SITE INFORMATION

Report Type: Closure Report nRM2022645367 & nRM2034561113

General Site Information:						
Site:	**White City Trunk Line Release**					
Company:	**Cimarex Energy**					
Section, Township and Range	**Unit J**	**Sec. 1**	**T 25S**	**R 26E**		
Lease Number:						
County:	**Eddy County**					
GPS:	**32.158230º N**			**-104.243715º W**		
Surface Owner:	Federal					
Mineral Owner:						
Directions:	From the intersection of HWY 128 & CR 1 (J-1), travel EAST on HWY 128 for approximately 3.0 miles, turn SOUTH onto lease road for 1.10 mi, turn WEST onto lease road for 0.60 mi to location on north side of lease road					

Release Data:	
Date Released:	8/3/2020 & 11/30/2020
Type Release:	Produced Water
Source of Contamination:	Line Breaks
Fluid Released:	179 bbls
Fluids Recovered:	100 bbls

Official Communication:			
Name:	Gloria Garza		Brittany Long
Company:	Cimarex Energy		Tetra Tech
Address:	600 N. Marienfield St.		901 W. Wall St.
	Ste 600		Ste 100
City:	Midland Texas, 79701		Midland, Texas, 79701
Phone number:	(432) 234-3204		(432) 741-5813
Fax:			
Email:	GGarza@Cimarex.com		Brittany.Long@TetraTech.com

Site Characterization	
Depth to Groundwater:	*Less than 50' below surface*
Karst Potential:	*High*

Recommended Remedial Action Levels (RRALs)				
Benzene	***Total BTEX***	***TPH (GRO+DRO)***	***TPH (GRO+DRO+MRO)***	***Chlorides***
10 mg/kg	*50 mg/kg*	*100 mg/kg*	*100 mg/kg*	*600 mg/kg*

TETRA TECH

January 12, 2021

Environmental Specialist
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Closure Report for the Cimarex, White City Trunk Line Release(s), Unit J, Section 1, Township 25 South, Range 26 East, Eddy County, New Mexico.
OCD Incident ID# nRM2022645367
OCD Incident ID# nRM2034561113

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by Cimarex Energy (Cimarex) to assess and remediate a release that occurred at the Cimarex, White City Trunk Line, Unit J, Section 1, Township 25 South, Range 26 East, Eddy County, New Mexico (Site). The site coordinates are 32.158230º, -104.243715º. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report's the releases were discovered on August 3, 2020 and November 30, 2020. On August 3, 2020, a main water line leaked due to corrosion of a valve, releasing approximately 24 barrels of produced water. None of the produced water was recovered. On November 30, 2020, during remediation activities of OCD ID (nRM2022645367), a fusion weld of a polyline broke, releasing approximately 155 barrels of produced water, creating another release, OCD ID (nRM2034561113). Approximately 100 barrels of the produced water was recovered. The release occurred along a right-of-way (ROW) and impacted areas measuring approximately 80' x 20'. The C-141 form is included in Appendix A.

Site Characterization

A site characterization was performed for the site and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. However, the site is in a high karst potential area. The nearest well is listed in the USGS National Water Information Database website in Section 13, approximately 2.24 miles South of the site, and has a reported depth to groundwater of 6.24 feet below ground surface. Additionally, the releases were remediated to 7.0' below surface and no groundwater was encountered. Site characterization data is included in Appendix B.

Tetra Tech
901 W Wall Street, Suite 100, Midland, TX 79701
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

TETRA TECH

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the site characterization, the proposed RRAL for TPH is 100 mg/kg (GRO+DRO+MRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 600 mg/kg.

Remediation and Reclamation Activities

Tetra Tech personnel were onsite in November 30, 2020 through December 2, 2020, to supervise the remediation and reclamation activities as well as to collect confirmation samples. During remediation activities, a fusion weld of a surface line failed, and an additional release occurred (nRM2034561113). This release was contained, hydrovacced, and remediated along with the original release (nRM2022645367). The impacted areas were excavated to a total depth ranging from 1.0'- 7.0' below surface, as shown on Figure 3 and Table 1.

Confirmation bottom hole and sidewall samples were collected every 200 square feet, a total of 13 bottom hole samples (Bottom Hole 1 through Bottom Hole 13) and 12 sidewall samples (Sidewall 1 through Sidewall 12) were collected to ensure proper removal of the impacted soils. The samples were submitted to the laboratory to be analyzed for TPH method 8015 extended, BTEX method 8021B, and Chloride by EPA Method 300.0. The sampling results are summarized in Table 1. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The excavation depths and sample locations are shown in Figure 3.

Referring to Table 1, all final confirmation samples collected showed benzene, total BTEX, and TPH concentrations below the laboratory reporting limits. Additionally, all final samples, showed chloride concentrations below the 600 mg/kg threshold.

Approximately 454 cubic yards of material was excavated and transported offsite for proper disposal. The areas were then backfilled with clean material to surface grade.

TETRA TECH

Conclusion

Based on the laboratory results and remediation activities performed, Cimarex requests closure of this spill issue. The final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 741-5813.

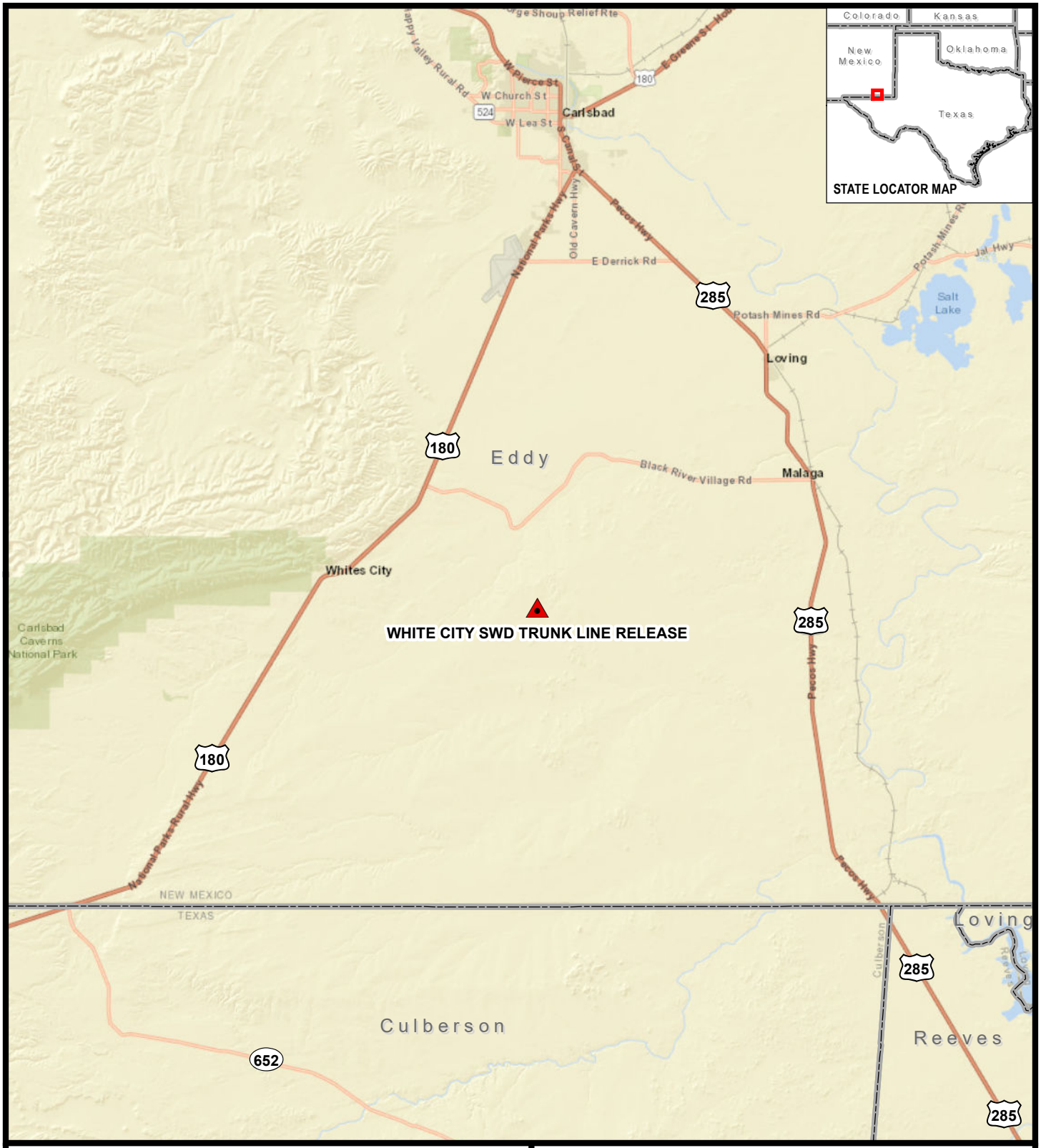
Respectfully submitted,
TETRA TECH

Brittany Long,
Project Manager

Clair Gonzales,
Senior Project Manager

cc:
Gloria Garza-Cimarex
Laci Luig-Cimarex
Stewart Wittenbach-Cimarex

Figures



SITE LOCATION

N
W
E
S

0 2.5 5 Miles

Approximate Scale in Miles

Source: ESRI Basemap - Streets, 2021.

