

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	NCS1919242369
District RP	3RP-13664
Facility ID	FCS1916856802
Application ID	

Release Notification

Operator did not submit an Initial C-141 as is out of compliance.

Responsible Party

Responsible Party: Whiptail Midstream LLC	OGRID: 373240
Contact Name: Ernie Johnson	Contact Telephone: 918-289-2147
Contact email: ernie.johnson@whiptailmidstream.com	Incident #: NCS1919242369 CHACO 4-1 CDP @ FCS1916856802
Contact mailing address: 15 West 6 th Street, Suite 2901, Tulsa, OK 74119	

Location of Release Source

Latitude 36.225430° Longitude -107.530145°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: CHACO 4-1 CDP	Site Type: Underground Pipeline.
Date Release Discovered: 7/2/2019	API#: N/A

Unit Letter	Section	Township	Range	County
K	13	23N	7W	Rio Arriba County

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

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 104	Volume Recovered (bbls) 0
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release


An underground pipeline transporting unrefined oil ruptured at sub-surface location, allowing oil to leak out into the nearby soils. The rupture in the pipeline was caused by corrosion.

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? The estimated volume of the release is 104 bbls, satisfying the criteria for a Major Release per 19.15.29.9 (A) (1) NMAC – Major Release – “an unauthorized release of a volume, excluding gases, or 25 barrels or more.”
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Notification was provided to the NMOCD and BLM by HRL Compliance Solutions (Gunnar Westerman) within 24hrs of discovering the release. Cory Smith (Environmental Specialist - NMOCD) was notified verbally via voicemail. Jim Griswold (Environmental Bureau Chief - NMOCD), “Emmanuel” Abiodun Adeboye (Natural Resource Specialist – BLM), and Whitney Thomas (Natural Resource Specialist – BLM) were notified via e-mail.	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> 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: <u>Ernie Johnson</u>	Title: <u>Director of Risk and Engineering Services</u>
Signature: <u></u>	Date: <u>7/17/19</u>
email: <u>ernie.johnson@whiptailmidstream.com</u>	Telephone: <u>918-289-2147</u>
<u>OCD Only</u> Received by: _____ Date: _____	

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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?	<u>180</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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

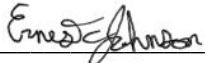
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, 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

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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: Ernie Johnson Title: Director of Risk and Engineering Services

Signature:  Date: October 2, 2019

email: ernie.johnson@whiptailmidstream.com Telephone: (918) 289-2147

OCD Only

Received by: _____ Date: _____

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Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: Ernie Johnson Title: Director of Risk and Engineering Services

Signature:  Date: October 2, 2019

email: ernie.johnson@whiptailmidstream.com Telephone: (918) 289-2147

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

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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: Ernie Johnson Title: Director of Risk and Engineering Services

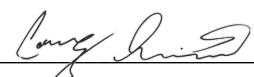
Signature:  Date: October 2, 2019

email: ernie.johnson@whiptailmidstream.com Telephone: (918) 289-2147

OCD Only

Received by: OCD Date: 10/1/19

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: 12/6/19

Printed Name: Cory Title: Environmentl Specialist

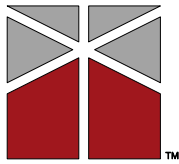


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LIST OF ATTACHMENTS

Attachment A: NMOCD Form C-141, Dated July 3, 2019
Attachment B: NMOCD Form C-138
Attachment C: Revised NMOCD Form C-141, Dated July 17, 2019
Attachment D: July 24, 2019 Laboratory Analytical Reports
Attachment E: August 15, 2019 Laboratory Analytical Reports



ACRONYM LIST

bbl(s)	Barrel(s)
BLM	Bureau of Land Management
BTEX	Benzene, Toluene, Ethyl benzene, and Xylene
DRO	Diesel Range Organics
FFO	Farmington Field Office
GPS	Global positioning system
GRO	Gasoline Range Organics
mg/kg	milligram per kilogram
NELAP	National Environmental Laboratory Accreditation Program
NMAC	New Mexico Administrative Code
NMOCD	New Mexico Oil Conservation Division
NRCS	National Resources Conservation Service
ORO	Oil Range Organics
ROW	Right of Way
TB	Tank Battery
TPH	Total Petroleum Hydrocarbons
USDA	United States Department of Agriculture
USGS	United States Geological Survey



EXECUTIVE SUMMARY

On July 2, 2019, an unintended release of unrefined crude oil from an underground pipeline occurred at the Whiptail Midstream LLC (Whiptail) Chaco 4-1 central depository point (CDP) facility (site). Immediately upon discovery, the pipeline was isolated and transportation of oil within the pipeline was ceased to prevent release of additional fluids. Whiptail contacted HRL Compliance Solutions, Inc. (HRL) to assist with reporting and remediation of the release.

The release was reported to the New Mexico Oil Conservation Division (NMOCD) within the 24-hour timeframe; NMOCD assigned Incident # NCS1919242369 to this release. The volume of the release was initially reported at 50 barrels (bbls); however, it was later revised to 104 bbls.

Remedial activities included excavation of impacted soil between July 3, 2019 and July 24, 2019 and on August 12, 2019. Impacted soil was transported to an NMOCD permitted surface waste management facility south of Bloomfield, New Mexico (Envirotech landfarm) for disposal under NMOCD Form C-138.

Following both remediation events, soil samples from the floor and sidewalls of the excavation were analyzed to confirm the soil remaining at the Site met the Closure Criteria for Soils Impacted by a Release, as provided in Table 1 of 19.15.29 NMAC (NMOCD Table 1 Closure Criteria). Based on meeting the NMOCD Table 1 Closure Criteria, HRL does not recommend additional remedial activities at the site and recommends closure of this release by the NMOCD.



1.0 INTRODUCTION

1.1 PURPOSE OF REPORT

This report presents a detailed description of the release response, notification, remediation efforts, and subsequent request for closure for the release of crude oil from an underground pipeline at the Whiptail Midstream LLC (Whiptail) Chaco 4-1 central depository point (CDP) facility (site).

1.2 RELEASE, INITIAL RESPONSE, AND REMEDIATION

At approximately 3:00 pm on July 2, 2019, a release was discovered from an underground pipeline transporting unrefined crude oil at the site (Figure 1) (Photographs); the release was believed to be 50 barrels (bbls). Immediately upon discovery, the source of the release was secured by terminating the flow of oil through the underground pipeline to prevent additional loss of fluids. Whiptail personnel attempted to mobilize hydro-excavation equipment to locate the section of the line the rupture; however, the equipment was not available until July 3, 2019. Whiptail also contacted HRL Compliance Solutions Inc. (HRL) upon discovery of the release to assist with notification, characterization, remediation, and closure activities.

HRL notified the following contacts and agencies:

CONTACT NAME	AGENCY	NOTIFICATION DATE	NOTIFICATION TIME	NOTIFICATION METHOD
Cory Smith	New Mexico Oil Conservation Division (NMOCD)	7/3/19	09:38	Voicemail
Jim Griswold	NMOCD	7/3/19	10:46	Email
Emmanuel Abiodun Adedoye	Bureau of Land Management (BLM)	7/3/19	10:46	Email
Whitney Thomas	BLM	7/3/19	10:46	Email

HRL submitted the Release Notification form (NMOCD Form C-141) (Attachment A) to Cory Smith, NMOCD. Additionally, HRL submitted a Request for Approval to Accept Solid Waste disposal (NMOCD Form C-138) (Attachment B) form to the Envirotech Landfarm for disposal of impacted soils at their facility south of Bloomfield, New Mexico. HRL also called for emergency utility locates (one-call) for the areas within and adjacent to the visually impacted soil.



On July 3, 2019, hydro-excavation equipment was used to locate the ruptured section of the buried pipeline. HRL field personnel utilized a hand auger to begin the vertical and horizontal delineation of impacts. The surficial extent of impacted soil was approximately 160 feet long from the source to the endpoint. Between July 3, 2019 and July 29, 2019, a backhoe was utilized to excavate impacted soils. Excavation activities confirmed that the rupture was due to pipeline corrosion and the damaged section of pipe was repaired. The excavation area was secured with safety fencing and strategic placement of heavy equipment when activities were not occurring at the site.

On July 15, 2019, an updated C-141 form (Attachment C) was submitted to NMOCD revising the estimated volume released to 104 bbls; the revision was based on Whiptail's automated sales measurement system associated with the ruptured pipeline.

On July 25, 2019 Cory Smith with the NMOCD and Abiodun Adeloye with the BLM were notified by email that confirmation sampling was scheduled for July 29, 2019, providing the 48-hour confirmation sampling notice. On July 29, 2019, HRL met with Cory Smith onsite to discuss the sample point grids and collection procedures. Soil samples from the floor and sidewalls of the excavation were collected from the sample locations outlined in the attached maps and analyzed for the parameters specified in Table 1 of 19.15.29 NMAC (NMOCD Table 1 Closure Criteria). Results (Attachment D) indicated the soil samples were below NMOCD Table 1 Closure Criteria except floor sample F10.

