Investigation, facing North



Figure 2 - Photograph of the Site during initial Investigation, facing West



Figure 3 - Photograph of the Site during initial Investigation, facing East



Figure 4 - Photograph of Geoprobing activities, facing South

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

State of New Mexico
Energy Minerals and Natural Resources

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

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: White Falcon 16 State #023H	Facility Type: Well	
Surface Owner: State	Mineral Owner: State	API No.: 30-025-43699

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	16	25S	35E	226	North	812	West	Lea

Latitude: 32.13689 Longitude: -103.377934 NAD83

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 53bbls	Volume Recovered: 15bbls
Source of Release: Flowline	Date and Hour of Occurrence: 11/18/2017 2:00pm	Date and Hour of Discovery: 11/18/2017 2:00pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Olivia Yu-NMOCD Amber Groves-NMSLO	
By Whom? Rebecca Haskell	Date and Hour: 11/18/2017 5:19pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED

By Olivia Yu at 8:31 am, Nov 28, 2017



Describe Cause of Problem and Remedial Action Taken.*

A third party contractor struck a buried poly flowline coming from the White Falcon 16 State #001H Battery while digging. The line was repaired and put back into service.

Describe Area Affected and Cleanup Action Taken.*

The release was contained to a 66' x 30' area on the north edge of the location. A vacuum truck was dispatched to the site to recover 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.

Signature: 		OIL CONSERVATION DIVISION	
Printed Name: Sheldon L. Hitchcock		Approved by Environmental Specialist: 	
Title: HSE Coordinator		Approval Date: 11/28/2017	Expiration Date:
E-mail Address: slhitchcock@concho.com		Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 11/20/2017	Phone: 575-746-2010		

* Attach Additional Sheets If Necessary

1RP-4881

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