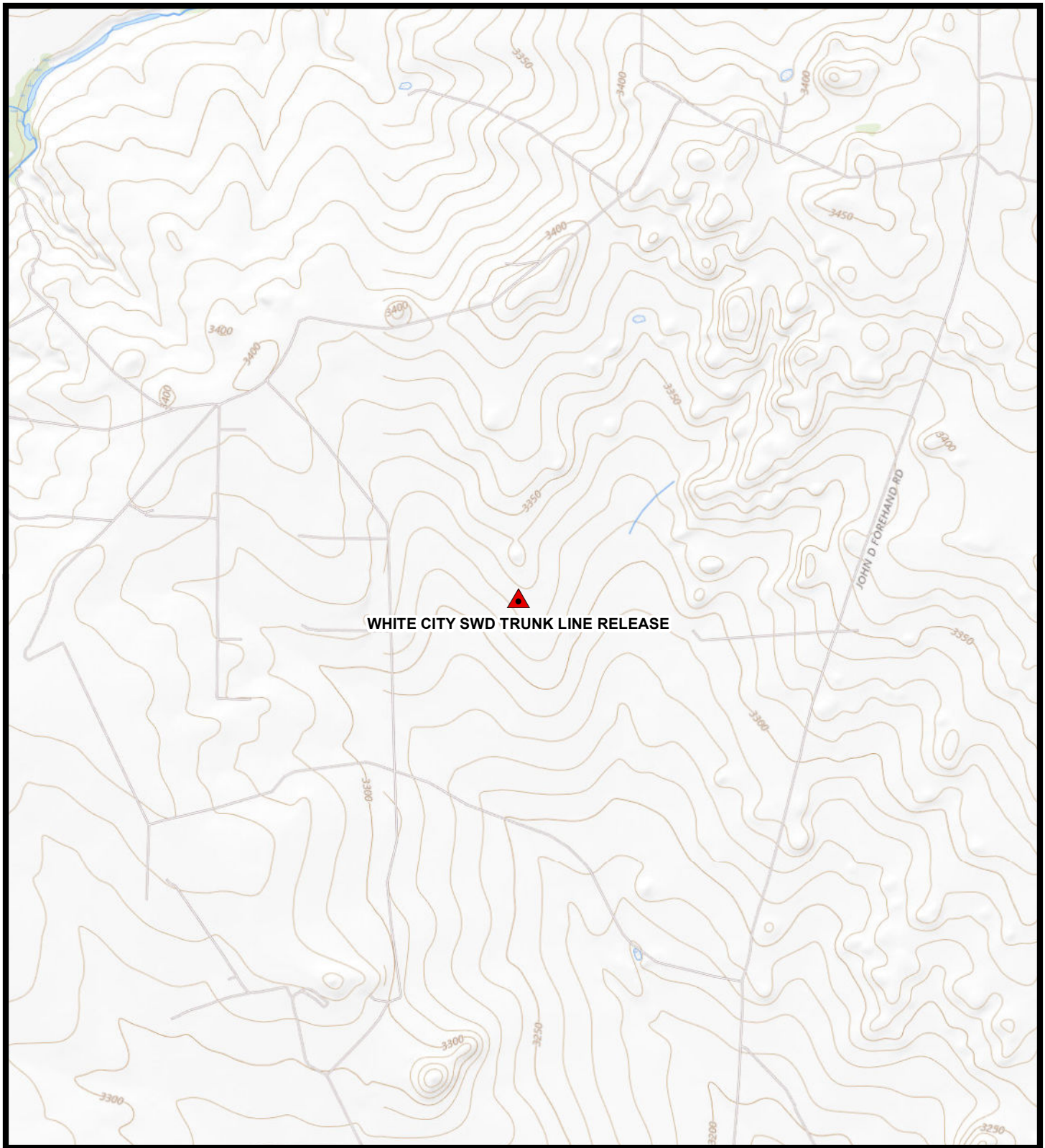
OVERVIEW MAP
WHITE CITY SWD TRUNK LINE RELEASE
Property Located at coordinates 32.158230°, -104.243715°
EDDY COUNTY, NEW MEXICO

CIMAREX

Project #:
212C-MD-02370

FIGURE
1

C:\GIS\Cimarex\212C-MD-02370_WhiteCity\SWDTLR\212C_MD_02370_WHITECITY_SWD_TLR_FIG1.mxd 1/4/2021 joel.peters



SITE LOCATION

N
W
E
S

0 1,000 2,000 Feet

Approximate Scale in Feet

Source: USGS, The National Map, Topo Base, 2021.

TOPOGRAPHIC MAP
WHITE CITY SWD TRUNK LINE RELEASE
Property Located at coordinates 32.158230°, -104.243715°
EDDY COUNTY, NEW MEXICO

CIMAREX

Project #:
212C-MD-02370

FIGURE
2

C:\GIS\Cimarex\212C-MD-02370_WhiteCity\SWDTLR\212C_MD_02370_WHITECITY_SWD_TLR_FIG2A.mxd 1/4/2021 joel.peters

BH BOTTOM HOLE SAMPLE LOCATION

SIDEWALL DESIGNATION

1' EXCAVATED DEPTH AREA

7' EXCAVATED DEPTH AREA

N
W E
S

0 15 30 Feet

Approximate Scale in Feet

Source: ESRI Basemap - Imagery, 2018.

EXCAVATION DEPTH MAP
WHITE CITY SWD TRUNK LINE RELEASE
Property Located at coordinates 32.158230°, -104.243715°
EDDY COUNTY, NEW MEXICO

CIMAREX

Project #:
212C-MD-02370

FIGURE
3

C:\GIS\Cimarex\212C-MD-02370_WhiteCity\SWDTLR\212C_MD_02370_WHITECITY_SWD_TLR_FIG3.mxd 1/4/2021 joel.peters

Tables

Table 1
Cimarex Energy
Crescent Hale 10 Fed 3H
Eddy County, New Mexico

Sample ID	Sample Date	Excavtion Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
BH-1	12/2/2020	7.0'	X	-	<26.3	<26.3	<26.3	<26.3	<0.00105	<0.00105	<0.00105	<0.00105	<0.00105	302
BH-2	12/2/2020	7.0'	X	-	<26.9	<26.9	<26.9	<26.9	<0.00108	<0.00108	<0.00108	<0.00108	<0.00108	196
BH-3	12/2/2020	7.0'	X	-	<27.2	<27.2	<27.2	<27.2	<0.00109	<0.00109	<0.00109	<0.00109	<0.00109	299
BH-4	12/2/2020	7.0'	X	-	<27.5	<27.5	<27.5	<27.5	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	463
BH-5	12/2/2020	7.0'	X	-	<27.8	<27.8	<27.8	<27.8	<0.00111	<0.00111	<0.00111	<0.00111	<0.00111	277
BH-6	12/2/2020	7.0'	X	-	<26.9	<26.9	<26.9	<26.9	<0.00108	<0.00108	<0.00108	<0.00108	<0.00108	341
BH-7	12/2/2020	7.0'	X	-	<27.5	<27.5	<27.5	<27.5	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	366
BH-8	12/2/2020	7.0'	X	-	<27.8	<27.8	<27.8	<27.8	<0.00111	<0.00111	<0.00111	<0.00111	<0.00111	11.1
BH-9	12/2/2020	1.0'	X	-	<31.2	<31.2	<31.2	<31.2	<0.00125	<0.00125	<0.00125	<0.00125	<0.00125	363
BH-10	12/2/2020	1.0'	X	-	<31.2	<31.2	<31.2	<31.2	<0.00125	<0.00125	<0.00125	<0.00125	<0.00125	399
BH-11	12/2/2020	1.0'	X	-	<31.2	<31.2	<31.2	<31.2	<0.00125	<0.00125	<0.00125	<0.00125	<0.00125	500
BH-12	12/2/2020	1.0'	X	-	<31.6	<31.6	<31.6	<31.6	<0.00127	<0.00127	<0.00127	<0.00127	<0.00127	398
BH-13	12/2/2020	1.0'	X	-	<25.8	<25.8	<25.8	<25.8	<0.00103	<0.00103	<0.00103	<0.00103	<0.00103	26.9
SW-1	12/2/2020	-	X	-	<27.2	<27.2	<27.2	<27.2	<0.00109	<0.00109	<0.00109	<0.00109	<0.00109	8.95
SW-2	12/2/2020	-	X	-	<27.2	<27.2	<27.2	<27.2	<0.00109	<0.00109	<0.00109	<0.00109	<0.00109	59.6
SW-3	12/2/2020	-	X	-	<27.5	<27.5	<27.5	<27.5	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	2.45
SW-4	12/2/2020	-	X	-	<27.2	<27.2	<27.2	<27.2	<0.00109	<0.00109	<0.00109	<0.00109	<0.00109	7.46
SW-5	12/2/2020	-	X	-	<27.5	<27.5	<27.5	<27.5	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	7.32
SW-6	12/2/2020	-	X	-	<27.5	<27.5	<27.5	<27.5	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	9.62
SW-7	12/2/2020	-	X	-	<27.2	<27.2	<27.2	<27.2	<0.00109	<0.00109	<0.00109	<0.00109	<0.00109	5.39
SW-8	12/2/2020	-	X	-	<27.5	<27.5	<27.5	<27.5	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110	219
SW-9	12/2/2020	-	X	-	<25.8	<25.8	<25.8	<25.8	<0.00103	<0.00103	<0.00103	<0.00103	<0.00103	126
SW-10	12/2/2020	-	X	-	<25.8	<25.8	<25.8	<25.8	<0.00103	<0.00103	<0.00103	<0.00103	<0.00103	49.1
SW-11	12/2/2020	-	X	-	<25.8	<25.8	<25.8	<25.8	<0.00103	<0.00103	<0.00103	<0.00103	<0.00103	38.6
SW-12	12/2/2020	-	X	-	<25.8	<25.8	<25.8	<25.8	<0.00103	<0.00103	<0.00103	<0.00103	<0.00103	58.1