On August 12, 2019, additional excavation of impacted soil occurred in the area near soil sample F10. Additional excavation consisted removing an additional one foot of soil from the floor of the excavation in the respective direction for the sample location. On August 14, 2019, confirmatory soil samples were collected from the floor within the F10 grid and newly exposed side walls at SW24 and SW25; results (Attachment E) were below NMOCD Table 1 Closure Criteria.

1.3 SCOPE AND LIMITATIONS

The scope of HRL's services consists of characterizing the release, remediation oversight, verification of release stability, confirmation sampling, regulatory liaison, and preparation of this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the San Juan Basin in New Mexico and in accordance with applicable state regulations.



2.0 SITE CHARACTERIZATION

2.1 GENERAL SITE INFORMATION

The following information provides a brief outline of the site location and site conditions.

2.1.1 Site Location

The site is located on federally owned land in Section 13, Township 23 North, Range 7 West, New Mexico Principal Meridian (Figure 1). The site is located within the San Juan Basin in southwest Rio Arriba County, New Mexico.

2.1.2 Site Description

The site is typical for oil and gas exploration and production activities in the San Juan Basin, New Mexico. The pipeline associated with the site is utilized for transporting unrefined crude oil from production facilities to a CDP for storage and distribution purposes.

The surrounding landscape is comprised of primarily of sagebrush common to high desert climates. The adjacent federal lands are used almost exclusively for rangeland. It has an arid climate and annual mean precipitation ranging between 10-13 inches. Native vegetation is principally big sagebrush, rubber rabbitbrush, four-winged saltbush, greasewood, broom snakeweed, and various native and weedy forbs and grasses.

2.1.3 Topography

The site is located at an elevation of approximately 6,090 feet above mean sea level (msl) and slopes gently to the east (Figure 1).

2.1.4 Soil and Geology

According to the United States Department of Agriculture (USDA) Web Soil Survey, the soil at the site is the Sparank-San Mateo silt loams, saline, solid, 0 to 3 percent slopes (USDA NRCS, 2019). This unit is described as silt loam to two inches then clay to 60 inches. This unit is typically deposited in flood plains; the parent material is stream alluvium derived from sandstone and shale. This unit is considered well drained and is slightly to moderately saline.

Bedrock geology at the site is the Eocene-age San Jose formation. This unit consists of sandstone and mudstone.

2.1.5 Surface Water

Surface water or perennial drainages were not located on the site (Figure 1). An ephemeral drainage was located approximately 525 feet south to south of the site. Additionally, the National Wetlands Inventory (NWI) on-line mapping tool has identified a freshwater pond located approximately 580 feet southeast of the site (Figure 2). This pond is a livestock pond



and has been assigned water right file number SJ-00681-27 by the New Mexico Office of the State Engineer (NMOSE) (Figure 3). Neither the drainage nor the freshwater/livestock pond was impacted by the release.

2.1.6 Groundwater

The minimum depth-to-groundwater near the release site was estimated to be 180 feet below ground surface as determined using the NMOSE on-line database water column report (Attachment F).

2.1.7 Known Water Sources

There are no known water sources within a half mile of the release, including private and domestic water sources, such as wells, springs, or other sources of freshwater extraction (Figure 3).

2.1.8 Oil and Gas Production/Transfer/Storage Equipment

The crude oil underground pipeline that corroded and resulted in the release was replaced during the remedial activities. Other oil and gas production, transfer, and storage equipment was not impacted by this release.

2.2 INVESTIGATION METHODS

This section discusses the actions performed at the site during the evaluation and confirmation sampling activities conducted between July 3, 2019 and August 14, 2019.

2.2.1 Soil Sampling Procedures

Sampling maps and procedures were reviewed with NMOCD and BLM representatives prior to initiating sampling activity. Prior to collection of samples, soil was screened using a Dexsil PetroFlag® (Petroflag) field kit and a Photo Ionization Detector (PID).

Confirmation sample locations were randomly selected utilizing a computer-generated aerial sampling program within ArcGIS. This approach, outlined in 19.15.29.12 NMAC allows for equal spacing throughout the spill footprint, so that each composite sample was representative of no more than 200 square feet. A 300-foot measuring tape, marking paint, and flagging was utilized to establish the sampling grid on the remediated areas prior to conducting confirmation sampling. A *GeoExplorer 6000 Series* Trimble global positioning system (GPS) unit was used to map the coordinates of all soil confirmation sample locations (Figures 4, 5, and 6).

Confirmatory soil samples were collected at approximately 3 inches below ground surface and in accordance with sampling methods outlined in the Natural Resources Conservation Service (NRCS) Field Guide.



2.2.2 Soil Sample Collection and Results

On July 29, 2019, HRL collected 41 five-point composite soil samples from the floor of the excavation and 23 five-point composite soil samples from the sidewalls of the excavation. Sampling activities on July 29, 2019 were observed by Mr. Cory Smith, NMOCD.

After additional vertical excavation on August 12, 2019; HRL collected one additional five-point composite soil sample (F10) from the floor of the excavation and two additional five-point composite soil samples (SW25 and SW25) from the sidewalls near F10. The soil samples were placed in laboratory-provided containers, labeled, preserved on ice, and maintained under strict chain of custody protocol. Samples were submitted to Envirotech Analytical Laboratory (Envirotech) in Farmington, New Mexico for analysis of:

- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency (USEPA) Method 8260
- Gasoline range organics (GRO), diesel range organics (DRO), oil range organics (ORO) by USEPA Method 8015 (collectively known as total petroleum hydrocarbons or TPH)
- Chloride by USEPA Method 300.0/9056A.

2.3 INVESTIGATION RESULTS

The following information presents analytical data for soil samples collected at the site.

2.3.1 Soil Analytical Results

Laboratory analytical results (Attachments D and E) were compared to the applicable NMOCD Table 1 Closure Criteria. Refer the Tables on the following pages for the confirmation analytical data results.



TABLE I								
EXCAVATION FLOOR - CONFIRMATION SAMPLE DATA 07/29/2019								
SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLE TYPE	SAMPLE DATE	SOIL STATUS	8021		8015	300
					BENZENE (mg/Kg)	TOTAL BTEX (mg/Kg)	Total TPH (mg/Kg)	CHLORIDE (mg/Kg)
Closure Criteria for Soils Impacted by a Release (19.15.29 NMAC)					10	50	2,500	20,000
F1	Floor	Composite	7/29/2019	In-Situ	ND	ND	330	42
F2	Floor	Composite	7/29/2019	In-Situ	ND	ND	0	27.5
F3	Floor	Composite	7/29/2019	In-Situ	ND	ND	0	49.1
F4	Floor	Composite	7/29/2019	In-Situ	ND	ND	122.4	ND
F5	Floor	Composite	7/29/2019	In-Situ	ND	ND	871	25.4
F6	Floor	Composite	7/29/2019	In-Situ	ND	ND	956	38
F7	Floor	Composite	7/29/2019	In-Situ	ND	ND	38.1	43.8
F8	Floor	Composite	7/29/2019	In-Situ	ND	ND	44.2	31.7
F9	Floor	Composite	7/29/2019	In-Situ	ND	ND	356	48.8
F10	Floor	Composite	7/29/2019	In-Situ	ND	0.138	5660	22.6
F11	Floor	Composite	7/29/2019	In-Situ	ND	ND	196.7	43
F12	Floor	Composite	7/29/2019	In-Situ	ND	ND	0	69.7
F13	Floor	Composite	7/29/2019	In-Situ	ND	ND	123.7	70.5
F14	Floor	Composite	7/29/2019	In-Situ	ND	ND	245.2	ND
F15	Floor	Composite	7/29/2019	In-Situ	ND	ND	0	ND
F16	Floor	Composite	7/29/2019	In-Situ	ND	ND	40.9	25.4
F17	Floor	Composite	7/29/2019	In-Situ	ND	ND	61.7	34
F18	Floor	Composite	7/29/2019	In-Situ	ND	ND	351	45.7
F19	Floor	Composite	7/29/2019	In-Situ	ND	ND	74.9	ND
F20	Floor	Composite	7/29/2019	In-Situ	ND	ND	0	ND
F21	Floor	Composite	7/29/2019	In-Situ	ND	ND	82.8	48.8
F22	Floor	Composite	7/29/2019	In-Situ	ND	ND	67.7	47.8
F23	Floor	Composite	7/29/2019	In-Situ	ND	ND	0	ND
F24	Floor	Composite	7/29/2019	In-Situ	ND	ND	27.4	20.2
F25	Floor	Composite	7/29/2019	In-Situ	ND	ND	260.4	ND
F26	Floor	Composite	7/29/2019	In-Situ	ND	ND	35.7	64.8
F27	Floor	Composite	7/29/2019	In-Situ	ND	ND	25.6	76.2
F28	Floor	Composite	7/29/2019	In-Situ	ND	ND	178.6	27.1
F29	Floor	Composite	7/29/2019	In-Situ	ND	ND	56.9	24.9
F30	Floor	Composite	7/29/2019	In-Situ	ND	ND	261.8	44.1
F31	Floor	Composite	7/29/2019	In-Situ	ND	ND	83.9	ND
F32	Floor	Composite	7/29/2019	In-Situ	ND	ND	368	48.8
F33	Floor	Composite	7/29/2019	In-Situ	ND	ND	438	77.6
F34	Floor	Composite	7/29/2019	In-Situ	ND	ND	206.4	25.4
F35	Floor	Composite	7/29/2019	In-Situ	ND	ND	295.6	20.3
F36	Floor	Composite	7/29/2019	In-Situ	ND	ND	709	30.4
F37	Floor	Composite	7/29/2019	In-Situ	ND	ND	240.5	46.4
F38	Floor	Composite	7/29/2019	In-Situ	ND	ND	341	37.2
F39	Floor	Composite	7/29/2019	In-Situ	ND	ND	568	44.3
F40	Floor	Composite	7/29/2019	In-Situ	ND	ND	854	ND
F41	Floor	Composite	7/29/2019	In-Situ	ND	ND	0	29.2

