



Revised Remediation Summary and Site Closure Request

March 18, 2020

Frepared by: Jared Stoffel, PG Project Manager

White Federal Com #001H (2RP-5470)

Prepared For:

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Curt Stanley

Senior Project Manager



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1.0 Introduction and Background Information

TRC Environmental Corporation (TRC), on behalf of COG Operating, LLC (COG), has prepared this *Revised Remediation Summary and Site Closure Request* for the Release at the Site known as the White Federal Com #001H (the Site). The legal description of the Site is Unit Letter "I", Section 28, Township 25 South, Range 29 East, in Eddy County, New Mexico. The subject property is owned by the Federal government and administered by Bureau of Land Management (BLM). The GPS coordinates for the Site are N 32.0981°, W 103.9818°. A topographical map is provided as **Figure 1**. Photographs are provided in the photolog as **Appendix A**.

On May 19, 2019, COG discovered a produced water release had occurred at the Site. The Release was attributed to a flowline failure, which impacted pastureland. On the discovery date, COG notified the New Mexico Oil and Conservation Division (NMOCD) and Bureau of Land Management (BLM) of the Release and the Release was assigned an NMOCD Reference number of 2RP-5470. During the initial response activities, a vacuum truck was dispatched to recover all freestanding fluids. On June 4, 2019, the initial Release Notification and Corrective Action (Form C-141) was submitted to the NMOCD. The Form C-141 indicated twenty (20) barrels (bbls) of produced water was released. No produced water was recovered during the initial response activities. The release affected an area measuring approximately nineteen-hundred (1,900) square feet (sq. ft.). A copy of the submitted Form C-141 for the Release is provided in **Appendix D**.

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) did not identify any registered water wells in Section 28, Township 25 South, Range 29 East. A reference map utilized by the NMOCD indicates groundwater should be encountered at less than twenty-five (25) feet below ground surface (bgs). No water wells were observed within one-thousand (1,000) feet of the Site. No surface water was observed within one-thousand (1,000) feet of the Release. An aerial map of the site location is provided as **Figure 2**.

Based on the depth to groundwater at the White Federal Com #001H Release Site, the NMOCD Closure Criteria for Soils Impacted by a Release are the most stringent closure criteria listed. In addition, the White Federal Com #001H is located in the 'medium karst' area as outlined in the BLM publicly available Karst Potential Map, provided as **Figure 3**. Subsequently, COG will utilize the most stringent NMOCD Closure Criteria for Soils Impacted by a Release for the White Federal Com #001H as follows:

- Benzene 10 mg/kg
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) 50 mg/kg
- Total Petroleum Hydrocarbons (TPH) –100 mg/kg
- Chloride 600 mg/kg

2.0 Initial Delineation Investigation

On July 30, 2019, an initial investigation was conducted at the Release Site. During the initial investigation activities, three (3) test trenches (TT-1, TT-2, and TT-3) were advanced within the



Release margins with an excavator, due to the hard rock layer located approximately one (1) foot bgs. The Release area was inferred from GPS data obtained from COG, as there was little hydrocarbon staining or chloride crusting observed in the Release area. Nine (9) soil samples (TT-1 @ 0-1', TT-1 @ 2', TT-1 @ 3', TT-2 @ 0-1', TT-2 @ 2', TT-2 @ 3', TT-3 @ 0-1', TT-3 @ 2', and TT-3 @ 3') were collected from the three (3) trench locations and submitted to Xenco Laboratories in Midland, TX for chloride analysis. Each soil sample exhibited chloride concentrations below NMOCD regulatory guidelines, with the exception of soil samples TT-1 @ 0-1' and TT-3 @ 0-1', which exhibited chloride concentrations of 1,010 mg/kg and 2,820 mg/kg, respectively. Please reference Figure 4 – Excavation & Sample Location Map for sample and release location information. Please reference Table 1- Concentrations of Benzene, BTEX, TPH and Chloride in Soil for a summary of the analytical data.

3.0 Remediation Activities

On August 2, 2019, remediation activities commenced at the Release Site. The area represented by test trench location TT-1 was excavated to a depth of approximately thirty (30) inches bgs. The northern portion of the area represented by test trench TT-2 was excavated to a depth of approximately twelve (12) inches bgs. Excavated soil was stockpiled on a plastic liner, pending disposition at an NMOCD approved disposal facility. Seven (7) five-point composite floor confirmation soil samples (FL-1-2.5, FL-2-2.5, FL-3-2.5, FL-4-2.5, FL-5-2.5, FL-6-2.5, FL-7-1) were collected from the base of the excavation. Five (5) five-point composite sidewall confirmation soil samples (SW-N1-1.25, SW-E1-1.25, SW-W1-1.25, SW-W2-0.5, and SW-E2-0.5) were collected from the excavation walls. The sidewall represented by soil sample SW-E1-1.25 was advanced to the east to the maximum extent practicable without interfering with the adjacent surface flowlines and a high traffic lease road. To characterize the area between the sidewall and the lease road, two (2) grab samples (SW-E1B-1.25 and SW-E1C-1.25) were collected adjacent to SW-E1-1.25 at 1.25 feet bgs. Collected soil samples were submitted to Xenco Laboratories in Midland, TX for chloride and/or TPH and BTEX analyses. TPH and BTEX concentrations were below laboratory reporting limits in each sample submitted for TPH and BTEX analyses. Chloride concentrations were below NMOCD regulatory guidelines in each submitted soil sample, with the exception of soil samples SW-E1-1.25, SW-E1B-1.25, and SW-E1C-1.25. Excavation continued to the south and the remainder of the area represented by soil sample TT-2 was excavated to twelve (12) inches bgs and the area represented by soil sample TT-3 was excavated to eighteen (18) inches bgs.

On August 5, 2019, seven (7) five-point composite floor confirmation soil samples (FL-8-1, FL-9-1.5, FL-10-1.5, FL-11-1.5, FL-12-1.5, FL-13-1.5, and FL-14-1.5) were collected from the base of the excavation. Five (5) five-point composite sidewall confirmation soil samples (SW-W3-0.5, SW-E3-0.5, SW-W4-0.75, SW-E4-0.75, and SW-S1-0.75) were collected from the excavation sidewalls. Collected soil samples were submitted to Xenco Laboratories for chloride and/or TPH and BTEX analyses. Each soil sample submitted for BTEX analysis exhibited BTEX concentrations below the laboratory reporting limit. Each soil sample submitted for TPH analysis exhibited TPH concentrations below the NMCOD regulatory guidelines. Each soil sample submitted for chloride analysis exhibited chloride concentrations below NMOCD regulatory



guidelines, with the exception of soil sample SW-E4-0.75. Following review of the analytical data, the sidewall represented by soil sample SW-E4-0.75 was advanced laterally to the east.

On August 6, 2019, one (1) five-point composite sidewall confirmation soil sample (SW-E4R-0.75) was collected from the sidewall, which was laterally advanced due to the exceedance of NMOCD regulatory guidelines in soil sample SW-E4-0.75. The soil sample was submitted to Xenco Laboratories for chloride analysis. The analytical results indicated the soil sample exhibited a chloride concentration below NMOCD regulatory guidelines.

The excavated material was transported under manifest to the R360 Red Bluff Facility for final disposition. The excavation was backfilled to grade with locally sourced, non-impacted 'like' material. A review of the analytical results indicated the collected soil samples exhibited concentrations below NMOCD regulatory guidelines for each constituent of concern, with the exception of soil samples SW-E1-1.25, SW-E1B-1.25, and SW-E1C-1.25. A deferral request was submitted to the BLM and NMOCD to allow the area represented by soil samples SW-E1-1.25, SW-E1B-1.25 and SW-E1C-1.25 in place.

4.0 Additional Remediation Activities

The deferral request was denied by both the BLM and the NMOCD. The BLM and NMOCD requested the area represented by soil samples SW-E1-1.25, SW-E1B-1.25 and SW-E1C-1.25 be excavated.

On October 23, 2019, the area underlying the surface flowlines and represented by soil samples SW-E1-1.25, SW-E1B-1.25, and SW-E1C-1.25 was excavated to a depth of approximately three (3) feet bgs, spanning from the previous excavation to the edge of the lease road. Following the excavation activities, two (2) five-point composite soil samples (FL-15-3 and FL-16-3) were collected from the base of the excavation. Three (3) five-point composite soil samples (SW-N1-1.5, SW-S1-1.5, and SW-E1D-1.5) were collected from the sidewalls of the excavation. The soil samples were submitted to the laboratory for chloride analysis. Each submitted soil sample exhibited chloride concentrations below NMOCD regulatory guidelines, with the exception of SW-E1D-1.5, which exhibited a chloride concentration of 695 mg/kg. The excavation could not be laterally advanced to the east, as the sidewall was at the margin of the lease road. Subsequently, the area represented by SW-E1D-1.5 was left in-situ.

The additional excavated material was transported under manifest to the R360 Red Bluff Facility for final disposition. The excavation was backfilled to grade with locally sourced, non-impacted 'like' material. A review of the analytical results indicated the collected soil samples exhibited concentrations below NMOCD regulatory guidelines for each constituent of concern, with the exception of SW-E1D-1.5. Please reference Figure 4 – Excavation & Sample Location Map for sample and release location information. Please reference Table 1- Concentrations of Benzene, BTEX, TPH and Chloride in Soil for a summary of the analytical data.



5.0 Re-Sampling of Lease Road Margin

On January 9, 2020, the NMOCD denied the submitted closure request due to the slightly elevated chloride concentration in soil sample SW-E1D-1.5, which was left in-situ. The soil sample was collected at the margin of the high-traffic lease road, and the sample location was immediately underlying the margin of the lease road. Further excavation to the east into the roadway was deemed a safety hazard. Several rain events between October 2019 and January 2020 were documented, and the sample location SW-E1D-1.5 was re-sampled to determine the effect of the rain on the chloride concentrations at the margin of the lease road. Soil sample SW-E1D-1.5R was collected from the area previously represented by soil sample SW-E1D-1.5 and was submitted to the laboratory for chloride analysis. A review of analytical results indicated the chloride concentrations exhibited by soil sample SW-E1D-1.5R was below NMOCD regulatory guidelines. COG asserts soil sample SW-E1D-1.5R is representative of the concentrations at the margin of the lease road following the rain events, and all soil at the Release Site with chloride concentrations above NMOCD regulatory guidelines has been removed from the Site. Please reference Figure 4 - Excavation & Sample Location Map for sample and release location information. Please reference Table 1- Concentrations of Benzene, BTEX, TPH and Chloride in Soil for a summary of the analytical data.

6.0 Site Closure Request

The laboratory analytical results from confirmation soil samples indicated TPH, BTEX, and/or chloride concentrations were below the NMOCD regulatory guidelines in the relevant submitted soil samples. Based on laboratory analytical results and field activities conducted to date, TRC recommends COG provide copies of this Remediation Summary and Site Closure Request to the NMOCD and BLM and request closure status to the White Federal Com #001H.

7.0 Limitation

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

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

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.



8.0 Distribution

Copy 1: Mike Bratcher

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division, District 2

811 S. First Street Artesia, NM 88210

Copy 2: Jim Amos

U.S. Department of the Interior

Carlsbad Field Office 620 E Greene Street

Carlsbad, New Mexico 88220

Copy 3: Ike Tavarez

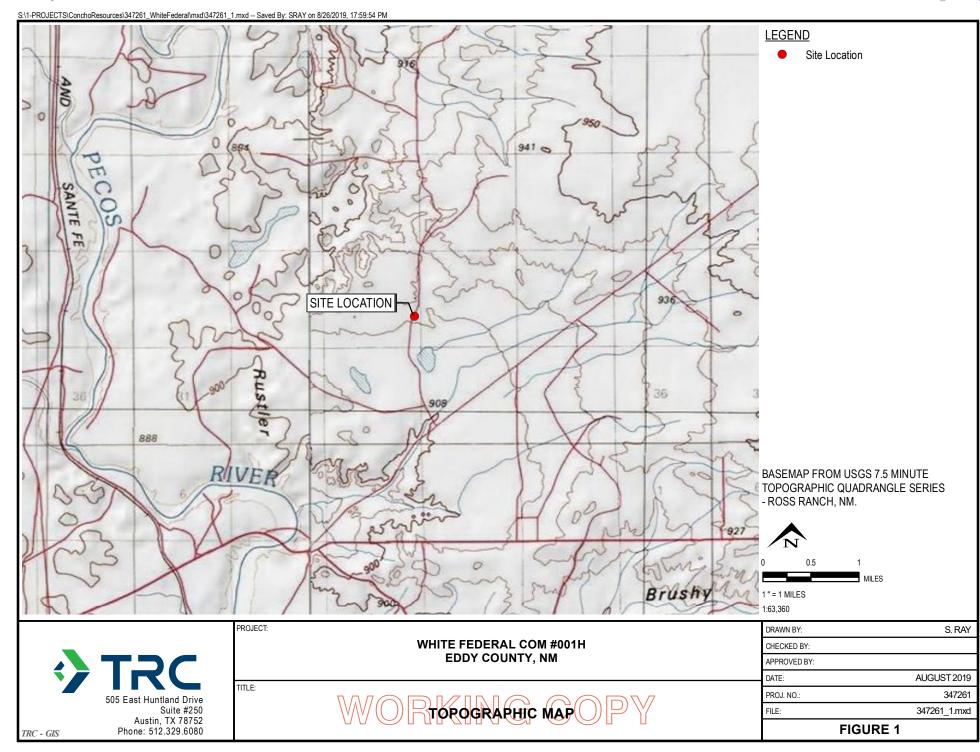
COG Operating, LLC 600 W. Illinois Avenue Midland, Texas 79701