(-) Not Analyzed
Exceedance

Photos

Cimarex Energy
White City Trunk Line
Eddy County, New Mexico

TETRA TECH

View of Remediation Activities – View South

View of Remediation Activities – View Northwest

Cimarex Energy
White City Trunk Line
Eddy County, New Mexico

TETRA TECH

View of Remediation Activities – View East

View of Remediation Activities – View West

Appendix A

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	NRM2022645367
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Cimarex Energy Co.	OGRID: 215099
Contact Name: Laci Luig	Contact Telephone: (432) 571-7800
Contact email: lluig@cimarex.com	Incident # *(assigned by OCD)*
Contact mailing address: 600 N Marienfeld Street, Ste. 600 Midland, TX 79701	

Location of Release Source

Latitude 32.158230 Longitude -104.243715
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: White City SWD Line	Site Type: ROW
Date Release Discovered: 8/3/2020	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
J	1	25S	26E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 24	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Corrosion
We had a leak in a main water transfer line on a ROW between a butterfly valve and Victaulic clamp due to corrosion. We temporarily repaired the leak until the new Stainless Steel Warren valve, stainless check valve, and poly flanges can be installed. We released 24 barrels of produced water on the ROW and lease road but were not able to recover any fluids. All carbon steel valves and Victaulic clamps will be removed. We will delineate the impacted soil to determine pathway forward.

State of New Mexico
Oil Conservation Division

Incident ID	NRM2022645367
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
By: Gloria Garza
To: Mike Bratcher, Robert Hamlet, Victoria Venegas and BLM NM CFO Spill
By: Email

Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

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

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

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

Printed Name: Laci Luig Title: Engineer Tech.

Signature: Laci Luig Date: 8/7/2020

email: lluig@cimarex.com Telephone: (432) 571-7810

OCD Only

Received by: Ramona Marcus Date: 8/13/2020

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: gloria garza Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Cristina Eads Date: 04/03/2021

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____

Signature: gloria garza Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Cristina Eads Date: 04/03/2021

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: 04/07/2021

Printed Name: Cristina Eads Title: Environmental Specialist

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	NRM2034561113
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Cimarex Energy Co.	OGRID: 215099
Contact Name: Laci Luig	Contact Telephone: (432) 571-7800
Contact email: lluig@cimarex.com	Incident # *(assigned by OCD)*
Contact mailing address: 600 N Marienfeld Street, Ste. 600 Midland, TX 79701	

Location of Release Source

Latitude 32.158230 Longitude -104.243715
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: White City SWD Line	Site Type: ROW
Date Release Discovered: 11/30/2020	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
J	1	25S	26E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 155	Volume Recovered (bbls) 100
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Corrosion
We had a release from a main water transfer line on a ROW. The release occurred during the remediation work for Incident nRM2022645367. We were in the process of moving the polyline out of the dig zone using a skid steer and nylon strap. The fusion point broke causing a release of 155 barrels of produced water. The water ran into an area that had already been dug out. We were able to recover 100 barrels of water. Tetra Tech will assist with the delineation and remediation.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM2034561113
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? The amount of the release is greater than 25 barrels.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
By: Gloria Garza
To: Mike Bratcher, Robert Hamlet, Cristina Eads and BLM NM CFO Spill
By: Email

Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

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

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

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

Printed Name: Laci Luig Title: Engineer Tech.

Signature: Laci Luig Date: 12/1/2020

email: lluig@cimarex.com Telephone: (432) 571-7810

OCD Only

Received by: Ramona Marcus Date: 12/10/2020

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: gloria garza Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Cristina Eads Date: 04/3/2021

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____

Signature: gloria garza Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Cristina Eads Date: 04/03/2021

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: 04/07/2021

Printed Name: Cristina Eads Title: Environmental Specialist

Appendix B

New Mexico NFHL Data

January 5, 2021

1:9,028

0 0.075 0.15 0.3 mi

0 0.1 0.2 0.4 km

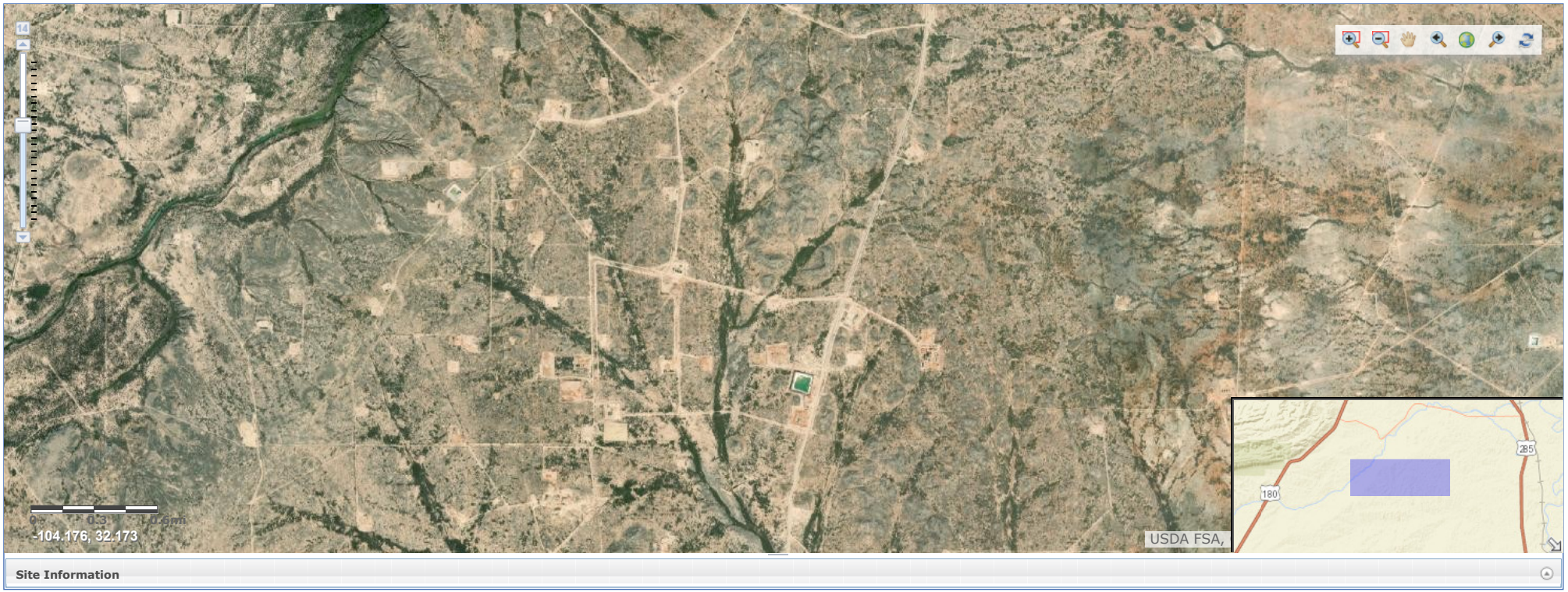
FEMA
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,

USGS science for a changing world

USGS Home
Contact USGS
Search USGS

National Water Information System: Mapper

Help Info



Site Information

Click to hideNews Bulletins

- Explore the **NEW** USGS National Water Dashboard to access real-time data from over 13,500 stations nationwide.
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320737104140601

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320737104140601 25S.26E.13.44222