ND – Non-detect

Table 1 Closure Criteria Exceeded



TABLE I								
EXCAVATION SIDE WALLS - CONFIRMATION SAMPLE DATA 07/29/2019								
SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLE TYPE	SAMPLE DATE	SOIL STATUS	8021		8015	300
					BENZENE (mg/Kg)	TOTAL BTEX (mg/Kg)	Total TPH (mg/Kg)	CHLORIDE (mg/Kg)
Closure Criteria for Soils Impacted by a Release (19.15.29 NMAC)					10	50	2,500	20,000
SW1	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	40.2	ND
SW2	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	0	50.5
SW3	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	0	ND
SW4	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	0	35.4
SW5	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	27.3	25.3
SW6	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	916	20.4
SW7	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	47.6	27
SW8	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	269.9	30
SW9	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	289.5	34.1
SW10	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	65.7	ND
SW11	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	78.7	37.6
SW12	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	85.9	58.9
SW13	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	0	ND
SW14	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	0	62.7
SW15	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	59.4	43.8
SW16	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	0	38.4
SW17	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	0	ND
SW18	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	280.8	37.9
SW19	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	0	53.2
SW20	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	40.3	23.9
SW21	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	0	72
SW22	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	198.7	48.4
SW23	Sidewall	Composite	7/29/2019	In-Situ	ND	ND	47.4	44.3

ND = Not Detected

Table 1 Threshold Exceeded



TABLE II								
CONFIRMATION RE-SAMPLE DATA 08/14/2019								
SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLE TYPE	SAMPLE DATE	SOIL STATUS	8021		8015	300
					BENZENE (mg/Kg)	TOTAL BTEX (mg/Kg)	Total TPH (mg/Kg)	CHLORIDE (mg/Kg)
Closure Criteria for Soils Impacted by a Release (19.15.29 NMAC)					10	50	100	600
F10 8/14/19	Floor	Composite	8/14/2019	In-Situ	ND	ND	ND	69.8
SW24 8/14/19	Sidewall	Composite	8/14/2019	In-Situ	ND	ND	ND	36.1
SW25 8/14/19	Sidewall	Composite	8/14/2019	In-Situ	ND	ND	61.7	45

ND = Not Detected

NA = Not Analyzed



2.4 EVALUATION OF DATA AND DISCUSSION

This section evaluates the investigation results with respect to NMOCD site closure requirements and guidelines.

2.4.1 NMOCD Closure Criteria for Soils Impacted by this Release

Whenever a release occurs on a surface other than a lined, bermed, or otherwise contained production or storage site, the responsible party must remediate the impacted surface to meet the closure criteria provided in Table I of 19.15.29 NMAC. The closure criteria for soils impacted by a release vary by constituent and are driven largely by the minimum depth to groundwater below the horizontal boundary of the release.

2.4.2 Results

The initial sample results from July 24, 2019 and supplemental sample results from August 14, 2019 confirm that the soil exceeding the TPH, BTEX, and chloride closure criteria attributed to this release have been removed from the Site. Based on these results, the excavation was backfilled.

3.0 RISK ASSESSMENT

3.1 POTENTIAL RECEPTOR EVALUATION

No potential receptors were identified either on or off-site based on the following findings.

3.1.1 Human Receptors

The impacted soils have been removed from the site and transported to an NMOCD permitted surface waste management facility for remediation.

3.1.2 Biological Receptors

There are no biological receptors onsite and within the surrounding area identified which may be threatened by the release that occurred at the site.

3.1.3 Wells and Surface Water

There are no potable wells, non-potable wells, or surface bodies within 500 horizontal feet of the lateral extent of the release.

4.0 REMEDIATION ASSESSMENT

4.1 REMEDIATION DRIVERS AND CLEANUP OBJECTIVES

Clear remediation drivers and objectives are required to establish the framework within which potential remedial technologies are evaluated and compared. The remediation driver for this



site is compliance with NMOCD regulations and directives to receive closure for the site. Cleanup objectives are media-specific goals that are protective of human health and the environment and were achieved to meet regulatory requirements as outlined in 19.15.29. NMAC.

4.2 RECOMMENDATION

Based on the confirmation sample lab analyses indicating soils impacted by the release at the site have been remediated to concentrations below the closure criteria provided in Table I of 19.15.29 NMAC, HRL recommends no additional remedial action for this release.

5.0 CLOSURE

HRL recommends that NMOCD Incident # NCS1919242369 be closed. All closure requirements as set forth in Subsections D-E of 19.15.29.12 NMAC and closure criteria outlined in Table I of 19.15.29 have been met. Photographs demonstrate the remedial activities and site stability.

Whiptail Midstream certifies that all information in this report and the attachments is correct and that Whiptail has complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain closure on the release at the site.

6.0 REFERENCES

Releases, Oil Conservation Commission, 19.15.29 NMAC (08/04/2018).

Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: <https://websoilsurvey.sc.egov.usda.gov/>. Accessed September 26, 2019.

State Engineer, New Mexico Office of the State Engineer. New Mexico Water Rights Reporting System. Available online at the following: <http://nmwrrs.ose.state.nm.us/waterColumn.html>. Accessed September 26, 2019.

Anderson, O.J., Jones, G.E., and Green, G.N., Geologic Map of New Mexico. USGS Open File Report OF-97-52. United States Geological Survey, and New Mexico Bureau of Mines and Mineral Resources, 1997.



FIGURES

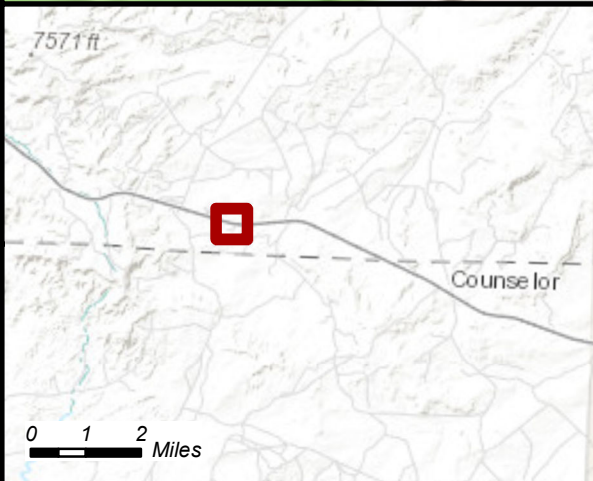
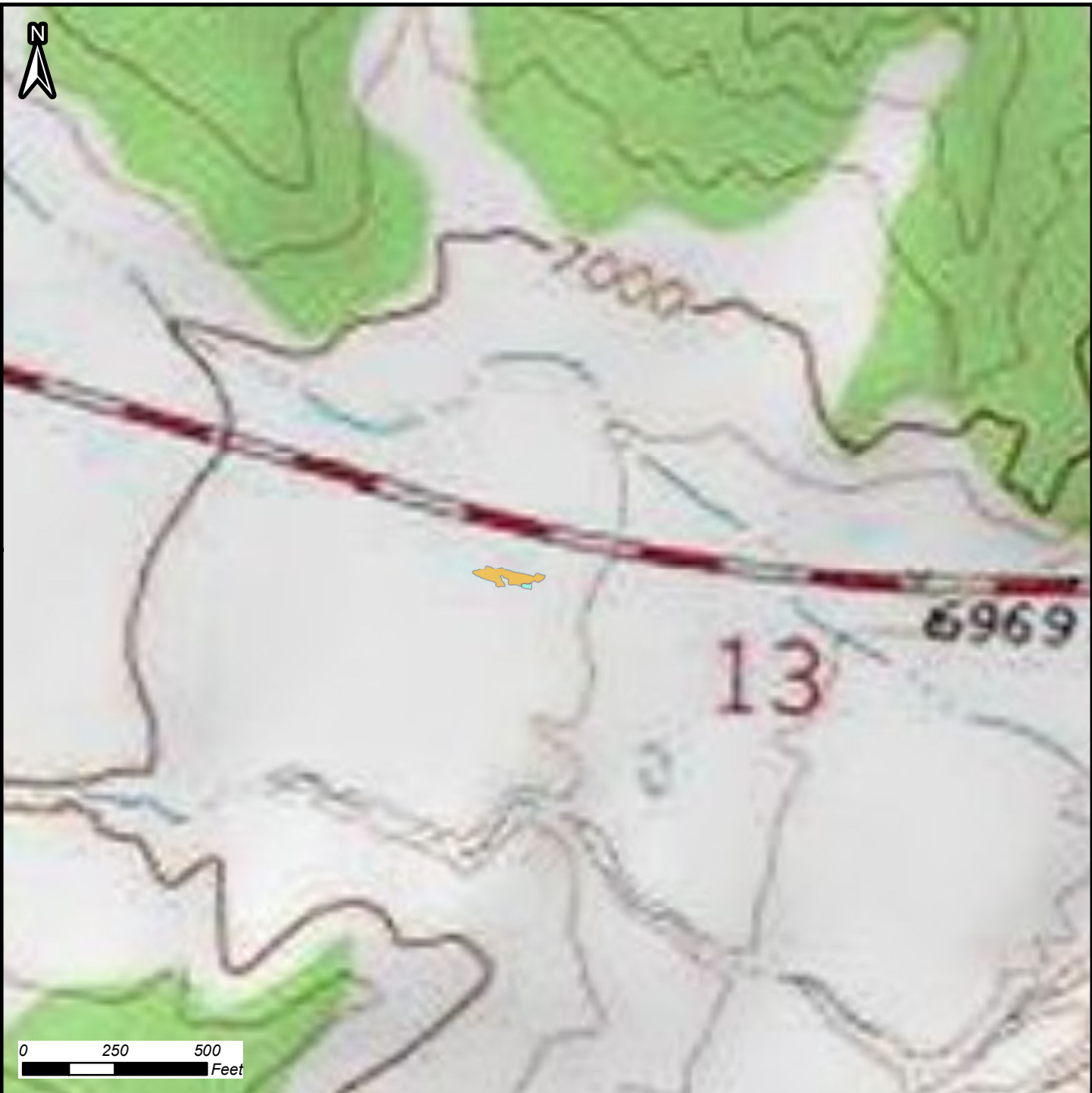