Copy4: TRC Environmental Corporation

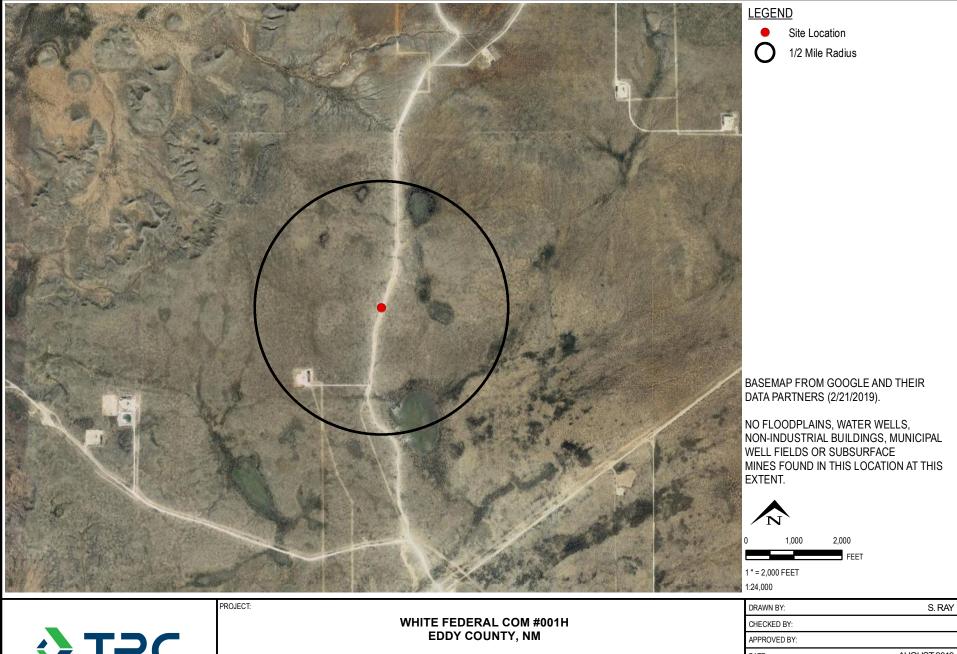
10 Desta Dr STE 150E Midland, TX 79705

Table 1: Concentrations of BTEX, TPH and/or Chloride in Soil											
				SW 846	8021B		SW	/ 846 8015M E	xt.		E 300
Sample ID	Date	Depth	Soil Status	Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	$\begin{aligned} GRO + DRO \\ C_{6}.C_{28} \\ (mg/kg) \end{aligned}$	ORO C ₂₈ - C ₃₅ (mg/kg)	TPH C ₆ -C ₃₅ (mg/kg)	Chloride (mg/kg)
TT-1 @ 0-1'	7/30/19	0-1'	Excavated	-	-	-	-	-	-	-	1,010
TT-1 @ 2'	7/30/19	2'	Excavated	-	-	-	-	-	-	-	344
TT-1 @ 3'	7/30/19	3'	In-Situ	-	-	-	-	-	-	-	120
TT-2 @ 0-1'	7/30/19	0-1'	Excavated	-	-	-	-	-	-	-	504
TT-2 @ 2'	7/30/19	2'	In-Situ	-	-	-	-	-	-	-	150
TT-2 @ 3'	7/30/19	3'	In-Situ	-	-	-	-	-	-	-	240
TT-3 @ 0-1'	7/30/19	0-1'	Excavated	-	-	-	-	-	-	-	2,820
TT-3 @ 2'	7/30/19	2'	In-Situ	-	-	-	-	-	-	-	206
TT-3 @ 3'	7/30/19	3'	In-Situ	-	-	-	-	-	-	-	50.0
SW-N1-1.25	8/2/19	1.25	In-Situ	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15	241
SW-E1-1.25	8/2/19	1.25	Excavated	-	-	-	-	-	-	-	10,200
SW-E1B-1.25	8/2/19	1.25	Excavated	-	-	-	-	-	-	-	11,600
SW-E1C-1.25	8/2/19	1.25	Excavated	-	-	-	-	-	-	-	6,090
SW-W1-1.25	8/2/19	1.25	In-Situ	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15	179
FL-1-2.5	8/2/19	2.5	In-Situ	-	-	-	-	-	-	-	280
FL-2-2.5	8/2/19	2.5	In-Situ	-	-	-	-	-	-	-	288
FL-3-2.5	8/2/19	2.5	In-Situ	-	-	-	-	-	-	-	317
FL-4-2.5	8/2/19	2.5	In-Situ	<0.00200	<0.002	<15.0	<15.0	<15.0	<15.0	<15	411
FL-5-2.5	8/2/19	2.5	In-Situ	-	-	-	-	-	-	-	501
FL-6-2.5	8/2/19	2.5	In-Situ	-	-	-	-	-	-	-	296
FL-7-1	8/2/19	1	In-Situ	-	-	-	-	-	-	-	324
SW-W2-0.5	8/2/19	0.5	In-Situ	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15	122
SW-E2-0.5	8/2/19	0.5	In-Situ	-	-	-	-	-	-	-	375
FL-8-1	8/5/19	1	In-Situ	<0.00199	0.02612	<15.0	<15.0	<15.0	<15.0	<15	72.7
FL-9-1.5	8/5/19	1.5	In-Situ	-	-	-	-	-	-	-	333
FL-10-1.5	8/5/19	1.5	In-Situ	-	-	-	-	-	-	-	210
NI	MOCD Closure C	Criteria		10	50	-	-	-	-	100	600

Table 1: Concentrations of BTEX, TPH and/or Chloride in Soil											
				SW 846	8021B		SW	/ 846 8015M E	xt.		E 300
Sample ID	Date	Depth	Soil Status	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)
FL-11-1.5	8/5/19	1.5	In-Situ	-	-	-	-	-	-	-	313
FL-12-1.5	8/5/19	1.5	In-Situ	<0.00200	<0.002	<15.0	43.9	43.9	<15.0	43.9	114
FL-13-1.5	8/5/19	1.5	In-Situ	-	-	-	-	-	-	-	270
FL-14-1.5	8/5/19	1.5	In-Situ	-	-	-	-	-	-	-	422
SW-W3-0.5	8/5/19	0.5	In-Situ	-	-	-	-	-	-	-	589
SW-E3-0.5	8/5/19	0.5	In-Situ	<0.00198	<0.00198	<15.0	<15.0	<15.0	<15.0	<15	117
SW-W4-0.75	8/5/19	0.75	In-Situ	-	-	-	-	-	-	-	173
SW-E4-0.75	8/5/19	0.75	Excavated	-	-	-	-	-	-	-	1,180
SW-S1-0.75	8/5/19	0.75	In-Situ	-	-	-	-	-	-	-	186
SW-E4R-0.75	8/6/19	0.75	In-Situ	-	-	-	-	-	-	-	247
SW-N1-1.5	10/23/19	1.5	In-Situ	-	-	-	-	-	-	-	451
SW-S1-1.5	10/23/19	1.5	In-Situ	-	-	-	-	-	-	-	353
SW-E1D-1.5	10/23/19	1.5	Resampled	-	-	-	-	-	-	-	695
FL-15-3	10/23/19	3	In-Situ	-	-	-	-	-	-	-	234
FL-16-3	10/23/19	3	In-Situ	-	-	-	-	-			305
SW-E1D-1.5R	1/9/20	1.5	In-Situ	-	-	-	-	-	-	-	232
N	NMOCD Closure Criteria			10	50	-	-	•	-	100	600



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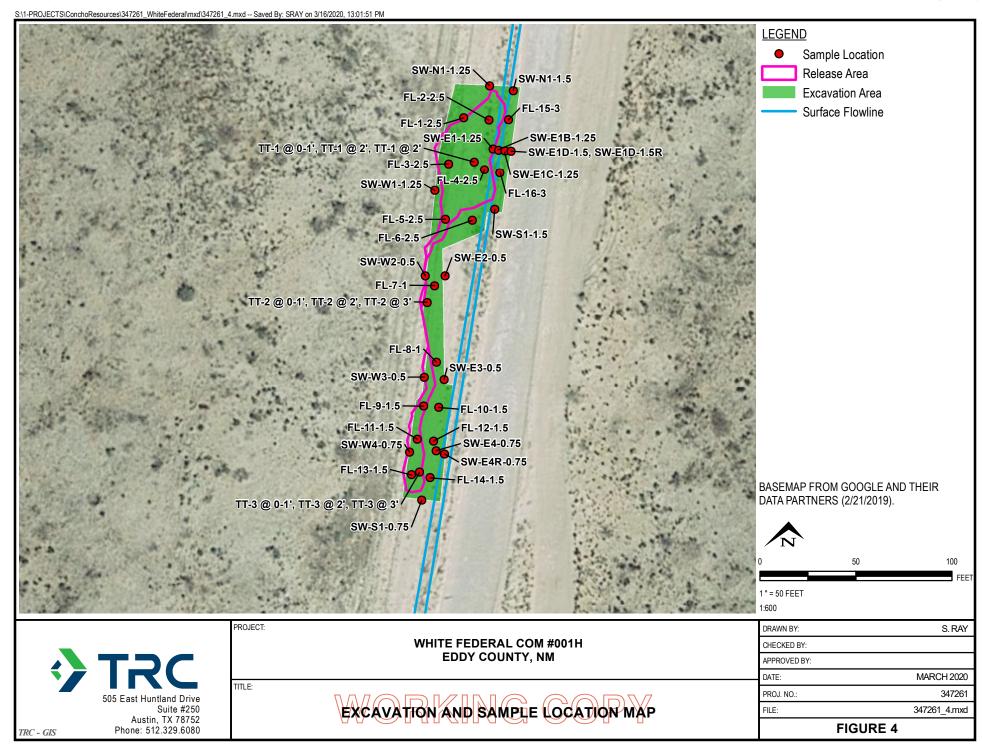
TITLE:

AERIAL MAP

DRAWN BY:	S. RAY
CHECKED BY:	
APPROVED BY:	
DATE:	AUGUST 2019
PROJ. NO.:	347261
FILE:	347261_2.mxd

FIGURE 2

S:\1-PROJECTS\ConchoResources\347261_WhiteFederal\mxd\347261_3.mxd -- Saved By: SRAY on 9/3/2019, 16:35:36 PM **LEGEND** SITE LOCATION HIGH KARST POTENTIAL MEDIUM KARST POTENTIAL LOW KARST POTENTIAL BASEMAP FROM GOOGLE AND THEIR DATA PARTNERS (2/21/2019). KARST DATA FROM NEW MEXICO BUREAU OF LAND MANAGEMENT. 1" = 2 MILES 1:126,720 PROJECT: S. RAY DRAWN BY: WHITE FEDERAL COM #001H CHECKED BY: **EDDY COUNTY, NM** APPROVED BY: DATE: SEPTEMBER 2019 TITLE: PROJ. NO.: 347261 505 East Huntland Drive Suite #250 Austin, TX 78752 Phone: 512.329.6080 KARST POTENTIAL MAP FILE: 347261_3.mxd FIGURE 3 TRC - GIS



Appendix A: Release Notification and Corrective Action (Form C-141)

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

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party				OGRID	OGRID				
Contact Nam	ne			Contact To	Contact Telephone				
Contact ema	Contact email				Incident # (assigned by OCD)				
Contact mail	ing address			1					
			Location	of Release So	ource				
Latitude				Longitude					
			(NAD 83 in de	cimal degrees to 5 decir	nal places)				
Site Name				Site Type					
Date Release	Discovered			API# (if app	plicable)				
Unit Letter	Section	Township	Range	Cour	nty	7			
Crude Oi	Nature and Volume of Release Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below) Crude Oil Volume Released (bbls) Volume Recovered (bbls)								
Produced	Water	Volume Release	ed (bbls)		Volume Reco	overed (bbls)			
		Is the concentrate produced water	tion of dissolved c >10,000 mg/l?	chloride in the	Yes N	No			
Condensa	nte	Volume Release			Volume Recovered (bbls)				
☐ Natural Gas Volume Released (Mcf)				Volume Recovered (Mcf)					
Other (describe) Volume/Weight Released (provide un			e units)	Volume/Wei	ght Recovered (provide units)				
Cause of Rel	ease								

Received by OCD: 4/13/2020 3:57:20 PM Form C-141 State of New Mexico Page 2 Oil Conservation Division

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Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
	T ''' I D
	Initial Response
The responsible p	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
The source of the rele	ease has been stopped.
	s been secured to protect human health and the environment.
Released materials ha	ave been contained via the use of berms or dikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed and managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain why:
has begun, please attach a	AC the responsible party may commence remediation immediately after discovery of a release. If remediation a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred at area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
regulations all operators are public health or the environment failed to adequately investigations.	rmation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and required to report and/or file certain release notifications and perform corrective actions for releases which may endanger ment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have at and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In f a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws
Printed Name:	Title:
Signature:	Opeant Date:
email:	Telephone:
OCD Only	
Received by:	Date:

Received by OCD: 4/13/2020 3:57:20 PM Form C-141 State of New Mexico Page 3 Oil Conservation Division

	Page 18 of 100
Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)				
Did this release impact groundwater or surface water?	☐ Yes ☐ No				
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ No				
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☐ No				
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ No				
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☐ No				
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No				
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No				
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No				
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No				
Are the lateral extents of the release overlying an unstable area such as karst geology?					
Are the lateral extents of the release within a 100-year floodplain?					
Did the release impact areas not on an exploration, development, production, or storage site?					
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.					
Characterization Report Checklist: Each of the following items must be included in the report.					
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs Photographs including date and GIS information Topographic/Aerial maps Laboratory data including chain of custody					

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

Received by OCD: 4/13/2020 3:57:20 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

	Page	19	of	$^{\circ}1$	0	0
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Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a thr addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	offications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have eat to groundwater, surface water, human health or the environment. In
Printed Name	_ Title:
Signature:	Date:
email:	Telephone:
OCD Only	
Received by:	Date:

Received by OCD: 4/13/2020 3:57:20 PM Form C-141 State of New Mexico Oil Conservation Division Page 6

	Page	20	of	10	Į
ent ID				Ì	
-4 DD					

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

A scaled site and sampling diagram as described in 19.15.29.11 NMAC Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection) Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling) Description of remediation activities 1 hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose at threat proundwaters, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowleds by must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Narr: Title: Date: Date:	Closure Report Attachment Checklist: Each of the following is	tems must be included in the closure report.
must be notified 2 days prior to liner inspection) Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling) Description of remediation activities Description of remediation activities Ihereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Nam	A scaled site and sampling diagram as described in 19.15.29.1	11 NMAC
Description of remediation activities		of the liner integrity if applicable (Note: appropriate OCD District office
Thereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Nam** Title: Date: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date: Date: Date:	Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)
and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Nam Title: Date: Title: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date: Date: Date: Date: Date: Date: Date:	☐ Description of remediation activities	
and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Nam Title: Date: Title: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date: Date: Date: Date: Date: Date: Date:		
Date: email: Telephone: OCD Only Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:	and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and replaced human health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the conformation accordance with 19.15.29.13 NMAC including notification to the Conformation of	n release notifications and perform corrective actions for releases which a C-141 report by the OCD does not relieve the operator of liability mediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for ations. The responsible party acknowledges they must substantially enditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.
OCD Only Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:	5:	
OCD Only Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:		
Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:	email:	Telephone:
Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:		
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:	OCD Only	
remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:	Received by:	Date:
	remediate contamination that poses a threat to groundwater, surface	water, human health, or the environment nor does not relieve the responsible
Printed Name: Title:	Closure Approved by:	Date:
	Printed Name:	Title:



Appendix B: Depth to Groundwater Data

Received by OCD: 4/13/2020 3:57:20 PM Page 22 of 100



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

No wells found.