Eddy County, New Mexico
Latitude 32°07'33.9", Longitude 104°14'19.1" NAD83
Land-surface elevation 3,205.00 feet above NGVD29
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1983-02-01		D	8.42			2		U		U	A
1987-10-08		D	8.13			2		U		U	A
1992-11-04		D	8.94			2		S		U	A
1998-01-07		D	11.46			2		S		U	A
2003-02-10		D	13.47			2		S	USGS	A	A
2013-01-09	16:00 MST	m	12.81			2	R	S	USGS	R	A
2018-02-01	13:30 MST	m	6.24			2		S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	R	Site had been pumped recently.
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	A	Reported by another government agency (do not use "A" if reported by owner, use "O").
Source of measurement	R	Reported by person other than the owner, driller, or another government agency.
Source of measurement	S	Measured by personnel of reporting agency.
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 01013	C	ED			4	25	25S	26E	571505	3551456*	245		
C 01089	C	ED	3	4	1	03	25S	26E	567505	3558398*	96	45	51
C 01368	C	ED		1	1	22	25S	26E	567261	3554059*	143	118	25
C 02220	CUB	ED	3	1	2	26	25S	26E	569598	3552352*	35		
C 02221	CUB	ED	4	3	2	25	25S	26E	571412	3551961*	35		
C 02675	C	ED	1	4	1	09	25S	26E	565907	3556978*	180	45	135
C 03258	C	ED	1	1	4	07	25S	26E	563073	3556546*	360		
C 03285	C	ED	4	4	2	07	25S	26E	563713	3556658	84	60	24
C 03569 POD1	CUB	ED	2	1	1	14	25S	26E	568862	3555746	30	0	30
C 03654 POD1	CUB	ED	2	3	1	24	25S	26E	570654	3553773			
C 03654 POD2	CUB	ED	2	3	1	24	25S	26E	554766	3562304			
C 03655 POD1	CUB	ED			4	22	25S	26E	550692	3561324			
C 03655 POD2	CUB	ED			4	22	25S	26E	550732	3561337			
C 03655 POD3	CUB	ED	1	4	4	22	25S	26E	568458	3553019			
C 03655 POD4	CUB	ED			4	22	25S	26E	550684	3561362			
C 04036 POD1	C	ED	1	4	3	06	25S	26E	562745	3557733	160	125	35
C 04049 POD1	CUB	ED	3	2	3	06	25S	26E	562592	3557864	165	120	45
C 04050 POD1	CUB	ED	1	4	3	06	25S	26E	562695	3557776	165	125	40
C 04329 POD1	C	ED	2	2	2	27	25S	26E	568577	3552567	57	14	43

***UTM location was derived from PLSS - see Help**

Average Depth to Water: **72 feet**

Minimum Depth: **0 feet**

Maximum Depth: **125 feet**

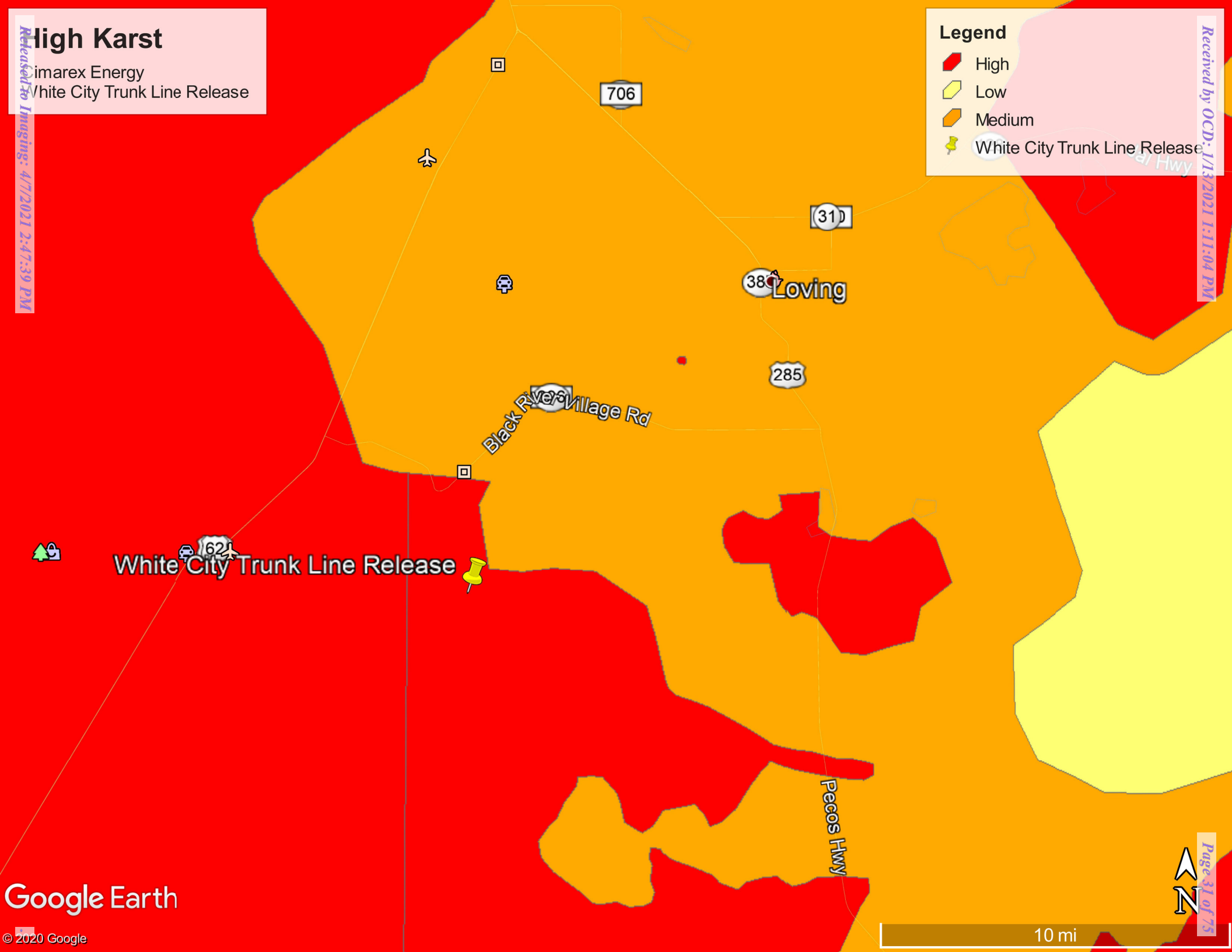
Record Count: 19

Basin/County Search:

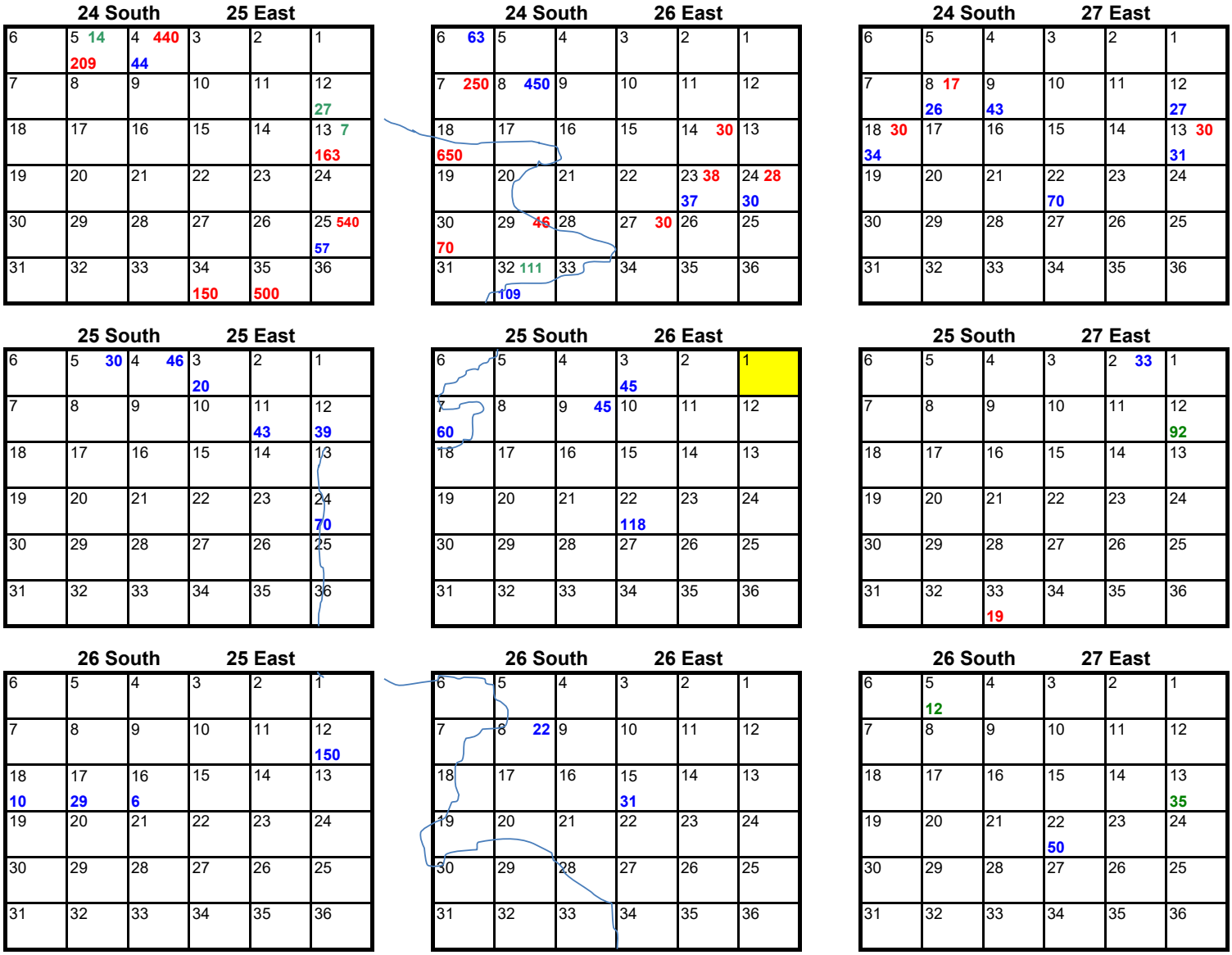
County: Eddy

PLSS Search:

Township: 25S **Range:** 26E


High Karst
imarex Energy
hite City Trunk Line Release
Released to Imaging: 4/7/2021 2:47:39 PM
Received by OCD: 1/13/2021 1:11:04 PM
Legend
High
Low
Medium
White City Trunk Line Release
706
310
Loving
285
Black River Village Rd
White City Trunk Line Release
Pecos Hwy
Google Earth
© 2020 Google
10 mi
N
Page 31 of 75

Water Well Data
Average Depth to Groundwater (ft)
White City SWD Line
Eddy County, New Mexico



88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

123 Tetra Tech installed temporary wells and field water level

143 NMOCD Groundwater map well location

Appendix C

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Brittany Long

Tetra Tech

901 W Wall Street, Ste 100

Midland, TX 79705

Project: White City Trunk Line

Project Number: 212C-MD-02370.100

Location: Eddy County, NM

Lab Order Number: 0L03002

NELAP/TCEQ # T104704516-17-8

Report Date: 12/17/20

Tetra Tech
901 W Wall Street, Ste 100
Midland TX, 79705

Project: White City Trunk Line
Project Number: 212C-MD-02370.100
Project Manager: Brittany Long

Fax: (432) 686-8085

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Bottomhole-1 @ 7'	0L03002-01	Soil	12/02/20 00:00	12-03-2020 09:03
Bottomhole-2 @ 7'	0L03002-02	Soil	12/02/20 00:00	12-03-2020 09:03
Bottomhole-3 @ 7'	0L03002-03	Soil	12/02/20 00:00	12-03-2020 09:03
Bottomhole-4 @ 7'	0L03002-04	Soil	12/02/20 00:00	12-03-2020 09:03
Bottomhole-5 @ 7'	0L03002-05	Soil	12/02/20 00:00	12-03-2020 09:03
Bottomhole-6 @ 7'	0L03002-06	Soil	12/02/20 00:00	12-03-2020 09:03
Bottomhole-7 @ 7'	0L03002-07	Soil	12/02/20 00:00	12-03-2020 09:03
Bottomhole-8 @ 7'	0L03002-08	Soil	12/02/20 00:00	12-03-2020 09:03
Bottomhole-9 @ 1'	0L03002-09	Soil	12/02/20 00:00	12-03-2020 09:03
Bottomhole-10 @ 1'	0L03002-10	Soil	12/02/20 00:00	12-03-2020 09:03
Bottomhole-11 @ 1'	0L03002-11	Soil	12/02/20 00:00	12-03-2020 09:03
Bottomhole-12 @ 1'	0L03002-12	Soil	12/02/20 00:00	12-03-2020 09:03
Bottomhole-13 @ 1'	0L03002-13	Soil	12/02/20 00:00	12-03-2020 09:03
SW-1	0L03002-14	Soil	12/02/20 00:00	12-03-2020 09:03
SW-2	0L03002-15	Soil	12/02/20 00:00	12-03-2020 09:03
SW-3	0L03002-16	Soil	12/02/20 00:00	12-03-2020 09:03
SW-4	0L03002-17	Soil	12/02/20 00:00	12-03-2020 09:03
SW-5	0L03002-18	Soil	12/02/20 00:00	12-03-2020 09:03
SW-6	0L03002-19	Soil	12/02/20 00:00	12-03-2020 09:03
SW-7	0L03002-20	Soil	12/02/20 00:00	12-03-2020 09:03
SW-8	0L03002-21	Soil	12/02/20 00:00	12-03-2020 09:03
SW-9	0L03002-22	Soil	12/02/20 00:00	12-03-2020 09:03
SW-10	0L03002-23	Soil	12/02/20 00:00	12-03-2020 09:03
SW-11	0L03002-24	Soil	12/02/20 00:00	12-03-2020 09:03
SW-12	0L03002-25	Soil	12/02/20 00:00	12-03-2020 09:03

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-1 @ 7'

0L03002-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*99.0 %*	*80-120*		*P0L0708*	*12/07/20*	*12/07/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*102 %*	*80-120*		*P0L0708*	*12/07/20*	*12/07/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**302**	10.5	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*92.4 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*97.2 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	12/03/20	12/03/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-2 @ 7'

0L03002-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*102 %*	*80-120*		*P0L0708*	*12/07/20*	*12/07/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*97.2 %*	*80-120*		*P0L0708*	*12/07/20*	*12/07/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**196**	10.8	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*91.3 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*94.4 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	12/03/20	12/03/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-3 @ 7'

0L03002-03 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00109	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*103 %*	*80-120*		*P0L0708*	*12/07/20*	*12/07/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*95.2 %*	*80-120*		*P0L0708*	*12/07/20*	*12/07/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**299**	10.9	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*95.8 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.0 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	12/03/20	12/03/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-4 @ 7'

0L03002-04 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00110	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Ethylbenzene	ND	0.00110	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Xylene (p/m)	ND	0.00220	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*106 %*	*80-120*		*P0L0708*	*12/07/20*	*12/07/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*98.4 %*	*80-120*		*P0L0708*	*12/07/20*	*12/07/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**463**	11.0	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**9.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.5	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*95.6 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*97.5 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	12/03/20	12/03/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-5 @ 7'

0L03002-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00111	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Toluene	ND	0.00111	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Ethylbenzene	ND	0.00111	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Xylene (p/m)	ND	0.00222	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Xylene (o)	ND	0.00111	mg/kg dry	1	P0L0708	12/07/20	12/07/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*104 %*	*80-120*		*P0L0708*	*12/07/20*	*12/07/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*99.4 %*	*80-120*		*P0L0708*	*12/07/20*	*12/07/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**277**	11.1	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**10.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.8	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C12-C28	ND	27.8	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*101 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*103 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	12/03/20	12/03/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-6 @ 7'

0L03002-06 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.5 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*96.3 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**341**	10.8	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*99.3 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*101 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	12/03/20	12/03/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-7 @ 7'

0L03002-07 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00110	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Ethylbenzene	ND	0.00110	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (p/m)	ND	0.00220	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*97.5 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*93.3 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**366**	11.0	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**9.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.5	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*94.2 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*98.6 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	12/03/20	12/03/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-8 @ 7'

0L03002-08 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00111	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Toluene	ND	0.00111	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Ethylbenzene	ND	0.00111	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (p/m)	ND	0.00222	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (o)	ND	0.00111	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*101 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*96.9 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**365**	11.1	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**10.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.8	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C12-C28	ND	27.8	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*100 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*100 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	12/03/20	12/03/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-9 @ 1'

0L03002-09 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00125	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Toluene	ND	0.00125	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Ethylbenzene	ND	0.00125	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (p/m)	ND	0.00250	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (o)	ND	0.00125	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*99.3 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*97.1 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**363**	12.5	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**20.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	31.2	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C12-C28	ND	31.2	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C28-C35	ND	31.2	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*99.1 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*102 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	31.2	mg/kg dry	1	[CALC]	12/03/20	12/03/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-10 @ 1'

0L03002-10 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00125	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Toluene	ND	0.00125	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Ethylbenzene	ND	0.00125	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (p/m)	ND	0.00250	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (o)	ND	0.00125	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*98.1 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.1 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**399**	12.5	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**20.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	31.2	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C12-C28	ND	31.2	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C28-C35	ND	31.2	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*93.4 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.5 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	31.2	mg/kg dry	1	[CALC]	12/03/20	12/03/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-11 @ 1'

0L03002-11 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00125	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Toluene	ND	0.00125	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Ethylbenzene	ND	0.00125	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (p/m)	ND	0.00250	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (o)	ND	0.00125	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*96.1 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.8 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**500**	12.5	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**20.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	31.2	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C12-C28	ND	31.2	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
>C28-C35	ND	31.2	mg/kg dry	1	P0L0302	12/03/20	12/03/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*94.4 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*96.2 %*	*70-130*		*P0L0302*	*12/03/20*	*12/03/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	31.2	mg/kg dry	1	[CALC]	12/03/20	12/03/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-12 @ 1'

0L03002-12 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00127	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Toluene	ND	0.00127	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Ethylbenzene	ND	0.00127	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (p/m)	ND	0.00253	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (o)	ND	0.00127	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.6 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*97.3 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**398**	12.7	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**21.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	31.6	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	31.6	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	31.6	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*89.2 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*91.8 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	31.6	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
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Midland TX, 79705	Project Manager: Brittany Long	

Bottomhole-13 @ 1'

0L03002-13 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*91.9 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*99.9 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**26.9**	5.15	mg/kg dry	5	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*85.1 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*86.6 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

SW-1

0L03002-14 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00109	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*97.1 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*96.8 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**8.95**	1.09	mg/kg dry	1	P0L0705	12/07/20	12/08/20	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*86.2 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*88.8 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
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Midland TX, 79705	Project Manager: Brittany Long	

SW-2

0L03002-15 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00109	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P0L0708	12/07/20	12/11/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.5 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*93.8 %*	*80-120*		*P0L0708*	*12/07/20*	*12/11/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**59.6**	10.9	mg/kg dry	10	P0L0705	12/07/20	12/07/20	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*86.9 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*89.3 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