Figure 1 - Site Location

Chaco 4-1 CDP

36.225940460 -107.529548637
Section 13, Township 23 North, Range 7 West

Mapped Features

-  Additional Excavation Extent
-  Original Excavation Extent

DISCLAIMER: This representation and the Geographic Information System (GIS) used to create it are designed as a source of reference and not intended to replace official records and/or legal surveys. HRL assumes no responsibility for any risks, dangers, or liabilities that may result from its use and makes no guarantees as to the quality or accuracy of the underlying data.



HRL
COMPLIANCE
SOLUTIONS

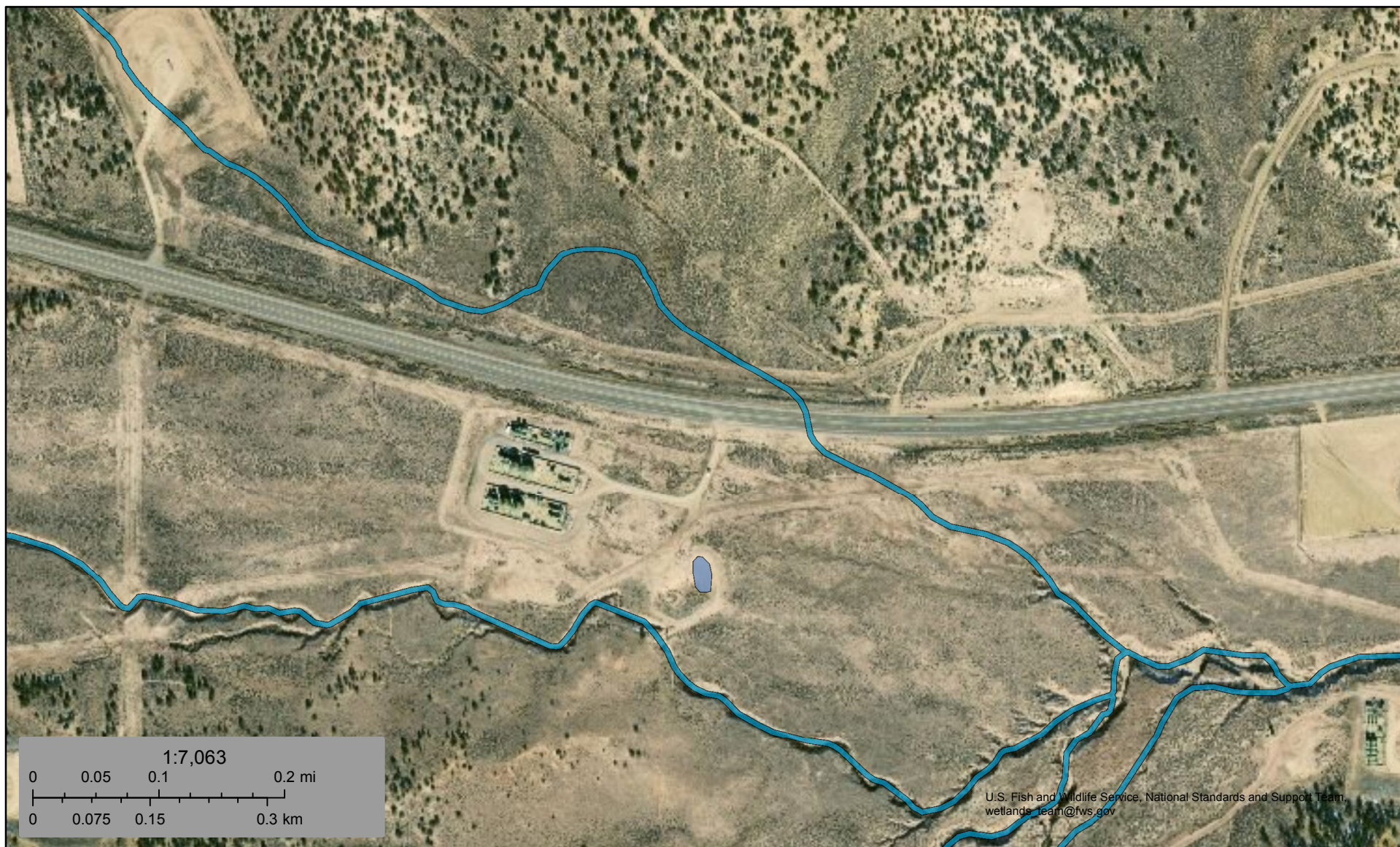
Author: A. Asay
Revision: 0
Date: 9/27/2019



U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



July 5, 2019

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

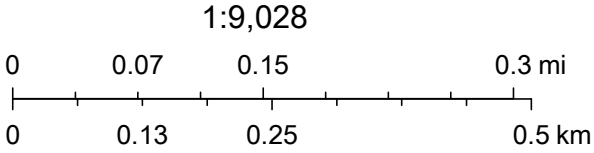
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