UTMNAD83 Radius Search (in meters):

Easting (X): 595999.25 Northing (Y): 3551295.63 Radius: 805

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.

8/13/19 2:58 PM Page 1 of 1 WELLS WITH WELL LOG INFORMATION



Appendix C: Photographic Documentation

Date: 9/16/19

Photographic Documentation

Photograph No. 1

Date: 7/30/2019

Direction: North

Description: View of the Release area prior to remediation.



Photograph No. 2

Date: 7/30/2019

Direction: North

Description:
View of
delineation
trench prior to
remediation.



Date: 9/16/19

Photographic Documentation

Photograph No. 3

Date: 8/6/2019

Direction: Northwest

Description: View of excavated area.



Photograph No. 4

Date: 8/6/2019

Direction: North

Description:

View of excavated area.



Date: 9/16/19

Photographic Documentation

Photograph No. 5

Date: 8/6/2019

Direction: North

Description: View of excavated area.



Photograph No. 6

Date: 8/8/2019

Direction: Northeast

Description:

View of the remediated area.



Date: 9/16/19

Photographic Documentation

Photograph No. 7

Date: 8/6/2019

Direction: North

Description:
View of
excavated area
adjacent to
requested
deferral area.



Photograph No. 8

Date: 8/6/2019

Direction: Northeast

Description:

View of excavated area adjacent to requested deferral area.





Appendix D: Laboratory Analytical Reports

Analytical Report 632558

for TRC Solutions, Inc

Project Manager: Jared Stoffel White Federal Com #001H

01-AUG-19

Collected By: Client





1211 W. Florida Ave Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142), North Carolina (681)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429), North Carolina (483)





01-AUG-19

Project Manager: **Jared Stoffel TRC Solutions, Inc**2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): 632558

White Federal Com #001H

Project Address:

Jared Stoffel:

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) 632558. 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. 632558 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Vramer

Project Assistant

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 632558



TRC Solutions, Inc, Midland, TX

White Federal Com #001H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TT-1 @ 0-1'	S	07-30-19 11:15	0 - 1 ft	632558-001
TT-1 @ 2'	S	07-30-19 11:20	2 ft	632558-002
TT-1 @ 3'	S	07-30-19 11:25	3 ft	632558-003
TT-2 @ 0-1'	S	07-30-19 11:35	0 - 1 ft	632558-004
TT-2@ 2'	S	07-30-19 11:40	2 ft	632558-005
TT-2 @3'	S	07-30-19 11:45	3 ft	632558-006
TT-3 @ 0-1'	S	07-30-19 11:50	0 - 1 ft	632558-007
TT-3 @ 2'	S	07-30-19 12:00	2 ft	632558-008
TT-3 @ 3'	S	07-30-19 12:05	3 ft	632558-009

CASE NARRATIVE

Client Name: TRC Solutions, Inc Project Name: White Federal Com #001H

Project ID:

Work Order Number(s): 632558

Report Date: 01-AUG-19 Date Received: 07/31/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 632558

TRC Solutions, Inc, Midland, TX

Project Name: White Federal Com #001H



Project Id: Contact:

Jared Stoffel

Project Location:

Report Date: 01-AUG-19 Project Manager: Jessica Kramer

Date Received in Lab: Wed Jul-31-19 09:59 am

	Lab Id:	632558-0	001	632558-002		632558-003		632558-004		632558-005		632558-006			
Analysis Requested	Field Id:	TT-1 @ (TT-1 @ 0-1'		TT-1 @ 2'		TT-1 @ 3'		TT-2 @ 0-1'		TT-2@ 2'		3'		
Anaiysis Kequesieu	Depth:	0-1 ft	0-1 ft		2- ft		3- ft		0-1 ft		2- ft				
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL			
	Sampled:	Jul-30-19 1	Jul-30-19 11:15		Jul-30-19 11:20		Jul-30-19 11:25		1:35	Jul-30-19 11:40		Jul-30-19 11:45			
Chloride by EPA 300	Extracted:	Aug-01-19	Aug-01-19 08:30		Aug-01-19 08:30		08:30	Aug-01-19 (08:30	Aug-01-19 (08:30	Aug-01-19	08:30	Aug-01-19 (08:30
	Analyzed:	Aug-01-19	Aug-01-19 11:11		10:52	Aug-01-19	1:18	Aug-01-19	11:24	Aug-01-19	11:30	Aug-01-19 1	1:49		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		1010	4.98	344	4.99	120	4.98	504	4.96	150	5.00	240	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 - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Version: 1.%

Jessica Kramer

Jessica Kramer Project Assistant



Certificate of Analysis Summary 632558

TRC Solutions, Inc, Midland, TX

Project Name: White Federal Com #001H



Project Id: Contact:

Jared Stoffel

Project Location:

Date Received in Lab: Wed Jul-31-19 09:59 am

Report Date: 01-AUG-19

Project Manager: Jessica Kramer

		632558-00)7	632558-0	08	632558-00	09		
4 1 1 0	Field Id:	TT-3 @ 0-	-1'	TT-3 @ 2	2'	TT-3 @ 3	3'		
Analysis Requested	Depth:	0-1 ft		2- ft		3- ft			
	Matrix:	SOIL	SOIL		SOIL				
	Sampled:	Jul-30-19 1	Jul-30-19 11:50		Jul-30-19 12:00		2:05		
Chloride by EPA 300	Extracted:	Aug-01-19 0	Aug-01-19 08:30		Aug-01-19 08:30		8:30		
	Analyzed:	Aug-01-19 11:55		Aug-01-19 12:02		Aug-01-19 1	2:08		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		2820	25.0	206	5.00	50.0	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 - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Version: 1.%

Jessica Vramer

Jessica Kramer Project Assistant



Flagging Criteria



- Page 35 of 100
- 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.

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

^{**} Surrogate recovered outside laboratory control limit.



BS / BSD Recoveries



Page 36 of 100

Project Name: White Federal Com #001H

Work Order #: 632558

Project ID:

Analyst:

SPC

Date Prepared: 08/01/2019

Date Analyzed: 08/01/2019

Matrix: Solid

Lab Batch ID: 3097154

Sample: 7683285-1-BKS

Batch #: 1

Units:

mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	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
Chloride	<5.00	250	254	102	250	255	102	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

Revised Date 051418 Rev. 2018.1



Chain of Custody

Work Order No: UBJSS

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334 Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tamba,FL (813

		,							5
	2	DO VE							3
ature) Received by: (Signature) Date/Time	Relinquished by: (Signature)	Pale/Time		re)	Recaived by: (Signature)	Recaived I	ure)	by: (Signat	Relinquished by: (Signature)
voluce: signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	ts affiliates and subcontractors. It red by the client if such losses are analyzed. These terms will be enf	company to Xenco, it s or expenses incurre ted to Xenco, but not	om client any losse le submit	urchase order for sponsibility for 5 for each samp	itutes a valid p t assume any r id a charge of \$	f samples const les and shall no each project an	nd relinquishment of the cost of samp	I be liable only n charge of \$75.	of service. Xenco wi
1631 / 245.1 / 7470 / 74	Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	Sb As Ba Be (CRA	TCLP / SPLP 6010: 8RCRA	TCLP / SPI	alyzed	Circle Method(s) and Metal(s) to be analyzed	od(s) and M	Circle Meth
Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn	Cd Ca Cr Co Cu Fe	o As Ba Be B	Al Sb As	/ Texas 11	RA 13PPM	8RCRA	200.8 / 6020:	/ 6010 2	Total 200.7 / 6010
		×	-	3:	12:05	7/30/2019	SS	Π-3 @ 3'	
		×		2'	12:00	7/30/2019	SS	TT-3 @ 2'	
		×	1	0-1'	11:55	7/30/2019	SS	∏-3 @ 0-1'	3-11
		×	1	3.	11:45	7/30/2019	SS	TT-2 @ 3'	TI-
		×	_	2'	11:40	7/30/2019	SS	TT-2 @ 2'	T-
		×	1	0-1'	11:35	7/30/2019	SS	IT-2 @ 0-1'	
		×		ယ္	11:25	7/30/2019	SS	TT-1 @ 3'	17-
		×		2'	11:20	7/30/2019	SS	TT-1 @ 2'	Ţ
		×		0-1'	11:15	7/30/2019	SS	IT-1 @ 0-1'	Ţ.
Sample Comments		Chloride	Numbe	Depth	Time Sampled	Date Sampled	Matrix	Sample Identification	Sample i
lab, if received by 4:30pm		e (E3	r of		Total Containers:	Total	Yes CNO N/A		Sample Custody Seals:
TAT should be		(00)	Co	20	Correction Factor:	Corre	Yes (No N/A		Cooler Custody Seals:
			ntai	A	K		(Yes) No		Received Intact:
			ners) Jec	Thermometer/ID	(10,01	i.	Temperature (°C):
				(Yes No	Wet Ice:	Yes/No/	Temp Blank:	CEIPT	SAMPLE RECEIPT
				Date:	Due Date:		abu	Tania Babu	Sampler's Name:
				Rush: 24hrs	Rush				P.O. Number:
				ne 👿	Routine				Project Number:
IUEST Work Order Notes	ANALYSIS REQUEST			Turn Around	Tu)1H	White Federal Com #001H	White F	Project Name:
Deliverables: EDD ☐ ADaPT ☐ Other:		nies.com	compa	Email: JStoffel@trccompanies.com	Email:		8-3003	(432) 238-3003	Phone:
Reporting:Level II Level III PST/UST TRRP Level IV			. .	City, State ZIP			Midland, TX 79705	Midland	City, State ZIP:
State of Project:				Address:			10 Desta Dr. STE 150 E	10 Dest	Address:
Program: UST/PST PRP Brownfields RRC Superfund		900	. ;	Company Name:				TRC	Company Name:
Work Order Comments		lke Tavarez	ent)	Bill to: (if different)			offel	Jared Stoffe	Project Manager:
813-620-2000) www.xenco.com Page of	Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	55-0900) Atlanta,G	Z (480-3	550) Phoenix,A	M (575-392-7	Hobbs,N			



XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 07/31/2019 09:59:00 AM

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

Work Order #: 632558

Temperature Measuring device used: R8

1101K 01001 W. 002000		
	Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?		.4
#2 *Shipping container in good condition	?	Yes
#3 *Samples received on ice?		Yes
#4 *Custody Seals intact on shipping cor	ntainer/ cooler?	N/A
#5 Custody Seals intact on sample bottle	es?	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 relinqu	uished/ received?	Yes
#10 Chain of Custody agrees with sampl	e 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 indicate	ed test(s)?	Yes
#16 All samples received within hold time	e?	Yes
#17 Subcontract of sample(s)?		N/A
#18 Water VOC samples have zero head	dspace?	N/A
* Must be completed for after-hours de	livery of samples prior to placing in	the refrigerator
Analyst:	PH Device/Lot#:	
Checklist completed by:	Brianna Teel	Date: 07/31/2019
Checklist reviewed by:	Jessica Kramer	Date: 07/31/2019

Analytical Report 632964

for TRC Solutions, Inc

Project Manager: Jared Stoffel White Federal Com #001H

13-AUG-19

Collected By: Client





1211 W. Florida Ave Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142), North Carolina (681)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429), North Carolina (483)





13-AUG-19

Project Manager: **Jared Stoffel TRC Solutions, Inc**2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): 632964

White Federal Com #001H

Project Address:

Jared Stoffel:

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) 632964. 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. 632964 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Vramer

Project Assistant

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 632964



TRC Solutions, Inc, Midland, TX

White Federal Com #001H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW-N1-1.25	S	08-02-19 10:00	1.25	632964-001
SW-E1-1.25	S	08-02-19 10:05	1.25	632964-002
SW-E1B-1.25	S	08-02-19 10:10	1.25	632964-003
SW-ECC-1.25	S	08-02-19 10:15	1.25	632964-004
SW-W1-1.25	S	08-02-19 10:20	1.25	632964-005
FL-1-2.5	S	08-02-19 10:25	2.5	632964-006
FL-2-2.5	S	08-02-19 10:30	2.5	632964-007
FL-3-2.5	S	08-02-19 10:35	2.5	632964-008
FL-4-2.5	S	08-02-19 10:40	2.5	632964-009
FL-5-2.5	S	08-02-19 10:45	2.5	632964-010
FL-6-2.5	S	08-02-19 10:50	2.5	632964-011
FL-7-1	S	08-02-19 12:00	1	632964-012
SW-W2-0.5	S	08-02-19 12:05	0.5	632964-013
SW-E2-0.5	S	08-02-19 12:10	0.5	632964-014

CASE NARRATIVE

Client Name: TRC Solutions, Inc Project Name: White Federal Com #001H

Project ID:

Work Order Number(s): 632964

Report Date: 13-AUG-19 Date Received: 08/05/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3097573 Inorganic Anions by EPA 300

Lab Sample ID 632970-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 632964-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012.