SW-3

0L03002-16 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Ethylbenzene	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (p/m)	ND	0.00220	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*92.2 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*99.1 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**2.45**	1.10	mg/kg dry	1	P0L0705	12/07/20	12/08/20	EPA 300.0	
% Moisture	**9.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.5	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*89.5 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*91.9 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
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Midland TX, 79705	Project Manager: Brittany Long	

SW-4

0L03002-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00109	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*98.8 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*96.8 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**7.46**	1.09	mg/kg dry	1	P0L0705	12/07/20	12/08/20	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*94.6 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*96.4 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
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Midland TX, 79705	Project Manager: Brittany Long	

SW-5

0L03002-18 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Ethylbenzene	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (p/m)	ND	0.00220	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*94.3 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*96.9 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**7.32**	1.10	mg/kg dry	1	P0L0705	12/07/20	12/08/20	EPA 300.0	
% Moisture	**9.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.5	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*93.4 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.9 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
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Midland TX, 79705	Project Manager: Brittany Long	

SW-6

0L03002-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Ethylbenzene	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (p/m)	ND	0.00220	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.0 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*100 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**9.62**	1.10	mg/kg dry	1	P0L0705	12/07/20	12/08/20	EPA 300.0	
% Moisture	**9.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.5	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*90.4 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*91.7 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
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Midland TX, 79705	Project Manager: Brittany Long	

SW-7

0L03002-20 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00109	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*104 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*99.0 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**5.39**	1.09	mg/kg dry	1	P0L0705	12/07/20	12/08/20	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*93.8 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.0 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
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Midland TX, 79705	Project Manager: Brittany Long	

SW-8

0L03002-21 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Ethylbenzene	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (p/m)	ND	0.00220	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*105 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*99.9 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**219**	11.0	mg/kg dry	10	P0L0706	12/07/20	12/10/20	EPA 300.0	
% Moisture	**9.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.5	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.1 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*97.8 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

SW-9

0L03002-22 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*103 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*102 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**126**	5.15	mg/kg dry	5	P0L0706	12/07/20	12/09/20	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*94.7 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*94.1 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

SW-10

0L03002-23 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*98.0 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*105 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**49.1**	5.15	mg/kg dry	5	P0L0706	12/07/20	12/09/20	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*95.4 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*94.8 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

SW-11

0L03002-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*100 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*97.0 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**38.6**	1.03	mg/kg dry	1	P0L0706	12/07/20	12/10/20	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.4 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.7 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

SW-12

0L03002-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P0L1003	12/10/20	12/10/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*103 %*	*80-120*		*P0L1003*	*12/10/20*	*12/10/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**58.1**	5.15	mg/kg dry	5	P0L0706	12/07/20	12/09/20	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P0L0404	12/04/20	12/04/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P0L0307	12/03/20	12/04/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*94.1 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*93.7 %*	*70-130*		*P0L0307*	*12/03/20*	*12/04/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	12/03/20	12/04/20	calc	

Tetra Tech
901 W Wall Street, Ste 100
Midland TX, 79705

Project: White City Trunk Line
Project Number: 212C-MD-02370.100
Project Manager: Brittany Long

Fax: (432) 686-8085

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0L0708 - General Preparation (GC)										
Blank (P0L0708-BLK1)				Prepared & Analyzed: 12/07/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	*0.118*		"	*0.120*		*98.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.116*		"	*0.120*		*96.7*	*80-120*			
LCS (P0L0708-BS1)				Prepared & Analyzed: 12/07/20						
Benzene	0.104	0.00100	mg/kg wet	0.100		104	70-130			
Toluene	0.0963	0.00100	"	0.100		96.3	70-130			
Ethylbenzene	0.102	0.00100	"	0.100		102	70-130			
Xylene (p/m)	0.192	0.00200	"	0.200		96.1	70-130			
Xylene (o)	0.0932	0.00100	"	0.100		93.2	70-130			
Surrogate: 4-Bromofluorobenzene	*0.116*		"	*0.120*		*96.3*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.122*		"	*0.120*		*102*	*80-120*			
LCS Dup (P0L0708-BSD1)				Prepared & Analyzed: 12/07/20						
Benzene	0.113	0.00100	mg/kg wet	0.100		113	70-130	7.72	20	
Toluene	0.108	0.00100	"	0.100		108	70-130	11.8	20	
Ethylbenzene	0.117	0.00100	"	0.100		117	70-130	13.9	20	
Xylene (p/m)	0.220	0.00200	"	0.200		110	70-130	13.6	20	
Xylene (o)	0.106	0.00100	"	0.100		106	70-130	13.1	20	
Surrogate: 4-Bromofluorobenzene	*0.114*		"	*0.120*		*95.2*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.121*		"	*0.120*		*101*	*80-120*			
Calibration Check (P0L0708-CCV1)				Prepared & Analyzed: 12/07/20						
Benzene	0.115	0.00100	mg/kg wet	0.100		115	80-120			
Toluene	0.109	0.00100	"	0.100		109	80-120			
Ethylbenzene	0.115	0.00100	"	0.100		115	80-120			
Xylene (p/m)	0.227	0.00200	"	0.200		113	80-120			
Xylene (o)	0.112	0.00100	"	0.100		112	80-120			
Surrogate: 4-Bromofluorobenzene	*0.122*		"	*0.120*		*102*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.123*		"	*0.120*		*103*	*75-125*			

Tetra Tech
901 W Wall Street, Ste 100
Midland TX, 79705

Project: White City Trunk Line
Project Number: 212C-MD-02370.100
Project Manager: Brittany Long

Fax: (432) 686-8085

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0L0708 - General Preparation (GC)										
Calibration Check (P0L0708-CCV2)				Prepared & Analyzed: 12/07/20						
Benzene	0.107	0.00100	mg/kg wet	0.100		107	80-120			
Toluene	0.0952	0.00100	"	0.100		95.2	80-120			
Ethylbenzene	0.0997	0.00100	"	0.100		99.7	80-120			
Xylene (p/m)	0.177	0.00200	"	0.200		88.6	80-120			
Xylene (o)	0.0896	0.00100	"	0.100		89.6	80-120			
Surrogate: 4-Bromofluorobenzene	*0.113*		*"*	*0.120*		*94.3*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.128*		*"*	*0.120*		*107*	*75-125*			
Batch P0L1003 - General Preparation (GC)										
Blank (P0L1003-BLK1)				Prepared & Analyzed: 12/10/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	*0.111*		*"*	*0.120*		*92.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.114*		*"*	*0.120*		*95.2*	*80-120*			
LCS (P0L1003-BS1)				Prepared & Analyzed: 12/10/20						
Benzene	0.112	0.00100	mg/kg wet	0.100		112	70-130			
Toluene	0.104	0.00100	"	0.100		104	70-130			
Ethylbenzene	0.114	0.00100	"	0.100		114	70-130			
Xylene (p/m)	0.206	0.00200	"	0.200		103	70-130			
Xylene (o)	0.0988	0.00100	"	0.100		98.8	70-130			
Surrogate: 1,4-Difluorobenzene	*0.124*		*"*	*0.120*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.116*		*"*	*0.120*		*96.9*	*80-120*			

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
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Midland TX, 79705	Project Manager: Brittany Long	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0L1003 - General Preparation (GC)										
LCS Dup (P0L1003-BSD1)				Prepared & Analyzed: 12/10/20						
Benzene	0.101	0.00100	mg/kg wet	0.100		101	70-130	10.2	20	
Toluene	0.0922	0.00100	"	0.100		92.2	70-130	12.2	20	
Ethylbenzene	0.113	0.00100	"	0.100		113	70-130	0.563	20	
Xylene (p/m)	0.184	0.00200	"	0.200		91.8	70-130	11.6	20	
Xylene (o)	0.0908	0.00100	"	0.100		90.8	70-130	8.50	20	
Surrogate: 4-Bromofluorobenzene	*0.132*		*"*	*0.120*		*110*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.118*		*"*	*0.120*		*98.3*	*80-120*			
Calibration Check (P0L1003-CCV1)				Prepared & Analyzed: 12/10/20						
Benzene	0.108	0.00100	mg/kg wet	0.100		108	80-120			
Toluene	0.101	0.00100	"	0.100		101	80-120			
Ethylbenzene	0.106	0.00100	"	0.100		106	80-120			
Xylene (p/m)	0.196	0.00200	"	0.200		98.2	80-120			
Xylene (o)	0.0963	0.00100	"	0.100		96.3	80-120			
Surrogate: 4-Bromofluorobenzene	*0.113*		*"*	*0.120*		*93.8*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.121*		*"*	*0.120*		*101*	*75-125*			
Calibration Check (P0L1003-CCV2)				Prepared & Analyzed: 12/10/20						
Benzene	0.111	0.00100	mg/kg wet	0.100		111	80-120			
Toluene	0.101	0.00100	"	0.100		101	80-120			
Ethylbenzene	0.104	0.00100	"	0.100		104	80-120			
Xylene (p/m)	0.189	0.00200	"	0.200		94.4	80-120			
Xylene (o)	0.0972	0.00100	"	0.100		97.2	80-120			
Surrogate: 1,4-Difluorobenzene	*0.128*		*"*	*0.120*		*107*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.117*		*"*	*0.120*		*97.1*	*75-125*			
Calibration Check (P0L1003-CCV3)				Prepared: 12/10/20 Analyzed: 12/11/20						
Benzene	0.111	0.00100	mg/kg wet	0.100		111	80-120			
Toluene	0.100	0.00100	"	0.100		100	80-120			
Ethylbenzene	0.110	0.00100	"	0.100		110	80-120			
Xylene (p/m)	0.199	0.00200	"	0.200		99.4	80-120			
Xylene (o)	0.104	0.00100	"	0.100		104	80-120			
Surrogate: 4-Bromofluorobenzene	*0.124*		*"*	*0.120*		*103*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.120*		*"*	*0.120*		*99.8*	*75-125*			