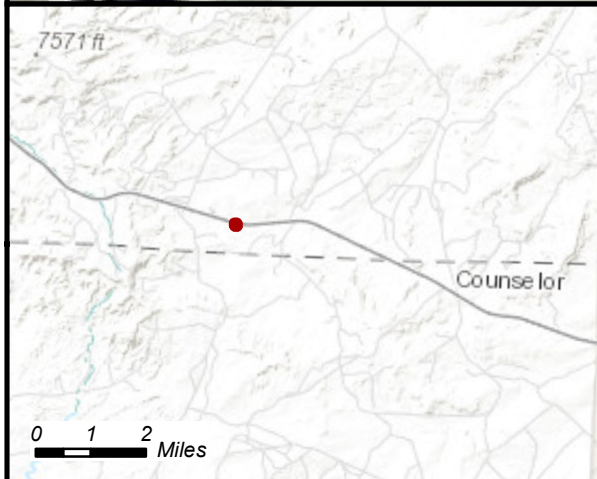
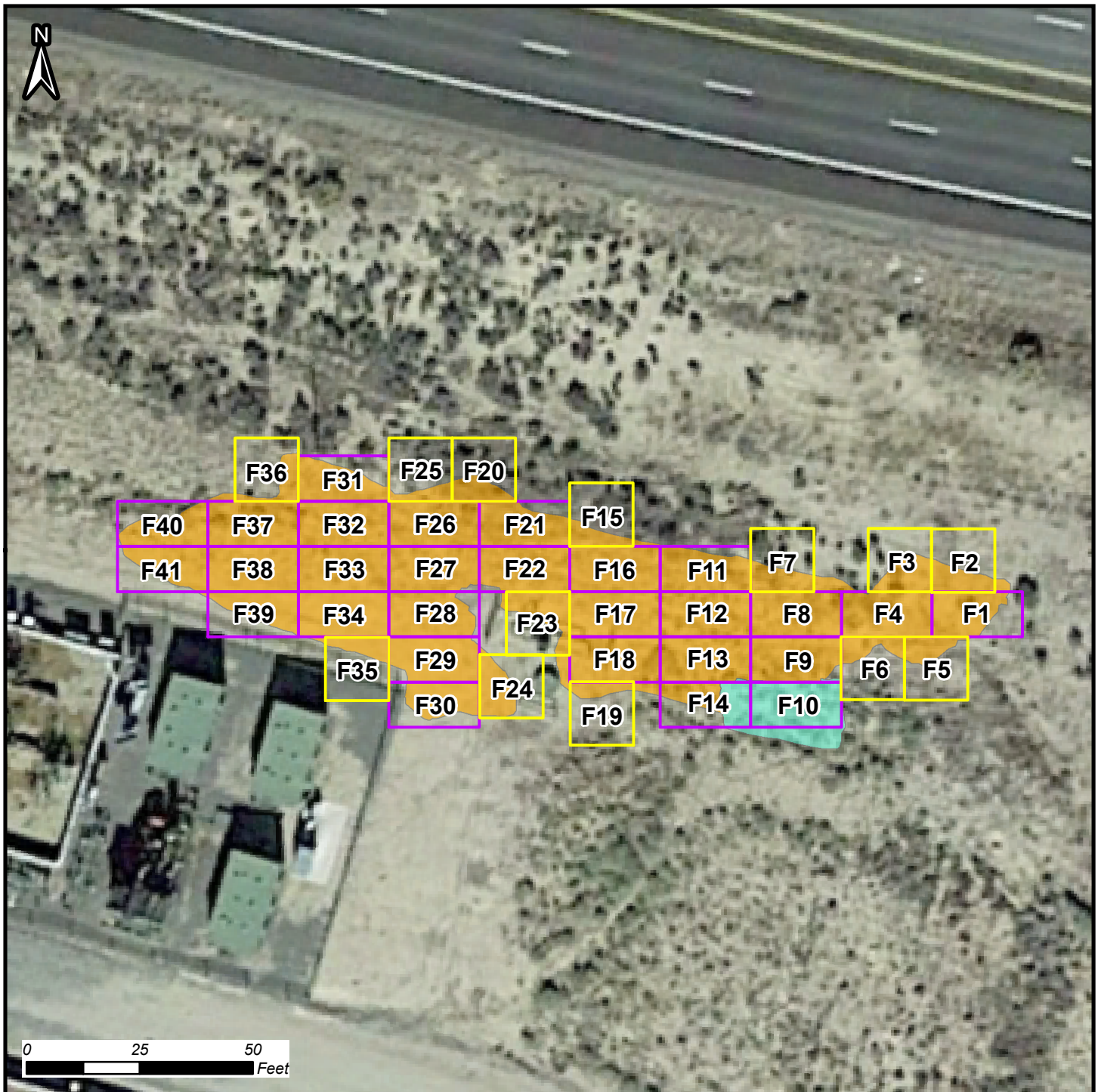
NMOSE Points of Diversion



9/27/2019, 11:01:38 AM



Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and





Confirmation Sample Map


Chaco 4-1 CDP
Excavation Footprint


36.225940460 -107.529548637
Section 13, Township 23 North, Range 7 West

Mapped Features

 14' X 14' Grid

 20' X 10' Grid

 Additional Excavation
Extent (8/12/19)

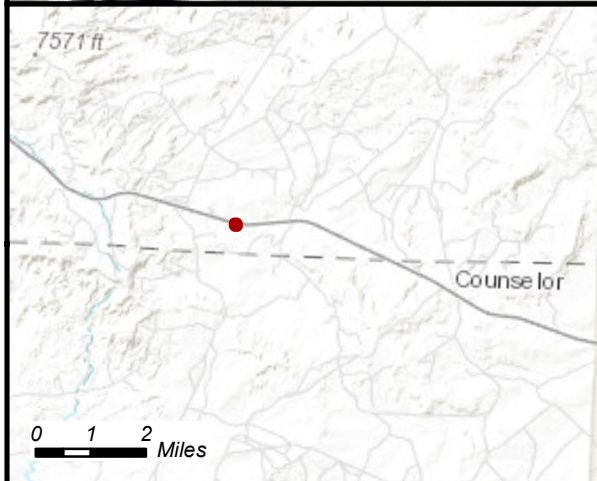
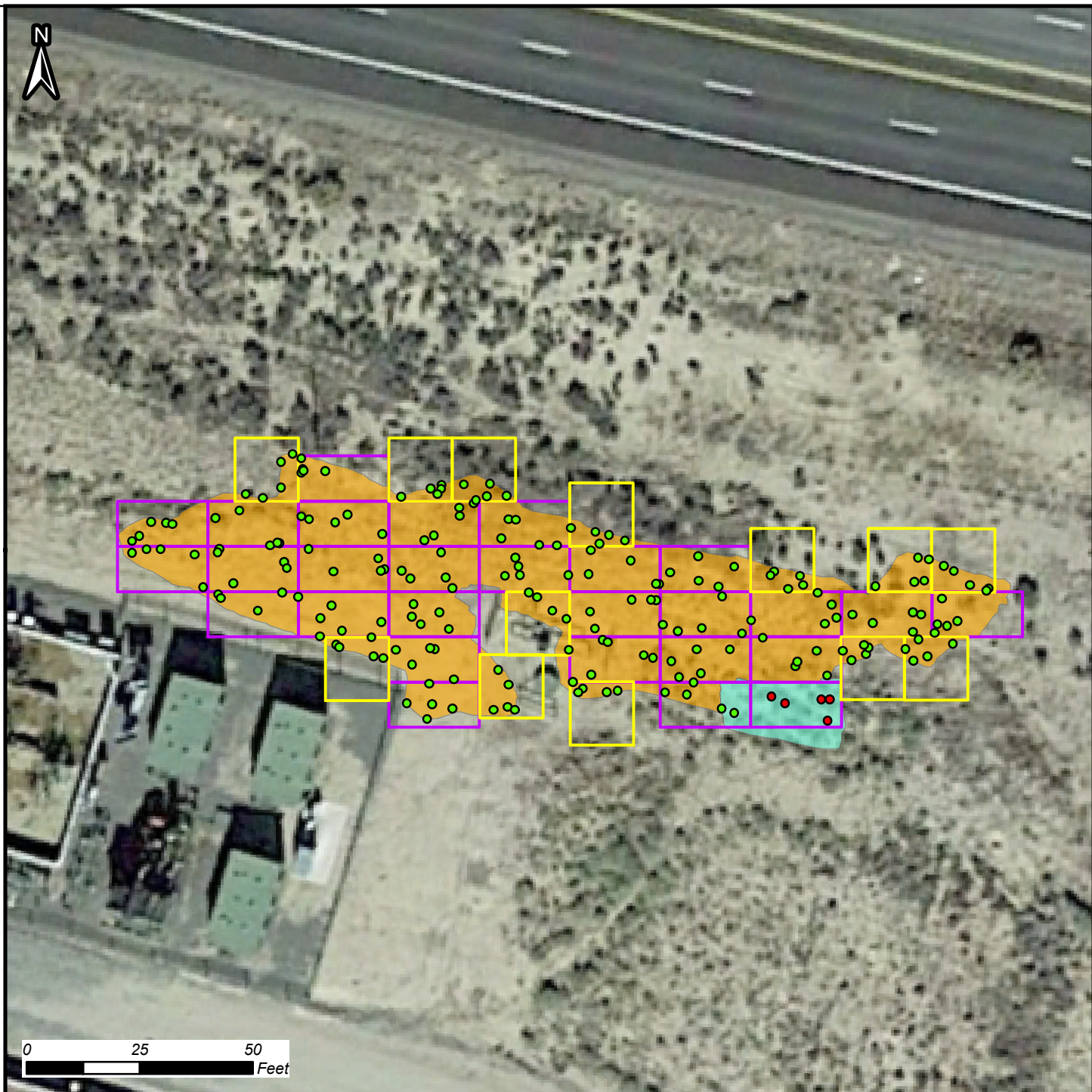
 Original Excavation
Extent (7/24/19)