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

Batch: LBA-3097581 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered below QC limits. Matrix interferences is suspected.

Samples affected are: 632964-014.

Batch: LBA-3097798 BTEX by EPA 8021B

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

Batch: LBA-3098311 BTEX by EPA 8021B

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



TRC Solutions, Inc, Midland, TX

Project Name: White Federal Com #001H

Page 43 of 1

Project Id: Contact:

Jared Stoffel

Project Location:

Date Received in Lab: Mon Aug-05-19 10:02 am

Report Date: 13-AUG-19

Project Manager: Jessica Kramer

	Lab Id:	632964-0	01	632964-0	02	632964-0	03	632964-0	04	632964-0	005	632964-0	006
A sambusin Damuandad	Field Id:	SW-N1-1	.25	SW-E1-1	.25	SW-E1B-1	.25	SW-ECC-	1.25	SW-W1-	1.25	FL-1-2.	5
Analysis Requested	Depth:	1.25-		1.25-		1.25-		1.25-		1.25-		2.5-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-02-19	10:00	Aug-02-19	10:05	Aug-02-19	10:10	Aug-02-19	10:15	Aug-02-19	10:20	Aug-02-19	10:25
BTEX by EPA 8021B	Extracted:	Aug-09-19	10:30							Aug-05-19	11:00		
	Analyzed:	Aug-11-19	13:20							Aug-06-19	04:33		
	Units/RL:	mg/kg	RL							mg/kg	RL		
Benzene	·	< 0.00200	0.00200							< 0.00199	0.00199		
Toluene		< 0.00200	0.00200							< 0.00199	0.00199		
Ethylbenzene		< 0.00200	0.00200							< 0.00199	0.00199		
m,p-Xylenes		< 0.00399	0.00399							< 0.00398	0.00398		
o-Xylene			0.00200							< 0.00199	0.00199		
Total Xylenes		< 0.002	0.002							< 0.00199	0.00199		
Total BTEX		< 0.002	0.002							< 0.00199	0.00199		
Chloride by EPA 300	Extracted:	Aug-05-19	15:30	Aug-05-19	15:30	Aug-05-19 1	15:30	Aug-05-19	15:30	Aug-05-19	15:30	Aug-05-19	15:30
	Analyzed:	Aug-05-19	17:27	Aug-05-19	17:16	Aug-05-19 1	17:22	Aug-05-19	17:43	Aug-05-19	17:49	Aug-05-19	18:05
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		241	5.01	10200	49.8	11600	50.2	6090	49.9	179	4.97	280	5.03
TPH by SW8015 Mod	Extracted:	Aug-05-19	17:00							Aug-05-19	17:00		
	Analyzed:	Aug-06-19 (03:43							Aug-06-19	04:06		
	Units/RL:	mg/kg	RL							mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0							<15.0	15.0		
Diesel Range Organics (DRO)		<15.0	15.0							<15.0	15.0		
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0							<15.0	15.0		
Total TPH		<15	15			· ·		· ·		<15	15		

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

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

Jessica Vramer



TRC Solutions, Inc, Midland, TX

Project Name: White Federal Com #001H



Project Id: Contact:

Jared Stoffel

Project Location:

Date Received in Lab: Mon Aug-05-19 10:02 am

Report Date: 13-AUG-19

Project Manager: Jessica Kramer

					1								
	Lab Id:	632964-0	007	632964-0	008	632964-0	009	632964-0	10	632964-0)11	632964-0	012
Analysis Requested	Field Id:	FL-2-2.	5	FL-3-2.	.5	FL-4-2.	5	FL-5-2.	5	FL-6-2.	5	FL-7-1	l
Analysis Requesieu	Depth:	2.5-		2.5-		2.5-		2.5-		2.5-		1-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-02-19	10:30	Aug-02-19	10:35	Aug-02-19	10:40	Aug-02-19	10:45	Aug-02-19	10:50	Aug-02-19	12:00
BTEX by EPA 8021B	Extracted:					Aug-05-19	11:00						
	Analyzed:					Aug-06-19 (04:55						
	Units/RL:					mg/kg	RL						
Benzene	,					< 0.00200	0.00200						
Toluene						< 0.00200	0.00200						
Ethylbenzene						< 0.00200	0.00200						
m,p-Xylenes						< 0.00399	0.00399						
o-Xylene						< 0.00200	0.00200						
Total Xylenes						< 0.002	0.002						
Total BTEX						< 0.002	0.002						
Chloride by EPA 300	Extracted:	Aug-05-19	15:30	Aug-05-19	15:30	Aug-05-19	15:30	Aug-05-19	15:30	Aug-05-19	15:30	Aug-05-19	15:30
	Analyzed:	Aug-05-19	18:11	Aug-05-19	18:16	Aug-05-19	18:21	Aug-05-19	18:27	Aug-05-19	18:32	Aug-05-19	18:38
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		288	5.02	317	5.01	411	4.99	501	5.04	296	5.02	324	5.05
TPH by SW8015 Mod	Extracted:					Aug-05-19	17:00						
	Analyzed:					Aug-06-19 (04:29						
	Units/RL:					mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)						<15.0	15.0						
Diesel Range Organics (DRO)						<15.0	15.0						
Motor Oil Range Hydrocarbons (MRO)						<15.0	15.0						
Total TPH						<15	15						

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Jessica Weamer



TRC Solutions, Inc, Midland, TX

Project Name: White Federal Com #001H



Project Id: Contact:

Jared Stoffel

Project Location:

Date Received in Lab: Mon Aug-05-19 10:02 am

Report Date: 13-AUG-19 Project Manager: Jessica Kramer

	Lab Id:	632964-0	13	632964-0	14			
Analysis Requested	Field Id:	SW-W2-0	0.5	SW-E2-0	.5			
Anatysis Requestea	Depth:	0.5-		0.5-				
	Matrix:	SOIL		SOIL				
	Sampled:	Aug-02-19	12:05	Aug-02-19 1	12:10			
BTEX by EPA 8021B	Extracted:	Aug-05-19	11:00					
	Analyzed:	Aug-06-19 (05:20					
	Units/RL:	mg/kg	RL					
Benzene		< 0.00199	0.00199					
Toluene		< 0.00199	0.00199					
Ethylbenzene		< 0.00199	0.00199					
m,p-Xylenes		< 0.00398	0.00398					
o-Xylene		< 0.00199	0.00199					
Total Xylenes		< 0.00199	0.00199					
Total BTEX		< 0.00199	0.00199					
Chloride by EPA 300	Extracted:	Aug-05-19	17:30	Aug-06-19 1	6:00			
	Analyzed:	Aug-05-19 2	23:55	Aug-07-19 (00:50			
	Units/RL:	mg/kg	RL	mg/kg	RL			
Chloride		122	4.96	375	4.98			
TPH by SW8015 Mod	Extracted:	Aug-09-19	12:00					
	Analyzed:	Aug-11-19 (01:10					
	Units/RL:	mg/kg	RL					
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0					
Diesel Range Organics (DRO)		<15.0	15.0					
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0					_
Total TPH		<15	15					

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

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Jessica Weamer

Jessica Kramer Project Assistant



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.

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

^{**} Surrogate recovered outside laboratory control limit.



Project Name: White Federal Com #001H

Work Orders: 632964, 632964

Lab Batch #: 3097581 Sample: 632964-001 / SMP **Project ID:**

Matrix: Soil Batch: 1

Date Analyzed: 08/06/19 03:43 Units: mg/kg SURROGATE RECOVERY STUDY Amount True Control TPH by SW8015 Mod **Found** Amount Recovery Limits Flags [A] [B] %R %R [D]**Analytes** 1-Chlorooctane 70-135 91.4 99.8 92 o-Terphenyl 39.0 49.9 78 70-135

Lab Batch #: 3097581

Sample: 632964-005 / SMP

Matrix: Soil

Units:

mg/kg

Units:	mg/kg	Date Analyzed: 08/06/19 04:06	SU	RROGATE RI	ECOVERY S	STUDY	
	ТРН	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1-Chlorood	ctane		85.3	100	85	70-135	
o-Terphen	vl		35.0	50.0	70	70-135	

Lab Batch #: 3097581

o-Terphenyl

Sample: 632964-009 / SMP

Batch:

Matrix: Soil

Units:	mg/kg	Date Analyzed: 08/06/19 04:29	SU	RROGATE RI	ECOVERY S	STUDY	
	ТРН	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1-Chlorood	ctane		88.3	99.9	88	70-135	
o-Terphen	yl		36.0	50.0	72	70-135	

Lab Batch #: 3097798

Sample: 632964-005 / SMP

Batch:

Units:	mg/kg	Date Analyzed: 08/06/19 04:33	SU	RROGATE R	ECOVERY S	STUDY	
	BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluor	robenzene		0.0285	0.0300	95	70-130	
4-Bromofly	uorobenzene		0.0375	0.0300	125	70-130	

Lab Batch #: 3097798

Sample: 632964-009 / SMP

Batch:

Matrix: Soil

SURROGATE RECOVERY STUDY

Units:

mg/kg

Date Analyzed: 08/06/19 04:55

		into office in	Jeo (Litt)	31021	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		
1,4-Difluorobenzene	0.0287	0.0300	96	70-130	
4-Bromofluorobenzene	0.0388	0.0300	129	70-130	

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Project Name: White Federal Com #001H

Work Orders: 632964, 632964

Sample: 632964-013 / SMP

Project ID:

Lab Batch #: 3097798

Matrix: Soil Batch:

Units: mg/kg	Date Analyzed: 08/06/19 05:20	SU	RROGATE RI	ECOVERY S	STUDY	
ВТ	EX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0286	0.0300	95	70-130	
4-Bromofluorobenzene		0.0359	0.0300	120	70-130	

Lab Batch #: 3098132

Sample: 632964-013 / SMP

Batch: 1

Matrix: Soil

Units:

mg/kg

Date Analyzed: 08/11/19 01:10

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.3	99.9	89	70-135	
o-Terphenyl	42.7	50.0	85	70-135	

Lab Batch #: 3098311

Sample: 632964-001 / SMP

Batch:

Matrix: Soil

Units:

mg/kg

Date Analyzed: 08/11/19 13:20

SURROGATE RECOVERY STUDY Amount True Control BTEX by EPA 8021B Limits Found Amount Recovery Flags %R %R [A] [B] [D] **Analytes** 1,4-Difluorobenzene 0.0318 0.0300 106 70-130 4-Bromofluorobenzene 0.0316 0.0300 105 70-130

Lab Batch #: 3097798

Sample: 7683491-1-BLK / BLK

Batch:

Matrix: Solid

Units:	mg/kg	Date Analyzed: 08/05/19 11:34	SURROGATE RECOVERY STUDY						
	вте	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
		Analytes			[D]				
1,4-Difluor	robenzene		0.0294	0.0300	98	70-130			
4-Bromoflu	uorobenzene		0.0301	0.0300	100	70-130			

Lab Batch #: 3097581

Sample: 7683530-1-BLK / BLK

Batch:

Matrix: Solid

SURROGATE RECOVERY STUDY

Units:

o-Terphenyl

mg/kg

Date Analyzed: 08/05/19 19:53

•	SCHROGIIE RECOVERI SICEI					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes	[22]	[2]	[D]	, , ,		
1-Chlorooctane	97.3	100	97	70-135		
o-Ternhenyl	11.2	50.0	88	70-135		

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Project Name: White Federal Com #001H

Work Orders: 632964, 632964

Sample: 7683939-1-BLK / BLK

Project ID:

Lab Batch #: 3098132

Matrix: Solid Batch:

Units:	mg/kg	Date Analyzed: 08/10/19 17:19	SURROGATE RECOVERY STUDY						
TPH by SW8015 Mod Analytes			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chlorooc	tane		91.1	100	91	70-135			

46.5

Lab Batch #: 3098311

Sample: 7683893-1-BLK / BLK

50.0 Batch: Matrix: Solid

Units:

o-Terphenyl

mg/kg

Date Analyzed: 08/11/19 06:19

SUDDOCATE DECOVEDV STUDY

93

70-135

Omes. Ingreg Duce Many 2cu. 00/11/19 00:19	SURRUGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes			[D]			
1,4-Difluorobenzene	0.0308	0.0300	103	70-130		
4-Bromofluorobenzene	0.0321	0.0300	107	70-130		

Lab Batch #: 3097798

Sample: 7683491-1-BKS / BKS

Batch: 1

Matrix: Solid

Units:

mg/kg

/kg	Date Analyzed: 08/05/19 09:53	SU	SURROGATE RECOVERY STUDY					
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
	Analytes			[D]				
e		0.0297	0.0300	99	70-130			
ene		0.0318	0.0300	106	70-130			

4-Bromofluorobenzene Lab Batch #: 3097581

1,4-Difluorobenzene

Sample: 7683530-1-BKS / BKS

Batch:

Matrix: Solid

Units:	mg/kg	Date Analyzed: 08/05/19 20:17	7 SURROGATE RECOVERY STUDY						
	ТРН	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
		Analytes			[10]				
1-Chlorooct	ane		100	100	100	70-135			
o-Terphenyl	1		44.1	50.0	88	70-135			

Lab Batch #: 3098132

Sample: 7683939-1-BKS / BKS

Batch:

Matrix: Solid

I Inite

Data Analyzad: 08/10/19 17:38

Units: mg/kg Date Analyzed: 08/10/19 17:38 SURROGATE RECOVERY STUDY							
	ТРН	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1-Chlorooc	etane		125	100	125	70-135	
o-Terpheny	/l		50.1	50.0	100	70-135	

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Project Name: White Federal Com #001H

Work Orders: 632964, 632964

Sample: 7683893-1-BKS / BKS

Project ID:

Lab Batch #: 3098311

Matrix: Solid Batch:

Units: **Date Analyzed:** 08/11/19 04:40 mg/kg SURROGATE RECOVERY STUDY True Amount Control BTEX by EPA 8021B **Found** Amount Recovery Limits Flags [A] [B] %R %R [D]**Analytes** 1,4-Difluorobenzene 0.0297 99 0.0300 70-130 4-Bromofluorobenzene 0.0310 0.0300 103 70-130