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
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Midland TX, 79705	Project Manager: Brittany Long	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0L1003 - General Preparation (GC)										
Matrix Spike (P0L1003-MS1)	**Source: 0L03002-16**			Prepared: 12/10/20 Analyzed: 12/11/20						
Benzene	0.0778	0.00110	mg/kg dry	0.110	ND	70.8	80-120			QM-05
Toluene	0.0643	0.00110	"	0.110	ND	58.5	80-120			QM-05
Ethylbenzene	0.0766	0.00110	"	0.110	ND	69.8	80-120			QM-05
Xylene (p/m)	0.117	0.00220	"	0.220	ND	53.1	80-120			QM-05
Xylene (o)	0.0587	0.00110	"	0.110	ND	53.4	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	*0.145*		"	*0.132*		*110*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.143*		"	*0.132*		*109*	*80-120*			
Matrix Spike Dup (P0L1003-MSD1)	**Source: 0L03002-16**			Prepared: 12/10/20 Analyzed: 12/11/20						
Benzene	0.0812	0.00110	mg/kg dry	0.110	ND	73.9	80-120	4.23	20	QM-05
Toluene	0.0650	0.00110	"	0.110	ND	59.1	80-120	1.12	20	QM-05
Ethylbenzene	0.0797	0.00110	"	0.110	ND	72.5	80-120	3.91	20	QM-05
Xylene (p/m)	0.118	0.00220	"	0.220	ND	53.9	80-120	1.43	20	QM-05
Xylene (o)	0.0617	0.00110	"	0.110	ND	56.2	80-120	5.08	20	QM-05
Surrogate: 4-Bromofluorobenzene	*0.143*		"	*0.132*		*109*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.138*		"	*0.132*		*105*	*80-120*			

Tetra Tech
901 W Wall Street, Ste 100
Midland TX, 79705

Project: White City Trunk Line
Project Number: 212C-MD-02370.100
Project Manager: Brittany Long

Fax: (432) 686-8085

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0L0404 - * DEFAULT PREP *** **										
Blank (P0L0404-BLK1)				Prepared & Analyzed: 12/04/20						
% Moisture	ND	0.1	%							
Blank (P0L0404-BLK2)				Prepared & Analyzed: 12/04/20						
% Moisture	ND	0.1	%							
Duplicate (P0L0404-DUP1)	**Source: 0L03002-10**			Prepared & Analyzed: 12/04/20						
% Moisture	20.0	0.1	%		20.0			0.00	20	
Duplicate (P0L0404-DUP2)	**Source: 0L03002-20**			Prepared & Analyzed: 12/04/20						
% Moisture	9.0	0.1	%		8.0			11.8	20	
Batch P0L0705 - * DEFAULT PREP *** **										
Blank (P0L0705-BLK1)				Prepared: 12/07/20 Analyzed: 12/17/20						
Chloride	ND	1.00	mg/kg wet							
LCS (P0L0705-BS1)				Prepared & Analyzed: 12/07/20						
Chloride	433	1.00	mg/kg wet	400		108	80-120			
LCS Dup (P0L0705-BSD1)				Prepared & Analyzed: 12/07/20						
Chloride	435	1.00	mg/kg wet	400		109	80-120	0.507	20	
Calibration Check (P0L0705-CCV1)				Prepared & Analyzed: 12/07/20						
Chloride	20.6		mg/kg	20.0		103	0-200			
Calibration Check (P0L0705-CCV2)				Prepared & Analyzed: 12/07/20						
Chloride	21.3		mg/kg	20.0		107	0-200			

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0L0705 - * DEFAULT PREP *** **										
Calibration Check (P0L0705-CCV3)				Prepared & Analyzed: 12/07/20						
Chloride	22.2		mg/kg	20.0		111	0-200			
Matrix Spike (P0L0705-MS1)		Source: 0L03002-01		Prepared & Analyzed: 12/07/20						
Chloride	1420	10.5	mg/kg dry	1050	302	106	80-120			
Matrix Spike (P0L0705-MS2)		Source: 0L03002-11		Prepared & Analyzed: 12/07/20						
Chloride	1790	12.5	mg/kg dry	1250	500	103	80-120			
Matrix Spike Dup (P0L0705-MSD1)		Source: 0L03002-01		Prepared & Analyzed: 12/07/20						
Chloride	1470	10.5	mg/kg dry	1050	302	111	80-120	3.48	20	
Matrix Spike Dup (P0L0705-MSD2)		Source: 0L03002-11		Prepared & Analyzed: 12/07/20						
Chloride	1810	12.5	mg/kg dry	1250	500	105	80-120	1.16	20	
Batch P0L0706 - * DEFAULT PREP *** **										
Blank (P0L0706-BLK1)				Prepared: 12/07/20 Analyzed: 12/09/20						
Chloride	ND	1.00	mg/kg wet							
LCS (P0L0706-BS1)				Prepared: 12/07/20 Analyzed: 12/09/20						
Chloride	452	1.00	mg/kg wet	400		113	80-120			
LCS Dup (P0L0706-BSD1)				Prepared: 12/07/20 Analyzed: 12/09/20						
Chloride	447	1.00	mg/kg wet	400		112	80-120	1.07	20	
Calibration Check (P0L0706-CCV1)				Prepared: 12/07/20 Analyzed: 12/09/20						
Chloride	21.6		mg/kg	20.0		108	0-200			

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0L0706 - * DEFAULT PREP *** **										
Calibration Check (P0L0706-CCV2)				Prepared: 12/07/20 Analyzed: 12/09/20						
Chloride	22.2		mg/kg	20.0		111	0-200			
Calibration Check (P0L0706-CCV3)				Prepared: 12/07/20 Analyzed: 12/09/20						
Chloride	22.4		mg/kg	20.0		112	0-200			
Matrix Spike (P0L0706-MS1)		**Source: 0L03002-21**		Prepared: 12/07/20 Analyzed: 12/10/20						
Chloride	1230	11.0	mg/kg dry	1100	219	91.7	80-120			
Matrix Spike (P0L0706-MS2)		**Source: 0L07007-04**		Prepared: 12/07/20 Analyzed: 12/09/20						
Chloride	675	1.05	mg/kg dry	526	202	90.0	80-120			
Matrix Spike Dup (P0L0706-MSD1)		**Source: 0L03002-21**		Prepared: 12/07/20 Analyzed: 12/10/20						
Chloride	1310	11.0	mg/kg dry	1100	219	99.5	80-120	6.68	20	
Matrix Spike Dup (P0L0706-MSD2)		**Source: 0L07007-04**		Prepared: 12/07/20 Analyzed: 12/09/20						
Chloride	688	1.05	mg/kg dry	526	202	92.4	80-120	1.89	20	

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0L0302 - TX 1005										
Blank (P0L0302-BLK1)				Prepared & Analyzed: 12/03/20						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*97.8*		*"*	*100*		*97.8*	*70-130*			
Surrogate: o-Terphenyl	*48.5*		*"*	*50.0*		*97.0*	*70-130*			
LCS (P0L0302-BS1)				Prepared & Analyzed: 12/03/20						
C6-C12	1040	25.0	mg/kg wet	1000		104	75-125			
>C12-C28	1140	25.0	"	1000		114	75-125			
Surrogate: 1-Chlorooctane	*125*		*"*	*100*		*125*	*70-130*			
Surrogate: o-Terphenyl	*49.1*		*"*	*50.0*		*98.2*	*70-130*			
LCS Dup (P0L0302-BSD1)				Prepared & Analyzed: 12/03/20						
C6-C12	1050	25.0	mg/kg wet	1000		105	75-125	0.0383	20	
>C12-C28	1130	25.0	"	1000		113	75-125	0.867	20	
Surrogate: 1-Chlorooctane	*124*		*"*	*100*		*124*	*70-130*			
Surrogate: o-Terphenyl	*48.5*		*"*	*50.0*		*97.0*	*70-130*			
Calibration Check (P0L0302-CCV1)				Prepared & Analyzed: 12/03/20						
C6-C12	523	25.0	mg/kg wet	500		105	85-115			
>C12-C28	570	25.0	"	500		114	85-115			
Surrogate: 1-Chlorooctane	*108*		*"*	*100*		*108*	*70-130*			
Surrogate: o-Terphenyl	*47.4*		*"*	*50.0*		*94.8*	*70-130*			
Calibration Check (P0L0302-CCV2)				Prepared & Analyzed: 12/03/20						
C6-C12	530	25.0	mg/kg wet	500		106	85-115			
>C12-C28	561	25.0	"	500		112	85-115			
Surrogate: 1-Chlorooctane	*108*		*"*	*100*		*108*	*70-130*			
Surrogate: o-Terphenyl	*47.4*		*"*	*50.0*		*94.8*	*70-130*			