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HRL
COMPLIANCE
SOLUTIONS

Author: A. Asay
Revision: 0
Date: 8/13/2019



Confirmation Sample Map

Chaco 4-1 CDP
Excavation Footprint

36.225940460 -107.529548637
Section 13, Township 23 North, Range 7 West

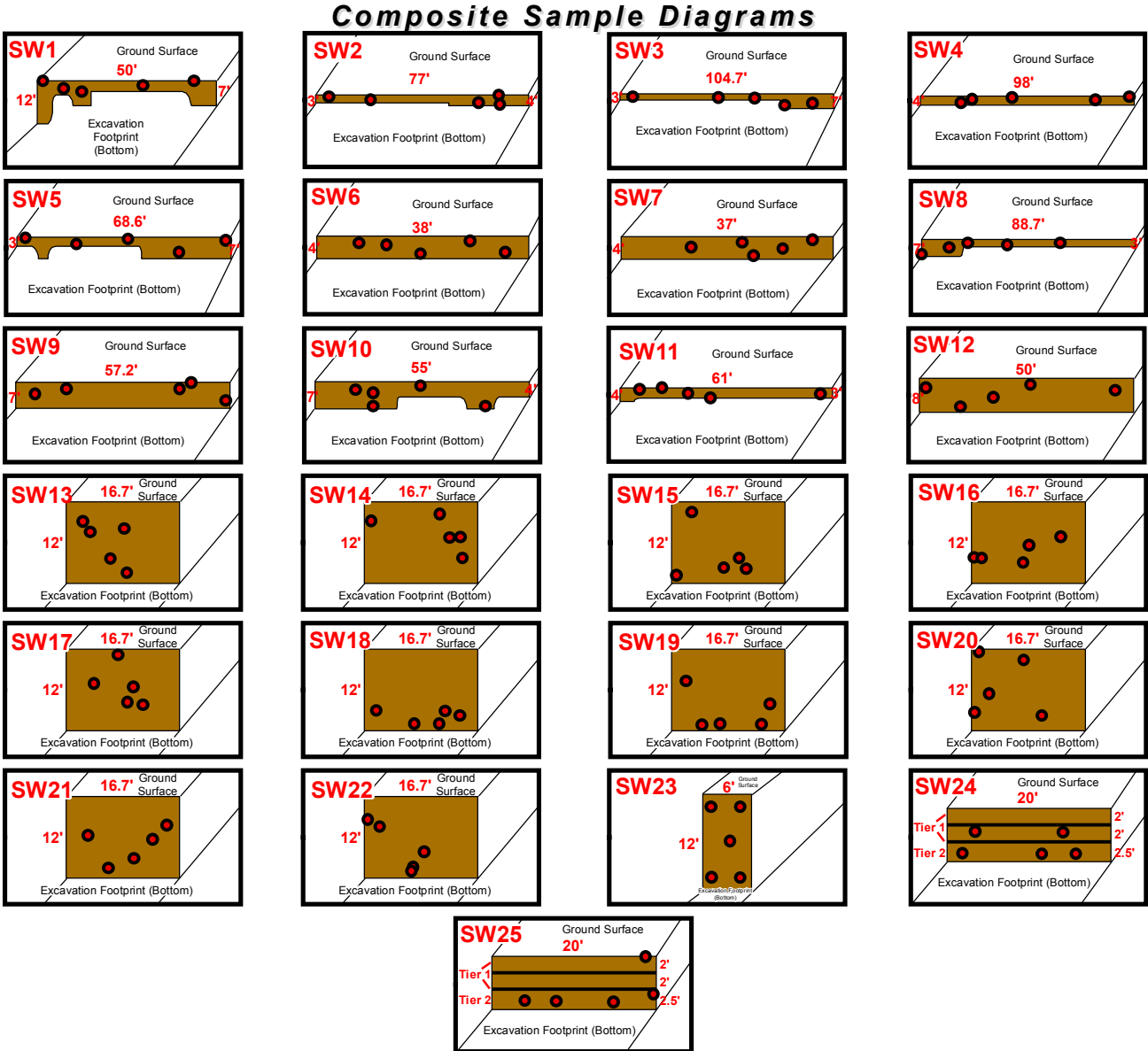
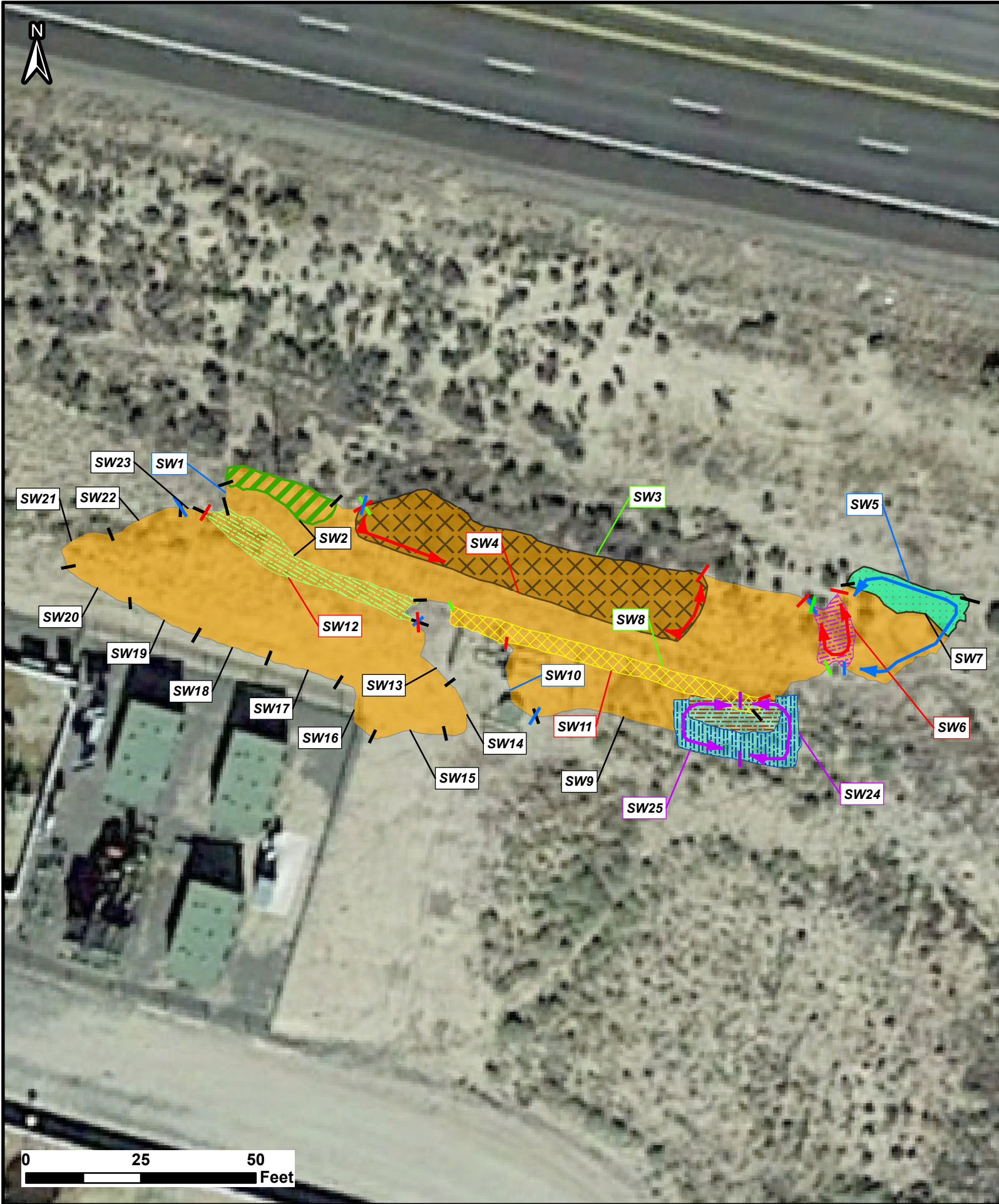
Mapped Features

- | | | |
|--|--|--|
| ● Composite Sample Location (8/14/19) | 14' X 14' Grid | ■ Additional Excavation Extent (8/12/19) |
| ● Composite Sample Location (7/29/19) | 20' X 10' Grid | ■ Original Excavation Extent (7/24/19) |

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Author: A. Asay
Revision: 0
Date: 8/13/2019



Side Wall Sampling Location Modifications - 7/29/19

Revised Sampling Location Label	Original Sampling Location Label
1	1 5
2	6 2
3	7 10
4	8 9
5	12 14
6	11
7	13
8	15 17
9	18 19
10	20 21
11	16
12	3 4
13	22
14	23
15	24
16	25
17	26
18	27
19	28
20	29
21	30
22	31
23	N/A
24	N/A
25	N/A



Confirmation Sample Map

Chaco 4-1 CDP Sidewalls
36.225940460 -107.529548637
Section 13, Township 23 North, Range 7 West

Mapped Features

- Sidewall Sample Location
- Tier 1 (Original)
- Tier 2 (Original)
- Tier 3
- Tier 4
- Tier 5
- Tier 6
- Tier 1 (New)
- Tier 2 (New)
- Additional Excavation Extent (8/12/19)
- Original Excavation Extent (7/24/19)

DISCLAIMER: This representation and the Geographic Information System (GIS) used to create it are designed as a source of reference and not intended to replace official records and/or legal surveys. HRL assumes no responsibility for any risks, dangers, or liabilities that may result from its use and makes no guarantees as to the quality or accuracy of the underlying data.