Lab Batch #: 3097798

Sample: 7683491-1-BSD / BSD

Batch: 1 Matrix: Solid

Units:

mg/kg

Date Analyzed: 08/05/19 10:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	70-130	
4-Bromofluorobenzene	0.0360	0.0300	120	70-130	

Lab Batch #: 3097581

Sample: 7683530-1-BSD / BSD

Batch:

Matrix: Solid

Units:

mg/kg

Date Analyzed: 08/05/19 20:40

SURROGATE RECOVERY STUDY Amount True Control TPH by SW8015 Mod Limits Flags Found Amount Recovery [A] [B] %R %R [D] **Analytes** 1-Chlorooctane 90.4 100 90 70-135 42.4 50.0 85 70-135

Lab Batch #: 3098132

o-Terphenyl

Sample: 7683939-1-BSD / BSD

Batch:

Matrix: Solid

Units:	mg/kg	Date Analyzed: 08/10/19 17:57	SURROGATE RECOVERY STUDY					
	ТРН	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorood	ctane		119	100	119	70-135		
o-Terpheny	yl		48.3	50.0	97	70-135		

Lab Batch #: 3098311

Sample: 7683893-1-BSD / BSD

Batch:

Matrix: Solid

Units:

ma/ka

Date Analyzed: 08/11/19 05:00

Omits. Ing/kg Date Analyzed. 00/11/17 05.00	SU	SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1,4-Difluorobenzene	0.0302	0.0300	101	70-130			
4-Bromofluorobenzene	0.0326	0.0300	109	70-130			

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Project Name: White Federal Com #001H

Work Orders: 632964, 632964

Lab Batch #: 3097798 **Sample:** 632966-001 S / MS **Project ID:**

Matrix: Soil Batch:

Units:

mg/kg

Date Analyzed: 08/05/19 10:34 SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	70-130	
4-Bromofluorobenzene	0.0352	0.0300	117	70-130	

Lab Batch #: 3097581

Sample: 632825-001 S / MS

Batch:

Matrix: Soil

Units:

mg/kg

Date Analyzed: 08/05/19 21:28

SURROGATE RECOVERY STUDY **Amount** True Control TPH by SW8015 Mod Found Recovery Limits Amount Flags [A] [B] %R %R [D] **Analytes** 95.5 96 70-135 99.6 49.8 45.0 90 70-135

Lab Batch #: 3098132

1-Chlorooctane

o-Terphenyl

Sample: 633553-021 S / MS

Batch:

Matrix: Soil

Units:

mg/kg Date Analyzed: 08/10/19 18:35 SURROGATE RECOVERY STUDY						
ТРН	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	Analytes			[D]		
		112	99.8	112	70-135	
		45.4	49.9	91	70-135	

Lab Batch #: 3098311

1-Chlorooctane o-Terphenyl

Sample: 633355-036 S / MS

Batch:

Units:

mg/kg

Units:	ng/kg	Date Analyzed: 08/11/19 05:20	SURROGATE RECOVERY STUDY								
		by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
		Analytes			[-]						
1,4-Difluorobenz	zene		0.0301	0.0300	100	70-130					
4-Bromofluorobe	enzene		0.0342	0.0300	114	70-130					

Lab Batch #: 3097798

Sample: 632966-001 SD / MSD

Date Analyzed: 08/05/19 10:54

Batch: 1

Matrix: Soil

SURROGATE RECOVERY STUDY

•		KKOOMIE KI	COVERT	JIODI	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes	[]	[-]	[D]	,,,==	
1,4-Difluorobenzene	0.0285	0.0300	95	70-130	
4-Bromofluorobenzene	0.0343	0.0300	114	70-130	

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

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

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Project Name: White Federal Com #001H

Work Orders: 632964, 632964

Sample: 632825-001 SD / MSD

Project ID:

Matrix: Soil Batch: 1

Lab Batch #: 3097581

mg/kg

Date Analyzed: 08/05/19 21:51

SURROGATE RECOVERY STUDY

	30	KKOGAIL KI	COVERT)10D1	
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		
1-Chlorooctane	95.6	99.9	96	70-135	
o-Terphenyl	43.4	50.0	87	70-135	

Lab Batch #: 3098132

Sample: 633553-021 SD / MSD

Batch: Matrix: Soil

Units:

Units:

mg/kg

Date Analyzed: 08/10/19 18:54

SURROGATE	RECOVERY	STUDY	

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	99.7	114	70-135	
o-Terphenyl	46.5	49.9	93	70-135	

Lab Batch #: 3098311

Sample: 633355-036 SD / MSD

Matrix: Soil Batch: 1

Units:	BTEX by EPA 8021B		SURROGATE RECOVERY STUDY								
	ВТЕ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
		Analytes			[D]						
1,4-Difluoro	benzene		0.0307	0.0300	102	70-130					
4-Bromofluorobenzene		0.0328	0.0300	109	70-130						

Surrogate Recovery [D] = 100 * A / B

^{*} Surrogate outside of Laboratory QC limits

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



BS / BSD Recoveries



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Project Name: White Federal Com #001H

Work Order #: 632964, 632964

Project ID:

Analyst:

ALG

Date Prepared: 08/05/2019

Date Analyzed: 08/05/2019

Lab Batch ID: 3097798

Sample: 7683491-1-BKS

Batch #: 1

Matrix: Solid

Units:

mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Spike	Blk. Spk Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	[A]	[B]	Result [C]	%R [D]	[E]	Duplicate Result [F]	%R [G]	%	%R	%RPD	riag
Benzene	< 0.00200	0.100	0.0970	97	0.100	0.113	113	15	70-130	35	
Toluene	< 0.00200	0.100	0.0959	96	0.100	0.110	110	14	70-130	35	
Ethylbenzene	< 0.00200	0.100	0.110	110	0.100	0.127	127	14	70-130	35	
m,p-Xylenes	< 0.00400	0.200	0.224	112	0.200	0.258	129	14	70-130	35	
o-Xylene	< 0.00200	0.100	0.105	105	0.100	0.125	125	17	70-130	35	

Analyst:

ALG

Date Prepared: 08/09/2019

Date Analyzed: 08/11/2019

Lab Batch ID: 3098311

Sample: 7683893-1-BKS

Batch #: 1

Matrix: Solid

Units:

mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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
Benzene	< 0.000385	0.100	0.0884	88	0.100	0.103	103	15	70-130	35	
Toluene	0.000620	0.100	0.0835	84	0.100	0.0957	96	14	70-130	35	
Ethylbenzene	< 0.00200	0.100	0.0836	84	0.100	0.0951	95	13	70-130	35	
m,p-Xylenes	< 0.00101	0.200	0.166	83	0.200	0.189	95	13	70-130	35	
o-Xylene	< 0.000344	0.100	0.0876	88	0.100	0.100	100	13	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



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Project Name: White Federal Com #001H

Work Order #: 632964, 632964

Project ID:

Analyst:

SPC

Date Prepared: 08/05/2019

Date Analyzed: 08/05/2019

Lab Batch ID: 3097573

Sample: 7683559-1-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	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
Chloride	< 5.00	250	272	109	250	262	105	4	90-110	20	

Analyst:

SPC

Date Prepared: 08/05/2019

Date Analyzed: 08/05/2019

Lab Batch ID: 3097576

Sample: 7683561-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	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
Chloride	<5.00	250	264	106	250	265	106	0	90-110	20	

Analyst:

CHE

Date Prepared: 08/06/2019

Date Analyzed: 08/06/2019

Lab Batch ID: 3097709

Sample: 7683630-1-BKS

Batch #: 1

Matrix: Solid

Units:

mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	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
Chloride	< 0.858	250	250	100	250	250	100	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



BS / BSD Recoveries



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Project Name: White Federal Com #001H

Work Order #: 632964, 632964

Project ID:

Analyst:

ARM

Date Prepared: 08/05/2019

Date Analyzed: 08/05/2019

Lab Batch ID: 3097581

Sample: 7683530-1-BKS

Batch #: 1

Matrix: Solid

Units:

mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	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
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1140	114	1000	1060	106	7	70-135	20	
Diesel Range Organics (DRO)	<8.13	1000	1180	118	1000	1100	110	7	70-135	20	

Analyst:

ARM

Date Prepared: 08/09/2019

Date Analyzed: 08/10/2019

Lab Batch ID: 3098132

Sample: 7683939-1-BKS

Batch #: 1

Matrix: Solid

Units:

mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	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
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1110	111	1000	1100	110	1	70-135	20	
Diesel Range Organics (DRO)	<8.13	1000	1070	107	1000	1020	102	5	70-135	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



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Project Name: White Federal Com #001H

Work Order #:

632964

Project ID:

Lab Batch ID:

3097798

QC- Sample ID: 632966-001 S

Batch #:

Matrix: Soil

Date Analyzed:

08/05/2019

Date Prepared: 08/05/2019

Analyst: ALG

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	0.100	0.0982	98	0.0996	0.0967	97	2	70-130	35	
Toluene	< 0.00200	0.100	0.0974	97	0.0996	0.0968	97	1	70-130	35	
Ethylbenzene	< 0.00200	0.100	0.112	112	0.0996	0.110	110	2	70-130	35	
m,p-Xylenes	< 0.00400	0.200	0.227	114	0.199	0.223	112	2	70-130	35	
o-Xylene	< 0.00200	0.100	0.110	110	0.0996	0.108	108	2	70-130	35	

Lab Batch ID:

3098311

QC- Sample ID: 633355-036 S

Batch #:

Matrix: Soil

Date Analyzed:

08/11/2019

Date Prepared: 08/09/2019

Analyst: ALG

Reporting Units:

mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD	Control Limits %R	Control Limits %RPD	Flag
Analytes	[A]	[B]		[D]	[E]	Kesuit [F]	[G]	/0	/0K	70KI D	
Benzene	< 0.00199	0.0996	0.0610	61	0.0994	0.0756	76	21	70-130	35	X
Toluene	< 0.00199	0.0996	0.0536	54	0.0994	0.0585	59	9	70-130	35	X
Ethylbenzene	< 0.00199	0.0996	0.0534	54	0.0994	0.0636	64	17	70-130	35	X
m,p-Xylenes	< 0.00398	0.199	0.0825	41	0.199	0.0700	35	16	70-130	35	X
o-Xylene	< 0.00199	0.0996	0.0605	61	0.0994	0.0713	72	16	70-130	35	X





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Project Name: White Federal Com #001H

Work Order #:

632964

Project ID:

3097573

QC- Sample ID: 632964-001 S

Batch #:

Matrix: Soil

Lab Batch ID: Date Analyzed:

08/05/2019

Date Prepared: 08/05/2019

Analyst: SPC

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]		Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	241	251	519	111	251	517	110	0	90-110	20	X

Lab Batch ID:

3097573

QC- Sample ID: 632970-001 S

1 Matrix: Soil

Date Analyzed:

08/05/2019

Date Prepared: 08/05/2019

Analyst: SPC

Batch #:

yst: SPC

Reporting Units:

mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	%R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes	[A]	[B]		[D]	[E]		[G]				
Chloride	6.11	249	266	104	249	262	103	2	90-110	20	

Lab Batch ID:

3097576

QC- Sample ID: 632928-009 S

Batch #:

Matrix: Soil

Date Analyzed:

08/06/2019

Date Prepared: 08/05/2019

Analyst: SPC

Reporting Units:

mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

1

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	27.5	250	286	103	250	287	104	0	90-110	20	





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Project Name: White Federal Com #001H

Work Order #:

632964 3097576

Batch #:

Matrix: Soil

Project ID:

Lab Batch ID: Date Analyzed:

08/06/2019

QC- Sample ID: 632964-013 S **Date Prepared:** 08/05/2019

Analyst: SPC

Reporting Units:

mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

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	122	248	373	101	248	372	101	0	90-110	20	

Lab Batch ID:

3097709

QC- Sample ID: 632672-011 S

Batch #:

Matrix: Soil

Date Analyzed:

08/06/2019

Date Prepared: 08/06/2019

Analyst: CHE

CIL

Reporting Units:

mg/kg

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	535	250	782	99	250	774	96	1	90-110	20	

Lab Batch ID:

3097709

QC- Sample ID: 633051-011 S

Batch #:

Matrix: Soil

Date Analyzed:

08/07/2019

Date Prepared: 08/06/2019

Analyst: CHE

Reporting Units:

mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes	[A]	[B]		[D]	[E]		[G]				
Chloride	350	250	591	96	250	591	96	0	90-110	20	





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Project Name: White Federal Com #001H

Work Order #:

632964 3097581

Batch #:

Matrix: Soil

Project ID:

Lab Batch ID: **Date Analyzed:**

08/05/2019

QC- Sample ID: 632825-001 S **Date Prepared:** 08/05/2019

Analyst: ARM

Reporting Units:

mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod 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
Gasoline Range Hydrocarbons (GRO)	9.21	996	1090	109	999	1080	107	1	70-135	20	
Diesel Range Organics (DRO)	13.5	996	1110	110	999	1110	110	0	70-135	20	

Lab Batch ID:

3098132

QC- Sample ID: 633553-021 S

Batch #:

Matrix: Soil

Date Analyzed:

08/10/2019

Date Prepared: 08/09/2019

Analyst: ARM

Reporting Units: mg/kg MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]		Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons (GRO)	9.06	998	968	96	997	975	97	1	70-135	20	
Diesel Range Organics (DRO)	256	998	1220	97	997	1210	96	1	70-135	20	



Chain of Custody

Work Order No:

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334 Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-6:

			65
)nature) Received by: (Signature) Date/Time	Date/Time Relinquished by: (Signature)	n Receiped by: (Signature)	Relinquished by (Signature)
s. It assigns standard terms and conditions are due to circumstances beyond the control enforced unless previously negotiated.	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	quishment of samples constitutes a valid purchase order froost of samples and shall not assume any responsibility for seapplied to each project and a charge of \$5 for each samples.	Notice: Signature of this document and relir of service. Xenco will be liable only for the of Xenco. A minimum charge of \$75.00 will
Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn Pb Mn Mo Ni Se Ag Ti U 1631/245.1/7470/7471:Hg	Sb As Ba Be B Cd Ca Cr Co Sb As Ba Be Cd Cr Co Cu	8RCRA 13PPM Texas 11 TCLP / SPLP 6010: 8R0	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed
		1 3 1 1 1045 2.5	87-8-18
	* *	1040 25	91-4-2.5
		1035 2.5	2
		+	V . 7 - 7 . V
	* 1	+	5m - 1 - 1 25
			Ľ.
		1010 1.25	SW-E1B-1.25
		1005	9w-E1-1.25
	/ * * *	soil 8/2/19 1000 1.25	SW-11-1.25
Sample Comments	TP BT Ch	Time Depth	Sample Identification
lab, if received by 4:30pm	H EX 100°	N/A Total Containers:	Sample Custody Seals: Yes No
TAT state the day received by the	(q	N/A Correction Factor: -C-2	.]
	801	6	Received Intact: Yes
	e)	Thermomet® JD	Temperature (°C):
)	emp Blank: Yes (lo) Wet Ice: (Yes No	SAMPLE RECEIPTTer
		Due Date:	Sampler's Name: 3. 34. CCL
		* Rush: 24 \	P.O. Number:
		Rc	Project Number:
QUEST Work Order Notes	ANALYSIS REQUEST	Federal Com #01H Turn Around	Project Name: White F
Deliverables: EDD ☐ ADaPT ☐ Other:	isto Stel Eticsolations. con	-3003 Email:	Phone: (472)-258
│		れやら	City, State ZIP: Mix Land
, (Dr STE ISOF	Address: 10 D154c.
Program: UST/PST PRP Brownfields RRC Superfund	(06	Company Name	Company Name: TRC
Comments	Bicky Histell	TOSKU Bill to: (if different)	Project Manager: うんくとく
aiiipa,rt (613-620-2000) www.xenco.com Page 1 of	(+00-000-0000) Aliania, GA (//0-449-0000) Tampa, FL (1,000 000 000 000 100 000 100 100 100 10	Conservation and the state of t

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.