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0L0302 - TX 1005										
Matrix Spike (P0L0302-MS1)	**Source: 0L02021-13**			Prepared & Analyzed: 12/03/20						
C6-C12	984	27.2	mg/kg dry	1090	ND	90.5	75-125			
>C12-C28	1110	27.2	"	1090	36.0	99.2	75-125			
Surrogate: 1-Chlorooctane	*111*		*"*	*109*		*102*	*70-130*			
Surrogate: o-Terphenyl	*48.6*		*"*	*54.3*		*89.4*	*70-130*			
Matrix Spike Dup (P0L0302-MSD1)	**Source: 0L02021-13**			Prepared & Analyzed: 12/03/20						
C6-C12	962	27.2	mg/kg dry	1090	ND	88.5	75-125	2.22	20	
>C12-C28	1060	27.2	"	1090	36.0	94.3	75-125	5.04	20	
Surrogate: 1-Chlorooctane	*112*		*"*	*109*		*103*	*70-130*			
Surrogate: o-Terphenyl	*43.0*		*"*	*54.3*		*79.1*	*70-130*			
Batch P0L0307 - TX 1005										
Blank (P0L0307-BLK1)				Prepared: 12/03/20 Analyzed: 12/04/20						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*95.2*		*"*	*100*		*95.2*	*70-130*			
Surrogate: o-Terphenyl	*47.1*		*"*	*50.0*		*94.2*	*70-130*			
LCS (P0L0307-BS1)				Prepared: 12/03/20 Analyzed: 12/04/20						
C6-C12	1050	25.0	mg/kg wet	1000		105	75-125			
>C12-C28	1130	25.0	"	1000		113	75-125			
Surrogate: 1-Chlorooctane	*126*		*"*	*100*		*126*	*70-130*			
Surrogate: o-Terphenyl	*53.9*		*"*	*50.0*		*108*	*70-130*			
LCS Dup (P0L0307-BSD1)				Prepared: 12/03/20 Analyzed: 12/04/20						
C6-C12	1030	25.0	mg/kg wet	1000		103	75-125	1.57	20	
>C12-C28	1110	25.0	"	1000		111	75-125	1.59	20	
Surrogate: 1-Chlorooctane	*125*		*"*	*100*		*125*	*70-130*			
Surrogate: o-Terphenyl	*52.1*		*"*	*50.0*		*104*	*70-130*			

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0L0307 - TX 1005										
Calibration Check (P0L0307-CCV1)				Prepared: 12/03/20 Analyzed: 12/04/20						
C6-C12	522	25.0	mg/kg wet	500		104	85-115			
>C12-C28	565	25.0	"	500		113	85-115			
Surrogate: 1-Chlorooctane	*109*		*"*	*100*		*109*	*70-130*			
Surrogate: o-Terphenyl	*48.8*		*"*	*50.0*		*97.7*	*70-130*			
Calibration Check (P0L0307-CCV2)				Prepared: 12/03/20 Analyzed: 12/04/20						
C6-C12	514	25.0	mg/kg wet	500		103	85-115			
>C12-C28	539	25.0	"	500		108	85-115			
Surrogate: 1-Chlorooctane	*105*		*"*	*100*		*105*	*70-130*			
Surrogate: o-Terphenyl	*45.4*		*"*	*50.0*		*90.9*	*70-130*			
Matrix Spike (P0L0307-MS1)	**Source: 0L03002-20**			Prepared: 12/03/20 Analyzed: 12/05/20						
C6-C12	1070	27.2	mg/kg dry	1090	ND	98.3	75-125			
>C12-C28	1160	27.2	"	1090	ND	106	75-125			
Surrogate: 1-Chlorooctane	*124*		*"*	*109*		*114*	*70-130*			
Surrogate: o-Terphenyl	*49.8*		*"*	*54.3*		*91.7*	*70-130*			
Matrix Spike Dup (P0L0307-MSD1)	**Source: 0L03002-20**			Prepared: 12/03/20 Analyzed: 12/05/20						
C6-C12	1080	27.2	mg/kg dry	1090	ND	99.4	75-125	1.14	20	
>C12-C28	1150	27.2	"	1090	ND	105	75-125	0.925	20	
Surrogate: 1-Chlorooctane	*128*		*"*	*109*		*118*	*70-130*			
Surrogate: o-Terphenyl	*52.4*		*"*	*54.3*		*96.4*	*70-130*			

Tetra Tech	Project: White City Trunk Line	Fax: (432) 686-8085
901 W Wall Street, Ste 100	Project Number: 212C-MD-02370.100	
Midland TX, 79705	Project Manager: Brittany Long	

Notes and Definitions

QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
BULK	Samples received in Bulk soil containers
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 12/17/2020

Brent Barron, Laboratory Director/Technical Director

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland,Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

OL03002

Client Name:	Cimarex	Site Manager:	Brittany Long
Project Name:	White City Trunk Line		
Project Location: (county, state)	Eddy County, New Mexico	Project #:	212C-MD-02370.100
Invoice to:	Cimarex/Gloria Garza		
Receiving Laboratory:	PBE Lab	Sampler Signature:	Devin Dominguez
Comments:			

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD None	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 824	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Sulfate TDS	Chloride	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
	Bottomhole-1 (7')	12/2/2020			X							1	N	X		X												X								
	Bottomhole-2 (7')	12/2/2020			X							1	N	X		X												X								
	Bottomhole-3 (7')	12/2/2020			X							1	N	X		X												X								
	Bottomhole-4 (7')	12/2/2020			X							1	N	X		X												X								
	Bottomhole-5 (7')	12/2/2020			X							1	N	X		X												X								
	Bottomhole-6 (7')	12/2/2020			X							1	N	X		X												X								
	Bottomhole-7 (7')	12/2/2020			X							1	N	X		X												X								
	Bottomhole-8 (7')	12/2/2020			X							1	N	X		X												X								
	Bottomhole-9 (1')	12/2/2020			X							1	N	X		X												X								
	Bottomhole-10 (1')	12/2/2020			X							1	N	X		X												X								

Relinquished by:	Date: 12/3	Time:	Received by: Alma Bledsoe
Relinquished by:	Date:	Time:	Received by: Date: 12/3/20 Time: 9:03
Relinquished by:	Date:	Time:	Received by: Date: Time:

LAB USE ONLY

Sample Temperature
8.1
9.1
CF+1
-2

REMARKS:

- [X] STANDARD
- [ ] RUSH: Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland,Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

OL03002

Client Name:	Cimarex	**Site Manager:**	Brittany Long
Project Name:	White City Trunk Line		
Project Location: (county, state)	Eddy County, New Mexico	**Project #:**	212C-MD-02370.100
Invoice to:	Cimarex/Gloria Garza		
Receiving Laboratory:	PBE Lab	**Sampler Signature:**	Devin Dominguez
Comments:			

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD None	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
	Bottomhole-11 (1')	12/2/2020			X					1	N	X		X												X							
	Bottomhole-12 (1')	12/2/2020			X					1	N	X		X												X							
	Bottomhole-13 (1')	12/2/2020			X					1	N	X		X												X							
	SW-1	12/2/2020			X					1	N	X		X												X							
	SW-2	12/2/2020			X					1	N	X		X												X							
	SW-3	12/2/2020			X					1	N	X		X												X							
	SW-4	12/2/2020			X					1	N	X		X												X							
	SW-5	12/2/2020			X					1	N	X		X												X							
	SW-6	12/2/2020			X					1	N	X		X												X							
	SW-7	12/2/2020			X					1	N	X		X												X							

Relinquished by:	Date: 12/3	Time:	Received by: Jenna Bledsoe 12/3/20 9:03
Relinquished by:	Date:	Time:	Received by: Date: Time:
Relinquished by:	Date:	Time:	Received by: Date: Time:

LAB USE ONLY

Sample Temperature 8.1 C-corr

REMARKS:

- [X] STANDARD
- [ ] **RUSH:** Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

0L03002

Client Name:	Cimarex	**Site Manager:**	Brittany Long
Project Name:	White City Trunk Line		
Project Location: (county, state)	Eddy County, New Mexico	**Project #:**	212C-MD-02370.100
Invoice to:	Cimarex/Gloria Garza		
Receiving Laboratory:	PBE Lab	**Sampler Signature:**	Devin Dominguez
Comments:			

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD None	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
	SW-8	12/2/2020			X						1	N	X			X												X							
	SW-9	12/2/2020			X						1	N	X			X												X							
	SW-10	12/2/2020			X						1	N	X			X												X							
	SW-11	12/2/2020			X						1	N	X			X												X							
	SW-12	12/2/2020			X						1	N	X			X												X							

Relinquished by:	Date: 12/3	Time:	Received by: Anna Bledsoe
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Date: 12/3/20 Time: 9:03

LAB USE ONLY

Sample Temperature
8.1
9.1
OFF 12

REMARKS:

- [X] STANDARD
- [ ] **RUSH:** Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 14617

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
CIMAREX ENERGY CO. 600 N. Marienfeld Street Suite 600 Midland, TX79701	215099	14617	C-141

OCD Reviewer	Condition
ceads	None