Author: A. Asay
Revision: 0
Date: 8/13/2019



PHOTOGRAPHS



Photograph 1: Origin of Release – 7/3/19



Photograph 2: Defining lateral extent of impacts – 7/3/19





Photograph 3: Hydro-excavation activities –7/3/19



Photograph 4: Beginning excavation activities - 7/3/19





Photograph 5: Repaired pipeline – 7/22/19



Photograph 6: Excavation – 7/22/19





Photograph 7: Excavation – 7/22/19



Photograph 8: Remediated Area and Sample Grid – 7/22/19





Photograph 9: Remediated Area and Sample Grid– 7/22/19



Photograph 10: Excavated Area – 7/24/19





Photograph 11: Excavated Area – 7/24/19



Photograph 12: Remediated Area and Sample Grid– 7/29/19





Photograph 13: Remediated Area–7/29/19



Photograph 14: Additional Excavation – 8/12/19





Photograph 15: Additional Excavation – 8/12/19



Photograph 16: Backfilled – 8/12/19





ATTACHMENT A

NMOCD FORM C-141, DATED JULY 3, 2019

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Whiptail Midstream LLC	OGRID: 373240
Contact Name: Don Wicburg	Contact Telephone: 970-759-4299
Contact email: don.wicburg@whiptailmidstream.com	Incident #: NCS1919242369 CHACO 4-1 CDP @ FCS1916856802
Contact mailing address: 504 South Bloomfield Blvd. Bloomfield, NM 87413.	

Location of Release Source

Latitude 36.225430° Longitude -107.530145°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: CHACO 4-1 CDP	Site Type: Underground Pipeline.
Date Release Discovered: 7/2/2019	API#: N/A

Unit Letter	Section	Township	Range	County
K	13	23N	7W	Rio Arriba County

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

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls): 50	Volume Recovered (bbls): 0
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:

An underground pipeline transporting unrefined oil ruptured at sub-surface location, allowing oil to leak out onto the nearby soils. The rupture in the pipeline is believed to have been caused by corrosion.

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? The estimated volume of the release is 50BBL, satisfying the criteria for a Major Release per 19.15.29.7 A. (1) NMAC - Major Release - "an unauthorized release of a volume, excluding gases, of 25 barrels or more".
---	---

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
 Notification was provided to the NMOCD and BLM by HRL Compliance Solutions (Gunnar Westerman) within 24hrs of discovering the release. Cory Smith (Environmental Specialist - NMOCD) was notified verbally via voicemail. Jim Griswold (Environmental Bureau Chief - NMOCD), "Emmanuel" Abiodun Adeboye (Natural Resource Specialist – BLM), and Whitney Thomas (Natural Resource Specialist – BLM) were notified via e-mail.

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> 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: <u>Don Wicburg</u>	Title: <u>VP - Operations</u>
Signature: _____	Date: _____
email: <u>don.wicburg@whiptailmidstream.com</u>	Telephone: <u>970-759-4299</u>
<u>OCD Only</u> Received by: _____ Date: _____	



ATTACHMENT B

NMOCD FORM C-138

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

Whiptail Midstream LLC. 504 S Bloomfield Blvd, Bloomfield NM 87413

2. Originating Site:

4-1 CDP. Unit K: NE 1/4 of SW 1/4 of Sec 13, Township 23N, Range 7W.

3. Location of Material (Street Address, City, State or ULSTR):

N/A - New Mexico (Rio Arriba County)

4. Source and Description of Waste:

Mechanical failure of a crude oil pipeline at a sub-surface location.

Estimated Volume 50 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Ernest Johnson, representative or authorized agent for Whiptail Midstream LLC do hereby

PRINT & SIGN NAME

COMPANY NAME

certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☒ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Ernest Johnson, representative for Whiptail Midstream LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:

NRE Field Services & Halo.

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility Permit # NM-01-0011

Address of Facility: #43 Road 7175, south of Bloomfield NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME:

TITLE:

DATE:

SIGNATURE:

TELEPHONE NO.:

Surface Waste Management Facility Authorized Agent



ATTACHMENT C

REVISED NMOCD FORM C-141 DATED JULY 17, 2019

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Whiptail Midstream LLC	OGRID: 373240
Contact Name: Ernie Johnson	Contact Telephone: 918-289-2147
Contact email: ernie.johnson@whiptailmidstream.com	Incident #: NCS1919242369 CHACO 4-1 CDP @ FCS1916856802
Contact mailing address: 15 W. 6th Street, Suite 2901, Tulsa, OK 74119.	

Location of Release Source

Latitude 36.225430° Longitude -107.530145°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: CHACO 4-1 CDP	Site Type: Underground Pipeline.
Date Release Discovered: 7/2/2019	API#: N/A

Unit Letter	Section	Township	Range	County
K	13	23N	7W	Rio Arriba County

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

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls): 104	Volume Recovered (bbls): 0
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:

An underground pipeline transporting unrefined oil ruptured at sub-surface location, allowing oil to leak out onto the nearby soils. The rupture in the pipeline is believed to have been caused by corrosion pending further investigation.

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? The estimated volume of the release is 104BBL, satisfying the criteria for a Major Release per 19.15.29.7 A. (1) NMAC - Major Release - "an unauthorized release of a volume, excluding gases, of 25 barrels or more".
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If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
 Notification was provided to the NMOCD and BLM by HRL Compliance Solutions (Gunnar Westerman) within 24hrs of discovering the release. Cory Smith (Environmental Specialist - NMOCD) was notified verbally via voicemail. Jim Griswold (Environmental Bureau Chief - NMOCD), "Emmanuel" Abiodun Adeloye (Natural Resource Specialist – BLM), and Whitney Thomas (Natural Resource Specialist – BLM) were notified via e-mail.

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
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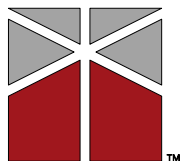
If all the actions described above have not been undertaken, explain why:

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: <u>Ernie Johnson</u>	Title: <u>Director of Risk and Engineering Services</u>
Signature: _____	Date: _____
email: <u>ernie.johnson@whiptailmidstream.com</u>	Telephone: <u>918-289-2147</u>

<u>OCD Only</u>	
Received by: _____	Date: _____



HRL
COMPLIANCE
SOLUTIONS

65 Mercado Street, Suite 109 • Durango, CO 81301
PHONE: **970.259.0926** • www.hrlcomp.com

INITIAL SPILL RESPONSE & REMDIAL ACTIONS

RELEASE ID#: NCS1919242369 CHACO 4-1 CDP @ FCS1916856802

RELEASE QUANTITY ESTIMATION PROCESS:

The quantity of oil released was estimated utilizing Whiptail's automated sales measurement system associated with the ruptured pipeline.

INITIAL REMEDIAL ACTIONS CONDUCTED: 07/03/19 – 07/11/19

Discovery: 07.02.19: Whiptail personnel discovered the release mid-afternoon (3:00PM) on 07/02/19. The source of the release was determined to be a rupture on an oil pipeline at a sub-surface location. The source of the release was immediately secured by terminating the flow of oil to the pipeline. Hydro excavation and earth moving equipment were scheduled immediately, though were not available for mobilization until the following morning on 07/03/19. A Form C-138 was filed and approved for disposal of impacted soils at Envirotech Landfarm and an emergency One-Call was issued for the areas within and adjacent to the visually impacted areas.

07.03.19 – 07.15.19: Remedial actions were taken upon mobilizing equipment to the site at 9:00AM on 7/3/19. A hand auger was utilized to determine the lateral and vertical extents of saturated/impacted soils. Hydro-excavation efforts were focused near the point of origin, and were utilized to locate underground piping in this area. Mechanical excavation was conducted utilizing a rubber tire hoe and an excavator. Mechanical excavation efforts were focused at the point of terminus (~160 feet down-gradient and to the E/SE from the point of origin), progressing towards the point of origin as impacted soils were excavated. Mechanical excavation efforts were also focused around the point of origin in order to expose the rupture on the pipeline. Once identified, the compromised portion of the pipe was repaired. The excavation area resulting from remediation efforts is secured with safety fencing and strategic placement of heavy equipment when the site is not active. Remediation activities are on-going at the site until clean-up has occurred. A formal site characterization and remediation summary will be provided upon completion of excavation activity and once confirmation sampling data indicates that soils satisfy the NMOCD Table 1 thresholds.



ATTACHMENT D

JULY 29, 2019 LABORATORY ANALYTICAL REPORTS

Analytical Report

Report Summary

Client: Whiptail Midstream LLC

Samples Received: 7/30/2019

Job Number: 17010-0011

Work Order: P907116

Project Name/Location: 4-1 CDP

Report Reviewed By:



Date: 8/2/19

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
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Envirotech, Inc, currently holds the appropriate and available Utah TNI certification NM009792018-1 for the data reported.

Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
F-1	P907116-01A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F2	P907116-02A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F3	P907116-03A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F4	P907116-04A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F5	P907116-05A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F6	P907116-06A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F7	P907116-07A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F8	P907116-08A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F9	P907116-09A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F10	P907116-10A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F-11	P907116-11A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F12	P907116-12A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F13	P907116-13A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F14	P907116-14A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F15	P907116-15A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F16	P907116-16A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F17	P907116-17A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F18	P907116-18A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F19	P907116-19A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F20	P907116-20A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.