Chain of Custody

Work Order No: 1933 104

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334 Midland TX (432-704-5440) FI Page TX (915/585-3443 Lubbook TX (906)704-1206

Hobbs,NM (575-392-	7550) Phoenix,AZ (480-	Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	13-620-2000) www.xenco.com
Jan 3081	Bill to: (if different)	Becky Hastell	Work Order Con
TRE	Company Name:	(06-	Program: UST/PST PRP Brownfie
10 Rish Dr STE 1505	Address:		State of Project:
Missians Tx 79705	City, State ZIP:		Reporting:Level II Level III PST/US

Company Name: Company Name: Company Name:	Program: UST/PST PRP Brownfields RRC Superfund
Address: 10 PCST NOSTE 150F Address:	State of Project:
City, State ZIP: からとして、Tr アクテロS City, State ZIP:	Reporting:Level II Level III PST/UST TRRP Level IV
Phone: 432 25% 3003 Email: 1570861/@4ccsol-1tons.com	Deliverables: EDD ☐ ADaPT ☐ Other:
Project Name: いかく たみに Com 母のられ Turn Around ANALYSIS REQUEST	OUEST Work Order Notes

Phor

P.O. Number: Project Number:

121816

Rush: 24 K Routine

, , , , , , , , , , , , , , , , , , , ,	WWW.XEIICO.COIII	www.xellco.com - ageor
Bucks Hastell	Work Order Comments	mments
-	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	elds RRC Superfund
State o	State of Project:	
Reporting:	Reporting:Level II Level III PST/UST TRRP Level IV	ST TRRP Level IV
tcsol-tions, com Deliverable	Deliverables: EDD	ADaPT ☐ Other:
ANALYSIS BEGLIEST		Work Order Notes

Sampler's Name: 3. 3508161	157		Due Date:)ate:				<u>>)</u>									···········		and the state of t
SAMPLE RECEIPT Te	Temp Blank:	Yes (No/	Wet Ice:	Kes No)	<u>ĝ)</u>) B) Foc										 	
Temperature (°C):	13.3	L	hermom ete) "D	ਰ		5)	21	E3			, , , , , , , , , , , , , , , , , , , 	<u></u>							
Received Intact:	No		Q	Q		01	<u></u> *&c	\mathcal{L}											
Cooler Custody Seals: Yes No	N/A	Corre	Correction Factor:	とって		(8	K (,dc											TAT atoms the decrease and butter
Sample Custody Seals: Yes 🗘	N/A OKA	Total	Total Containers:			H	5	100											lab, if received by 4:30pm
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Numbe	TP	BT	Ch											Sample Comments
PI-6-2.5	\$	3/2/18	1050	2.5	1			*								-			
FL-7-1			002(_	_			7.								-			
SU-W2-0.5			1205	O Vi		ታ	*	<i>*</i>											
54-62-0.5	(-	1210	0.5	_			*											
										<u> </u>	-		-	<u> </u>	<u> </u>	-			
										_	-	-	-	+	-	-	-	-	
									_		_	_	_	_	_			-	
									_		-	-		-	H			-	
Total 200.7 / 6010 200.8 / 6020:	6020:	8RC	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co	/ Texas 11	Α	b As	Ba l	3e B	CG C	a Cr		ı Fe	Pb M	g Mn	ĕ	Z X	Se A	g Sic	Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed) to be an		TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	.P 6010: 8F	CRA	Sb A	s Ba	Be C	다 전	င္ပ		Mn	lo Ni	Se /	Ag TI	_			1631 / 245.1 / 7470 / 7471 : Hg

Revised Date 051418 Rev. 2018.1



XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 08/05/2019 10:02:00 AM

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

Work Order #: 632964

Temperature Measuring device used: R8

Sample Receipt Checklis	st	Comments
#1 *Temperature of cooler(s)?	3.3	
#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 de	livery of samples prior to placin	g in the refrigerator
Analyst:		PH Device/Lot#:	
	Checklist completed by:	Bawa Tul Brianna Teel	Date: <u>08/05/2019</u>
	Checklist reviewed by:	Jessica Kramer	Date: <u>08/05/2019</u>

Analytical Report 633109

for TRC Solutions, Inc

Project Manager: Jared Stoffel White Federal Com #001H

09-AUG-19

Collected By: Client





1211 W. Florida Ave Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142), North Carolina (681)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429), North Carolina (483)





09-AUG-19

Project Manager: **Jared Stoffel TRC Solutions, Inc**2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): 633109

White Federal Com #001H

Project Address:

Jared Stoffel:

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) 633109. 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. 633109 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Vramer

Project Assistant

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 633109



TRC Solutions, Inc, Midland, TX

White Federal Com #001H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL-8-1	S	08-05-19 09:20	1 ft	633109-001
FL-9-1.5	S	08-05-19 09:30	1.5 ft	633109-002
FL-10-1.5	S	08-05-19 09:40	1.5 ft	633109-003
FL-11-1.5	S	08-05-19 09:50	15 ft	633109-004
FL-12-1.5	S	08-05-19 10:00	1.5 ft	633109-005
FL-13-1.5	S	08-05-19 10:10	1.5 ft	633109-006
FL-14-1.5	S	08-05-19 10:20	1.5 ft	633109-007
SW-W3-0.5	S	08-05-19 10:40	0.5 ft	633109-008
SW-E3-0.5	S	08-05-19 10:45	0.5 ft	633109-009
SW-W4-0.75	S	08-05-19 10:55	0.75 ft	633109-010
SW-E4-0.75	S	08-05-19 11:00	0.75 ft	633109-011
SW-S1-0.75	S	08-05-19 11:05	0.75 ft	633109-012

09-AUG-19



CASE NARRATIVE

Client Name: TRC Solutions, Inc Project Name: White Federal Com #001H

Project ID: Report Date:
Work Order Number(s): 633100

Work Order Number(s): 633109 Date Received: 08/06/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3097738 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered below QC limits. Matrix interferences is suspected.

Samples affected are: 632995-001 SD, 633109-009.

Batch: LBA-3097944 BTEX by EPA 8021B

 $Benzene,\,Ethylbenzene,\,Toluene,\,m,p-Xylenes,\,o-Xylene\,\,Relative\,\,Percent\,\,Difference\,\,(RPD)\,\,between$

matrix spike and duplicate were above quality control limits. Samples in the analytical batch are: 633109-001, -005, -009

Lab Sample ID 633109-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 633109-001, -005, -009. The Laboratory Control Sample for Toluene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

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



TRC Solutions, Inc, Midland, TX

Project Name: White Federal Com #001H

Page 67 of 10

Project Id: Contact:

Jared Stoffel

Project Location:

Date Received in Lab: Tue Aug-06-19 12:10 pm

Report Date: 09-AUG-19

Project Manager: Jessica Kramer

	Lab Id:	633109-0	001	633109-0	02	633109-0	03	633109-0	04	633109-	005	633109-0	006
Analysis Paguastad	Field Id:	FL-8-1		FL-9-1.:	5	FL-10-1	.5	FL-11-1	.5	FL-12-1	1.5	FL-13-1	.5
Analysis Requested	Depth:	1- ft		1.5- ft		1.5- ft		15- ft		1.5- f	t	1.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	,	SOIL	
	Sampled:	Aug-05-19 (09:20	Aug-05-19 (9:30	Aug-05-19 (09:40	Aug-05-19 (09:50	Aug-05-19	10:00	Aug-05-19	10:10
BTEX by EPA 8021B	Extracted:	Aug-06-19	14:00							Aug-06-19	14:00		
	Analyzed:	Aug-07-19	15:43							Aug-07-19	16:03		
	Units/RL:	mg/kg	RL							mg/kg	RL		
Benzene		< 0.00199	0.00199							< 0.00200	0.00200		
Toluene		0.00357	0.00199							< 0.00200	0.00200		
Ethylbenzene		< 0.00199	0.00199							< 0.00200	0.00200		
m,p-Xylenes		0.0151	0.00398							< 0.00399	0.00399		
o-Xylene		0.00745	0.00199							< 0.00200	0.00200		
Total Xylenes		0.02255	0.00199							< 0.002	0.002		
Total BTEX		0.02612	0.00199							< 0.002	0.002		
Chloride by EPA 300	Extracted:	Aug-06-19	12:45	Aug-06-19 1	2:45	Aug-06-19	12:45	Aug-06-19	12:45	Aug-06-19	12:45	Aug-06-19	12:45
	Analyzed:	Aug-06-19	14:23	Aug-06-19 1	4:07	Aug-06-19	14:29	Aug-06-19	14:35	Aug-06-19	14:40	Aug-06-19	14:57
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		72.7	49.6	333	4.96	210	5.04	313	4.98	114	5.00	270	5.02
TPH by SW8015 Mod	Extracted:	Aug-06-19	16:48							Aug-06-19	16:48		
	Analyzed:	Aug-07-19	04:15							Aug-07-19	04:39		
	Units/RL:	mg/kg	RL							mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0							<15.0	15.0		
Diesel Range Organics (DRO)		<15.0	15.0							43.9	15.0		
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0							<15.0	15.0		
Total TPH		<15	15							43.9	15		

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

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Version: 1.%

Jessica Kramer Project Assistant

Jessica Kramer



TRC Solutions, Inc, Midland, TX

Project Name: White Federal Com #001H



Project Id: Contact:

Jared Stoffel

Project Location:

Date Received in Lab: Tue Aug-06-19 12:10 pm

Report Date: 09-AUG-19 **Project Manager:** Jessica Kramer

	1									ı			
	Lab Id:	633109-0	007	633109-0	08	633109-00	09	633109-0	10	633109-0	11	633109-0	012
Analysis Requested	Field Id:	FL-14-1	.5	SW-W3-0).5	SW-E3-0.	.5	SW-W4-0	.75	SW-E4-0	.75	SW-S1-0	.75
Analysis Requesieu	Depth:	1.5- ft		0.5- ft		0.5- ft		0.75- ft		0.75- ft	:	0.75- ft	t
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-05-19	10:20	Aug-05-19 1	0:40	Aug-05-19 1	0:45	Aug-05-19	10:55	Aug-05-19	11:00	Aug-05-19	11:05
BTEX by EPA 8021B	Extracted:					Aug-06-19 1	4:00						
	Analyzed:					Aug-07-19 1	6:23						
	Units/RL:					mg/kg	RL						
Benzene						< 0.00198	0.00198						
Toluene							0.00198						
Ethylbenzene							0.00198						
m,p-Xylenes							0.00397						
o-Xylene							0.00198						
Total Xylenes							0.00198						
Total BTEX						< 0.00198	0.00198						
Chloride by EPA 300	Extracted:	Aug-06-19	12:45	Aug-06-19 1	2:45	Aug-06-19 1	2:45	Aug-06-19	12:45	Aug-06-19	12:45	Aug-06-19	12:45
	Analyzed:	Aug-06-19	15:02	Aug-06-19 1	5:08	Aug-06-19 1	5:13	Aug-06-19	15:19	Aug-06-19	15:25	Aug-06-19	15:41
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		422	4.97	589	4.99	117	5.03	173	5.00	1180	5.00	186	5.00
TPH by SW8015 Mod	Extracted:					Aug-06-19 1	6:48						
	Analyzed:					Aug-07-19 0	5:02						
	Units/RL:					mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)						<15.0	15.0						
Diesel Range Organics (DRO)						<15.0	15.0						
Motor Oil Range Hydrocarbons (MRO)						<15.0	15.0						
Total TPH		·		<u> </u>		<15	15						

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

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Version: 1.%

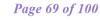
Jessica Kramer Project Assistant

Jessica Weamer



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.

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

^{**} Surrogate recovered outside laboratory control limit.



Project Name: White Federal Com #001H

Work Orders: 633109,

Sample: 633109-001 / SMP

Project ID:

Lab Batch #: 3097738

Matrix: Soil Batch: - 1

Units:	mg/kg	Date Analyzed: 08/07/19 04:15	SU	RROGATE RI	ECOVERY S	STUDY	
	ТРН	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooct	ane	•	91.0	100	91	70-135	
o-Terphenyl	1		37.3	50.0	75	70-135	

Lab Batch #: 3097738

Sample: 633109-005 / SMP

Batch: 1 Matrix: Soil

Units:

mg/kg

Date Analyzed: 08/07/19 04:39

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.5	99.8	91	70-135	
o-Terphenyl	35.1	49.9	70	70-135	

Lab Batch #: 3097738

Sample: 633109-009 / SMP

Batch:

Matrix: Soil

Units:

mg/kg

Date Analyzed: 08/07/19 05:02

SURROGATE RECOVERY STUDY Amount True Control TPH by SW8015 Mod Limits Flags Found Amount Recovery %R %R [A] [B] [D] **Analytes** 88.7 99.7 89 70-135 33.6 49.9 70-135 **

Lab Batch #: 3097944

1-Chlorooctane

o-Terphenyl

Sample: 633109-001 / SMP

Batch:

Matrix: Soil

Units:	mg/kg	Date Analyzed: 08/07/19 15:43	SU	RROGATE RI	ECOVERY S	STUDY	
	ВТЕ	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4 D'G	1	Analytes	0.0004	0.0000	-	50.400	
1,4-Difluor	robenzene		0.0321	0.0300	107	70-130	
4-Bromoflu	uorobenzene		0.0374	0.0300	125	70-130	

Lab Batch #: 3097944

Sample: 633109-005 / SMP

Batch:

Matrix: Soil

Units:	mg/kg	Date Analyzed: 08/07/19 16:03	SU	RROGATE R	ECOVERY S	STUDY	
	ВТЕ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluor	robenzene		0.0326	0.0300	109	70-130	
4-Bromofli	uorobenzene		0.0334	0.0300	111	70-130	

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Project Name: White Federal Com #001H

Work Orders: 633109,

Lab Batch #: 3097944

Sample: 633109-009 / SMP

Project ID:

Matrix: Soil Batch:

Units:

mg/kg

Date Analyzed: 08/07/19 16:23

7/19 16:23	SURROGATE	RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	70-130	
4-Bromofluorobenzene	0.0380	0.0300	127	70-130	

Lab Batch #: 3097738

Sample: 7683636-1-BLK / BLK

Batch: 1 Matrix: Solid

Units:

mg/kg

Date Analyzed: 08/06/19 19:57

SURROGATE RECOVERY STUDY

				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		
1-Chlorooctane	97.4	100	97	70-135	
o-Terphenyl	38.9	50.0	78	70-135	

Lab Batch #: 3097944

Sample: 7683634-1-BLK / BLK

Batch:

Matrix: Solid

Units:

mg/kg

Date Analyzed: 08/07/19 15:02

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	0.0295	0.0300	98	70-130	

Lab Batch #: 3097738

Sample: 7683636-1-BKS / BKS

Batch:

Matrix: Solid

Units:	mg/kg	Date Analyzed: 08/06/19 20:21	SU	RROGATE RI	ECOVERY S	STUDY	
	ТРН	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooc	ctane		99.0	100	99	70-135	
o-Terpheny	yl		48.1	50.0	96	70-135	

Lab Batch #: 3097944

Sample: 7683634-1-BKS / BKS

Batch:

Matrix: Solid

Units:	mg/kg	Date Analyzed: 08/07/19 13:28	SU	RROGATE RI	ECOVERY S	STUDY	
	ВТЕ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluor	robenzene		0.0316	0.0300	105	70-130	
4-Bromoflu	uorobenzene		0.0317	0.0300	106	70-130	

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Project Name: White Federal Com #001H

Work Orders: 633109,

Sample: 7683636-1-BSD / BSD

Project ID:

Matrix: Solid Batch: 1

Lab Batch #: 3097738 mg/kg **Units:**

Date Analyzed: 08/06/19 20:44

SURROGATE RECOVERY STUDY

				31021	
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		
1-Chlorooctane	93.8	100	94	70-135	
o-Terphenyl	46.5	50.0	93	70-135	

Lab Batch #: 3097944

Sample: 7683634-1-BSD / BSD

Batch: 1 Matrix: Solid

Units:

mg/kg

Date Analyzed: 08/07/19 22:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		
1,4-Difluorobenzene	0.0303	0.0300	101	70-130	
4-Bromofluorobenzene	0.0326	0.0300	109	70-130	

Lab Batch #: 3097738

Sample: 632995-001 S / MS

Batch:

Matrix: Soil

Units:

mg/kg

Date Analyzed: 08/06/19 21:32

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	79.7	99.7	80	70-135	
o-Terphenyl	35.2	49.9	71	70-135	

Lab Batch #: 3097944

Sample: 633109-001 S / MS

Matrix: Soil

SURROGATE RECOVERY STUDY

Units:	mg/kg	Date Analyzed: 08/07/19 14:10
	BTE	X by EPA 8021B

by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes	[A]	[b]	[D]	/0K		
	0.0318	0.0300	106	70-130		
	0.0205	0.0200	102	70.120		

4-Bromofluorobenzene Lab Batch #: 3097738

1,4-Difluorobenzene

Sample: 632995-001 SD / MSD

Batch:

Matrix: Soil

Units:

mg/kg

Date Analyzed: 08/06/19 21:56

omis. Mg/kg Date Analyzett. 00/00/19 21.30	SURROGATE RECOVERY STUDY						
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analytes			[D]				
1-Chlorooctane	76.7	99.8	77	70-135			
o-Terphenyl	33.4	49.9	67	70-135	**		

^{*} Surrogate outside of Laboratory QC limits

Surrogate Recovery [D] = 100 * A / B

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Form 2 - Surrogate Recoveries

Project Name: White Federal Com #001H

Work Orders : 633109, **Lab Batch #:** 3097944

Sample: 633109-001 SD / MSD

Project ID:

Unite: mg/kg Date Analyzed: 08/07/10 18:44

Batch: 1 Matrix: Soil

Units: mg/kg	Date Analyzed: 08/07/19 18:44	SU	RROGATE RE	ECOVERY S	STUDY	
B'.	ΓEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0314	0.0300	105	70-130	
4-Bromofluorobenzene		0.0329	0.0300	110	70-130	

Surrogate Recovery [D] = 100 * A / B

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

^{*} Surrogate outside of Laboratory QC limits

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



BS / BSD Recoveries



Page 74 of 100

Project Name: White Federal Com #001H

Work Order #: 633109

Project ID:

Analyst: ALG

Date Prepared: 08/06/2019

Date Analyzed: 08/07/2019

Lab Batch ID: 3097944

Sample: 7683634-1-BKS

Matrix: Solid

Units:

mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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
Benzene	< 0.000385	0.100	0.105	105	0.100	0.107	107	2	70-130	35	
Toluene	< 0.000456	0.100	0.0923	92	0.100	0.0985	99	6	70-130	35	
Ethylbenzene	< 0.000565	0.100	0.0893	89	0.100	0.0976	98	9	70-130	35	
m,p-Xylenes	< 0.00101	0.200	0.176	88	0.200	0.194	97	10	70-130	35	
o-Xylene	< 0.000344	0.100	0.0932	93	0.100	0.103	103	10	70-130	35	

Analyst:

CHE

Date Prepared: 08/06/2019

Batch #: 1

Date Analyzed: 08/06/2019

Lab Batch ID: 3097648

Sample: 7683622-1-BKS

Batch #: 1

Matrix: Solid

Units:

mg/kg

Chloride by EPA 300 Blank Spike Blank Blank Spike Blank Blk. Spk Control Control Added Spike RPD Flag Sample Result Spike Spike Dup. Limits Limits Added [A] Result %R **Duplicate** %R % %R %RPD [B] [C] [D] Result [F] [G] $[\mathbf{E}]$ **Analytes** Chloride < 5.00 264 275 90-110 20 250 106 250 110 4

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



Page 75 of 100

Project Name: White Federal Com #001H

Work Order #: 633109

Project ID:

Analyst:

ARM

Date Prepared: 08/06/2019

Date Analyzed: 08/06/2019

Lab Batch ID: 3097738

Sample: 7683636-1-BKS

Batch #: 1

Matrix: Solid

Units:

mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	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
Gasoline Range Hydrocarbons (GRO)	12.0	1000	1140	114	1000	1110	111	3	70-135	20	
Diesel Range Organics (DRO)	13.7	1000	1190	119	1000	1150	115	3	70-135	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



Page 76 of 100

Project Name: White Federal Com #001H

Work Order #:

633109

Project ID:

Lab Batch ID:

3097944

QC- Sample ID: 633109-001 S

Batch #:

Matrix: Soil

Date Analyzed:

08/07/2019

Date Prepared: 08/06/2019

Analyst: ALG

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	0.000448	0.0992	0.0775	78	0.0998	0.115	115	39	70-130	35	F
Toluene	0.00357	0.0992	0.0665	63	0.0998	0.104	101	44	70-130	35	XF
Ethylbenzene	0.00184	0.0992	0.0633	62	0.0998	0.104	102	49	70-130	35	XF
m,p-Xylenes	0.0151	0.198	0.123	54	0.200	0.206	95	50	70-130	35	XF
o-Xylene	0.00745	0.0992	0.0650	58	0.0998	0.104	97	46	70-130	35	XF

Lab Batch ID:

3097648

8 **QC- Sample ID:** 633109-002 S

Batch #:

Matrix: Soil

Date Analyzed:

08/06/2019

Date Prepared: 08/06/2019

Analyst: CHE

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	333	248	584	101	248	585	102	0	90-110	20	

Lab Batch ID:

3097648

QC- Sample ID: 633109-011 S

Batch #:

Matrix: Soil

Date Analyzed:

08/06/2019

Date Prepared: 08/06/2019

Analyst: CHE

Reporting Units:

mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Parent Sample	Spike	Spiked Sample Result	Sample		Duplicate Spiked Sample		RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Chloride	1180	250	1420	96	250	1410	92	1	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



Form 3 - MS / MSD Recoveries



Page 77 of 100

Project Name: White Federal Com #001H

Work Order #:

633109 3097738

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 <math>> 4 times the amount spiked.

Batch #:

Matrix: Soil

Project ID:

Lab Batch ID: Date Analyzed:

08/06/2019

QC- Sample ID: 632995-001 S **Date Prepared:** 08/06/2019

Analyst: ARM

Reporting Units:

mg/kg

Allalyst. ARW

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod 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
Gasoline Range Hydrocarbons (GRO)	14.8	997	1010	100	998	1000	99	1	70-135	20	
Diesel Range Organics (DRO)	56.5	997	1060	101	998	996	94	6	70-135	20	



CHAIN OF CUSTODY

Odessa, Texas (432-563-1800)

Dallas, Texas (214-902-0300)		Norcross, Georgia (770-449-8800)		Tampa, Florida (813-620-2000)
Service Cerrier - San Antonio, Texas (210-509-3334)	<u>mww.wemco.com</u>	Xenco Quote #	co Job#	1027/10
		Analy	Analytical Information	
Company Name / Branch:	Project Information		OND NATIONAL STATES CONTRACTOR OF THE STATES C	matrix codes
TPC	Uhite Helica (on	#001#		A= Air
		100		S = Soil/Sed/Solid
Email: Protection of the Indian No.				DW = Drinking Water
istoffel etreliments in /427 738- 3000	Hose I Backy Hose II	o)		SW = Surface water
Stoff	COG	S)		WW= Waste Water
		801 80,		0 = 0il
				WW= Waste Water
No. Field ID / Point of Collection	MI	Number of preserved bottles + X		
The state of the s	Sample Depth Date Time Marrix bottles ICI laCH/Zr cetate	NO3 2SO4 aOH aHSO4 EOH DNE		
1 70-8-1	501	× × ×		Field Comments
2 16-9-1.5	(S)	-		
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- constround time (business days)	Data Deliverable Information	nation	Notes:	
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 3:00 pm			FED-EX / UPS: Tracking #	
Rejuduished by Sample	me: Peceive y:	AMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY Relinquished By: Date Time:		
delinquished by:	Date ime:		22	
Relinquished by:		Relinquished By: Date Time:	Received By:	
	5 Custody Seal # Preserved where applicable On the Coder Temp Thermo. Corr. Factor A	Custody Seal # Preserved where applicable	applicable On lee C	Cooler Temp Thermo. Corr. Factor

Setting the Standard since 1990

XINGO ABORATORIES

Stafford, TX (281) 240-4200

Revision 2016.1

Copier Temp. Thermo. Corr. Factor	ble On Ice	Preserved where applicable	Preserve	al#	Custody Seal #			Received By:	Rec	Date Time:		Relinquished by:	Relinqu
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	Received By:	Date Time:	Da	ed By:	Relinquished By: 2		K					Principles of State o	
	O C Hacking #		PALOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY	CLUDING COU	SESSION, INC	CHANGE POS	SAMPLES	LOW EACH TIN	B	MUST BE DOC	SAMPLE CUSTODY MUST BE DOCUMENT		
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man, providence and the second				el IV	TRRP Level IV	П	Level III Std QC+ Forms	Level III St			7 Day TAT	Next Day EMERGENCY	Z Z
			raw data)	Level IV (Full Data Pkg /raw data)	Level IV (F		QC	Level II Std QC			5 Day TAT	Same Day TAT	sa
	Notes:	No				Data Deliverable Information	ata Deliverab					Turnaround Time (Business days)	
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Field Comments		Chlo	BTE	MEOH NONE	H2SO4 NaOH	NaOH/Zn Acetate HNO3	# of bottles	Time Matrix		Sample Depth	ection	Field ID / Point of Collection	No.
		·.১	λ (bottles	Number of preserved bottles	Number o			Collection	0			
2		()									0	Samplers's Name: TANIA BABO	ampler
WW = Waste Water					77			6	PO Number:	קק	Sa.	Tace Stored	oject
SL - Sludge OW = Ocean/Sea Water WI = Wipe O = Oil		001)				Asst I	Invoice To: Becky Haskell	voice To:	1	Hone No:	J staffel et companis. (om	ر المالية المالية المالية
P = Product SW = Surface Water										1 1	Milland, Tx 7970S	10 Posts Dr STE 150E	op
GW = Groundsolld							- 1		Project Location:	7		Company Address:	ompan
W= Water					Ŧ	4	(0)	Number:	Project Name/Number:	P		Company Name / Branch:	ompap
Matrix Codes	nation	Analytical Information					rmation	Project Information				Client / Reporting Information	입
W 55109	Xenco Job #		Xenco Quote #			com	www.xenco.com						
Sqrvice Center-Hobbs, NM (575) 392-7550	712-8143	Service Center - Baton Rouge, LA (832) 712-8143	enter - Baton	Service (09-3334	San Antonio, TX (210) 509-3334	San Antoni		94-1296	Lubbock, TX (806) 794-1296	Dailas, 1X (214) 902-0300	allas, I
Service Center- Amarillo, TX (806)678-4514)900	Phoenix, AZ (480) 355-0900	Phoenix,		440	Midland, TX (432) 704-5440	Midland, T)		5-3443	El Paso, TX (915) 585-3443	Stafford, TX (281) 240-4200	tafford



XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 08/06/2019 12:10:36 PM

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

Work Order #: 633109

Temperature Measuring device used: R8

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		1.7	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping contai	ner/ 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 relinquish	ned/ received?	Yes	
#10 Chain of Custody agrees with sample la	abels/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 headsp	ace?	N/A	

Must be	completed for after-hours de	elivery of samples prior to plac	cing in the refrigerator	
Analyst:	·	PH Device/Lot#:		
	Checklist completed by:	Brianna Teel	Date: <u>08/06/2019</u>	
	Checklist reviewed by:	Jessica Vramer Jessica Kramer	Date: <u>08/06/2019</u>	

Analytical Report 633232

for TRC Solutions, Inc

Project Manager: Jared Stoffel
White Federal Com #001h

08-AUG-19

Collected By: Client





1211 W. Florida Ave Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142), North Carolina (681)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429), North Carolina (483)

Page 1 of 10





08-AUG-19

Project Manager: **Jared Stoffel TRC Solutions, Inc**2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): 633232

White Federal Com #001h

Project Address:

Jared Stoffel:

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) 633232. 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. 633232 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Vramer

Project Assistant

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Sample Cross Reference 633232



TRC Solutions, Inc, Midland, TX

White Federal Com #001h

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW-E4R-0.75'	S	08-06-19 10:00	0.75	633232-001
SW-E2R-0.5'	S	08-06-19 10:40	0.5	Not Analyzed
SW-E2B-1'	S	08-06-19 10:50	1 ft	Not Analyzed
SW-E2C-0.75	S	08-06-19 11:00	0.75	Not Analyzed

CASE NARRATIVE

Client Name: TRC Solutions, Inc Project Name: White Federal Com #001h

Project ID:

Work Order Number(s): 633232

Report Date: 08-AUG-19 Date Received: 08/07/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 633232

TRC Solutions, Inc, Midland, TX

Project Name: White Federal Com #001h



Project Id: Contact:

Jared Stoffel

Project Location:

Date Received in Lab: Wed Aug-07-19 08:42 am

Report Date: 08-AUG-19 Project Manager: Jessica Kramer

	Lab Id:	633232-001			
Analysis Requested	Field Id:	SW-E4R-0.75'			
Anaiysis Requesieu	Depth:	0.75-			
	Matrix:	SOIL			
	Sampled:	Aug-06-19 10:00			
Chloride by EPA 300	Extracted:	Aug-07-19 09:00			
	Analyzed:	Aug-07-19 11:19			
	Units/RL:	mg/kg RL			
Chloride		247 4.96			

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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Version: 1.%

fession Weamer

Jessica Kramer Project Assistant



Flagging Criteria



Page 86 of 100

- 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.

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

^{**} Surrogate recovered outside laboratory control limit.



BS / BSD Recoveries



Page 87 of 100

Project Name: White Federal Com #001h

Work Order #: 633232

Project ID:

Analyst:

CHE

Date Prepared: 08/07/2019

Date Analyzed: 08/07/2019

Lab Batch ID: 3097726

Sample: 7683628-1-BKS

Batch #: 1

Matrix: Solid

Units:

mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	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
Chloride	<5.00	250	262	105	250	262	105	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



Page 88 of 100

Project Name: White Federal Com #001h

Work Order #:

633232 3097726

Batch #:

Matrix: Soil

Project ID:

Lab Batch ID: Date Analyzed:

08/07/2019

QC- Sample ID: 633147-001 S **Date Prepared:** 08/07/2019

Analyst: CHE

Reporting Units:

mg/kg

Analyst: CHE

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	520	253	768	98	253	769	98	0	90-110	20	

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 <math>> 4 times the amount spiked.

Project Name:

White Federal Com #001H

Turn Around

ANALYSIS REQUEST



Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-33 Midland, TX (432-704-5440) EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-129

Phone: Project Manager: City, State ZIP: Company Name: Address: TRC Midland, TX 79705 Jared Stoffel (432) 238-3003 10 Desta Dr. STE 150 E Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (Email: Address: JStoffel@trccompanies.com Bill to: (if different) City, State ZIP: Company Name: COG lke Tavarez Deliverables: EDD 🗌 Reporting:Level II Level III PST/UST TRRP Level IV ADaPT 🗆 Other:

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	State of Project:	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐		813-620-2000)				
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	andard terms and conditions	ractore It assigns st	affiliates and subcont	to Xenco. its	t company	r from clier	/alid purchase orde	onstitutes a v	of samples co	d relinquishmen	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 farms and conditions	Z۱
1 / 7470 / 7471 : Hg	e Ag TI U 1631 / 245.1 / 7470	Mn Mo Ni Se Ag	Cd Cr Co Cu Pb	- 34	Sb As Ba Be	8RCRA	TCLP / SPLP 6010: 8RCRA	TCLP	nalyzed	ital(s) to be a	Circle Method(s) and Metal(s) to be analyzed	
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					×		0.75	10:00	8/6/2019	SS	SW-E4R-0.75'	
Sample Comments	Sar			Hold	Chlorid	Numbe	e led Depth	Time d Sampled	Date Sampled	Matrix	Sample Identification	
lab, if received by 4:30pm	lab				es (E	er of	ners:	Total Containers:	То	s CNO N/A	Sample Custody Seals: Yes	ഗ
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						L	Wet loe: Yes No		Yes No	Temp Blank:	SAMPLE RECEIPT	
							Due Date:			ou	Sampler's Name: Tania Babu	S
-							Rush:/24hrs				P.O. Number:	T T
					~	L	Routine				Project Number:	-n

Work Order Notes



XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Work Order #: 633232

Date/ Time Received: 08/07/2019 08:42:00 AM

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)?		3.3	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping contain	er/ 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	ed/ received?	Yes	
#10 Chain of Custody agrees with sample lal	bels/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 to	est(s)?	Yes	
#16 All samples received within hold time?		Yes	
#17 Subcontract of sample(s)?		N/A	
#18 Water VOC samples have zero headspa	ace?	N/A	

* Must be o Analyst:	completed for after-hours de	elivery of samples prior to pla	acing in the refrigerator
Allalyst.	Checklist completed by:		Date: <u>08/07/2019</u>
	Checklist reviewed by:	Jessica Kramer	Date: <u>08/08/2019</u>



Certificate of Analysis Summary 648670

TRC Solutions, Inc, Midland, TX

Project Name: White Federal Com #001H



Project Id: Contact:

Project Location:

J Stoffel Malaga, NM

Date Received in Lab: Fri Jan-10-20 12:33 pm

Report Date: 13-JAN-20

Project Manager: Jessica Kramer

			I	I	I	I	
	Lab Id:	648670-001					
Analysis Requested	Field Id:	SW-E1D-1.5R					
Analysis Requesieu	Depth:						
	Matrix:	SOIL					
	Sampled:	Jan-09-20 15:00					
Chloride by EPA 300	Extracted:	Jan-12-20 08:30					
	Analyzed:	Jan-12-20 11:11					
	Units/RL:	mg/kg RL					
Chloride		232 49.8					

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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Version: 1.%

Jessica Kramer
Project Assistant

Analytical Report 648670

for TRC Solutions, Inc

Project Manager: J Stoffel White Federal Com #001H

13-JAN-20

Collected By: Client





1211 W. Florida Ave Midland TX 79701

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19) Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Tampa: Florida (E87429), North Carolina (483)





13-JAN-20

Project Manager: J Stoffel TRC Solutions, Inc 2057 Commerce Midland, TX 79703

Reference: XENCO Report No(s): 648670

White Federal Com #001H Project Address: Malaga, NM

J Stoffel:

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) 648670. 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.

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Respectfully,

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Project Assistant

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Sample Cross Reference 648670



TRC Solutions, Inc, Midland, TX

White Federal Com #001H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW-E1D-1.5R	S	01-09-20 15:00		648670-001

Version: 1.%

CASE NARRATIVE

Client Name: TRC Solutions, Inc Project Name: White Federal Com #001H

Project ID:

Work Order Number(s): 648670

Report Date: 13-JAN-20 Date Received: 01/10/2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 648670



TRC Solutions, Inc, Midland, TX

White Federal Com #001H

Sample Id: SW-E1D-1.5R Matrix: Soil Date Received:01.10.20 12.33

Lab Sample Id: 648670-001

Date Collected: 01.09.20 15.00

Prep Method: E300P

Tech:

SPC

Analytical Method: Chloride by EPA 300

% Moisture:

Analyst:

SPC

Date Prep:

01.12.20 08.30

Basis:

Wet Weight

Seq Number: 3112972

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	232	49.8	mg/kg	01.12.20 11.11		10



Flagging Criteria



Page 97 of 100

- 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



OC Summary 648670

TRC Solutions, Inc

White Federal Com #001H

Analytical Method: Chloride by EPA 300

Seq Number: 3112972

MB Sample Id: 7694154-1-BLK Matrix: Solid

Prep Method: E300P

Date Prep: 01.12.20

LCSD Sample Id: 7694154-1-BSD Units

LCS %RP RPD MB Spike LCS Limits Analysis LCSD LCSD Flag **Parameter** Result Amount Result %Rec D Limit Date Result %Rec

LCS Sample Id: 7694154-1-BKS

Chloride 90-110 0 20 01.12.20 10:31 < 5.00 250 272 109 272 109 mg/kg

Analytical Method: Chloride by EPA 300

Seq Number: 3112972

Matrix: Soil

Prep Method: E300P

Date Prep: 01.12.20

Parent Sample Id:

648608-006

MS Sample Id: 648608-006 S

MSD Sample Id: 648608-006 SD

RPD Spike MS MS %RP Units **Analysis Parent MSD MSD** Limits Flag **Parameter** Limit Result Amount Result %Rec %Rec D Date Result Chloride 33.8 251 307 109 307 109 90-110 0 20 mg/kg 01.12.20 12:24

Analytical Method:

Chloride by EPA 300

Seq Number:

3112972

Matrix: Soil

Prep Method: E300P

Date Prep: 01.12.20

Parent Sample Id:

648722-001

MS Sample Id: 648722-001 S

MSD Sample Id: 648722-001 SD

RPD MS %RP MS **Parent** Spike **MSD MSD** Limits Units Analysis Flag **Parameter** Result %Rec D Limit Date Result Amount Result %Rec 01.12.20 10:51 Chloride 1140 149 1270 87 1290 90-110 2 20 mg/kg X 101

Setting the Standard since 1990 ABORATORIES

CHAIN OF CUSTODY

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El Paso, TX (915) 585-3443

Midland, TX (432) 704-5440

Phoenix, AZ (480) 355-0900

	*
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		www.xenco.com	Xenco Quote #	Xenco Job#	0,015/10
Client / Reporting Information				Analytical Information	Matrix Codes
Company Name / Branch:	P	Project Name/Number: White Federal	c / Con #001 H		W≃ Water S≔ Soil/Sed/Solid
Company Address:					GW = Ground Water DW = Drinking Water P = Product SW = Surface Water
Email: 3stoffel Otrusolutions.com	Phone No: 457-258-3003	Invoice To:			SL - Siudge OW = Ocean/Sea Water WI = Wipe
Project Contact: J. Stoffel		PO Number:	T THE WASHINGTON		O≡ O _{II} WW = Waste Water A = Air
Samplers's Name: 5, Staft)			.`dr		:
	0	Collection Number	Number of preserved bottles		
No. Field ID / Point of Collection	tion Sample Depth	Date Time Matrix bottles HCI NaOH/Zn Accetate	HNO3 H2SO4 NaOH NaHSO4 MEOH NONE		Field Comments
1 SW-E1D-1.5R		A 1500 Sil 1			
2					
S					
4					
5					
0					
7					
8					
9		534316			
Turnaround Time (Business days)		Data Deliverable Information	98	Notes:	
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		Level II Report with TRRP checklist	dist		
TAT Starts Day received by Lab, if received by 5:00 pm	received by 5:00 pm			FED-EX / UPS: Tracking #	
Reynquished by Sample:	SAMPLE CUSTODY MUST BE DO	SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY Date Time: Received By: Rethrouleful By: Date	OSSESSION, INCALUDING COURIER DELIVERY	Republication of the state of t	
Refination	1, 9,70)	11800	P	1733	
3		3		4	
Relinquished by:	Date Time:	Received By:	Custody Seal # Preserv	Preserved where applicable On Ce	Cooler Temp. Thermo. Corr. Factor

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 01.10.2020 12.33.00 PM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 648670

Temperature Measuring device used: R8

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		5	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping contain	ner/ 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 relinquish	ed/ received?	Yes	
#10 Chain of Custody agrees with sample la	abels/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 t	test(s)?	Yes	
#16 All samples received within hold time?		Yes	
#17 Subcontract of sample(s)?		Yes	
#18 Water VOC samples have zero headsp	ace?	N/A	

* Must be completed for after-hours deliver	v of samp	oles prior to	placing in the	he refrigerator
made by completed for ditor medic deliver	<i>,</i> 0. 0ap	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	p.aog t.	

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PH Device/Lot#:

Checklist completed by:

Date: 01.10.2020

Checklist reviewed by: Jessica Vramer

Date: 01.10.2020