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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F-1
P907116-01 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		93.9 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		95.8 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	185	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	145	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		74.4 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		93.9 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		95.8 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	42.0	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F2
P907116-02 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		102 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Toluene-d8		92.1 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Bromofluorobenzene		96.5 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		75.2 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		102 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Toluene-d8		92.1 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Bromofluorobenzene		96.5 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	27.5	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F3
P907116-03 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Toluene-d8		94.0 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.6 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		73.1 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Toluene-d8		94.0 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.6 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	49.1	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F4
P907116-04 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		92.1 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		97.6 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	68.5	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	53.9	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		72.6 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		92.1 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		97.6 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F5
P907116-05 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		99.4 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Toluene-d8		93.1 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Bromofluorobenzene		96.4 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	505	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	366	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		77.2 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		99.4 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Toluene-d8		93.1 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Bromofluorobenzene		96.4 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	25.4	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F6
P907116-06 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Toluene-d8		94.9 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.5 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	624	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	332	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		79.4 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Toluene-d8		94.9 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.5 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	38.0	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F7
P907116-07 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		99.6 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Toluene-d8		93.6 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Bromofluorobenzene		96.3 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	38.1	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		76.1 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		99.6 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Toluene-d8		93.6 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Bromofluorobenzene		96.3 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	43.8	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F8
P907116-08 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		99.7 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Toluene-d8		93.8 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Bromofluorobenzene		98.1 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	44.2	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		74.9 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		99.7 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Toluene-d8		93.8 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Bromofluorobenzene		98.1 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	31.7	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F9
P907116-09 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		99.6 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Toluene-d8		94.1 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.4 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	224	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	132	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		78.0 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		99.6 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Toluene-d8		94.1 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.4 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	48.8	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F10
P907116-10 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
p,m-Xylene	0.0795	0.0500	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
o-Xylene	0.0585	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
Total Xylenes	0.138	0.0250	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		95.4 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		93.0 %		70-130	1931013	07/30/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	4180	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	1480	500	mg/kg	10	1931017	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		99.6 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		95.4 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		93.0 %		70-130	1931013	07/30/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	22.6	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F-11
P907116-11 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		105 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Toluene-d8		90.2 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Bromofluorobenzene		99.5 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	79.7	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	117	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		83.1 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		105 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Toluene-d8		90.2 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Bromofluorobenzene		99.5 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	43.0	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F12
P907116-12 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		105 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Toluene-d8		90.1 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Bromofluorobenzene		101 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		78.3 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		105 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Toluene-d8		90.1 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Bromofluorobenzene		101 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	69.7	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F13
P907116-13 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Toluene-d8		90.4 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.9 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	72.7	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	51.0	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		80.1 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Toluene-d8		90.4 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.9 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	70.5	20.0	mg/kg	1	1931012	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F14
P907116-14 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		106 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Toluene-d8		89.8 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Bromofluorobenzene		101 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	150	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	95.2	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		77.8 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		106 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Toluene-d8		89.8 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Bromofluorobenzene		101 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	1931012	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F15
P907116-15 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		105 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Toluene-d8		88.9 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Bromofluorobenzene		100 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		73.8 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		105 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Toluene-d8		88.9 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Bromofluorobenzene		100 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	1931012	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F16
P907116-16 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		105 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Toluene-d8		89.9 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Bromofluorobenzene		101 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	40.9	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		73.9 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		105 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Toluene-d8		89.9 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Bromofluorobenzene		101 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	25.4	20.0	mg/kg	1	1931012	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F17
P907116-17 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		104 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Toluene-d8		89.3 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Bromofluorobenzene		99.9 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	61.7	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		75.0 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		104 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Toluene-d8		89.3 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Bromofluorobenzene		99.9 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	34.0	20.0	mg/kg	1	1931012	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F18
P907116-18 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		98.6 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Toluene-d8		88.7 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	
Surrogate: Bromofluorobenzene		102 %		70-130	1931013	07/30/19	08/01/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	233	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	118	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		78.1 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		98.6 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Toluene-d8		88.7 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	
Surrogate: Bromofluorobenzene		102 %		70-130	1931013	07/30/19	08/01/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	45.7	20.0	mg/kg	1	1931012	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F19
P907116-19 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		99.8 %		70-130	1931013	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		93.3 %		70-130	1931013	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		98.3 %		70-130	1931013	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	74.9	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Surrogate: n-Nonane		73.7 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		99.8 %		70-130	1931013	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		93.3 %		70-130	1931013	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		98.3 %		70-130	1931013	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	1931012	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

F20
P907116-20 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1931013	07/30/19	07/31/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		93.3 %		70-130	1931013	07/30/19	07/31/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		97.3 %		70-130	1931013	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931017	07/30/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		75.0 %		50-200	1931017	07/30/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931013	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1931013	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		93.3 %		70-130	1931013	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		97.3 %		70-130	1931013	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	1931012	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
504 S. Bloomfield Blvd.
Bloomfield NM, 87413

Project Name: 4-1 CDP
Project Number: 17010-0011
Project Manager: Gunner Westerman

Reported:
08/02/19 13:32

Volatile Organic Compounds by 8260 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1931013 - Purge and Trap EPA 5030A
Blank (1931013-BLK1)

Prepared: 07/30/19 0 Analyzed: 08/01/19 2

Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 1,2-Dichloroethane-d4	0.500		"	0.500		99.9	70-130			
Surrogate: Toluene-d8	0.446		"	0.500		89.2	70-130			
Surrogate: Bromofluorobenzene	0.486		"	0.500		97.2	70-130			

LCS (1931013-BS1)

Prepared: 07/30/19 0 Analyzed: 08/01/19 2

Benzene	2.77	0.0250	mg/kg	2.50		111	70-130			
Toluene	2.32	0.0250	"	2.50		92.7	70-130			
Ethylbenzene	2.31	0.0250	"	2.50		92.3	70-130			
p,m-Xylene	4.71	0.0500	"	5.00		94.1	70-130			
o-Xylene	2.32	0.0250	"	2.50		92.6	70-130			
Total Xylenes	7.02	0.0250	"	7.50		93.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.509		"	0.500		102	70-130			
Surrogate: Toluene-d8	0.443		"	0.500		88.5	70-130			
Surrogate: Bromofluorobenzene	0.493		"	0.500		98.5	70-130			

Matrix Spike (1931013-MS1)

Source: P907116-01

Prepared: 07/30/19 0 Analyzed: 08/01/19 2

Benzene	2.72	0.0250	mg/kg	2.50	ND	109	48-131			
Toluene	2.27	0.0250	"	2.50	ND	90.8	48-130			
Ethylbenzene	2.28	0.0250	"	2.50	ND	91.1	45-135			
p,m-Xylene	4.63	0.0500	"	5.00	ND	92.6	43-135			
o-Xylene	2.29	0.0250	"	2.50	ND	91.5	43-135			
Total Xylenes	6.92	0.0250	"	7.50	ND	92.2	43-135			
Surrogate: 1,2-Dichloroethane-d4	0.517		"	0.500		103	70-130			
Surrogate: Toluene-d8	0.445		"	0.500		89.0	70-130			
Surrogate: Bromofluorobenzene	0.494		"	0.500		98.8	70-130			

Matrix Spike Dup (1931013-MSD1)

Source: P907116-01

Prepared: 07/30/19 0 Analyzed: 08/02/19 0

Benzene	2.74	0.0250	mg/kg	2.50	ND	109	48-131	0.678	23	
Toluene	2.27	0.0250	"	2.50	ND	90.7	48-130	0.176	24	
Ethylbenzene	2.27	0.0250	"	2.50	ND	90.6	45-135	0.550	27	
p,m-Xylene	4.60	0.0500	"	5.00	ND	92.0	43-135	0.596	27	
o-Xylene	2.27	0.0250	"	2.50	ND	90.8	43-135	0.856	27	
Total Xylenes	6.87	0.0250	"	7.50	ND	91.6	43-135	0.682	27	
Surrogate: 1,2-Dichloroethane-d4	0.512		"	0.500		102	70-130			
Surrogate: Toluene-d8	0.450		"	0.500		89.9	70-130			
Surrogate: Bromofluorobenzene	0.501		"	0.500		100	70-130			

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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1931017 - DRO Extraction EPA 3570
Blank (1931017-BLK1)

Prepared: 07/30/19 1 Analyzed: 08/02/19 0

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	45.1		"	50.0		90.2	50-200			

LCS (1931017-BS1)

Prepared: 07/30/19 1 Analyzed: 08/02/19 1

Diesel Range Organics (C10-C28)	496	25.0	mg/kg	500		99.3	38-132			
Surrogate: n-Nonane	40.4		"	50.0		80.8	50-200			

Matrix Spike (1931017-MS1)

Source: P907116-01

Prepared: 07/30/19 1 Analyzed: 08/02/19 1

Diesel Range Organics (C10-C28)	682	25.0	mg/kg	500	185	99.6	38-132			
Surrogate: n-Nonane	39.8		"	50.0		79.7	50-200			

Matrix Spike Dup (1931017-MSD1)

Source: P907116-01

Prepared: 07/30/19 1 Analyzed: 08/02/19 1

Diesel Range Organics (C10-C28)	709	25.0	mg/kg	500	185	105	38-132	3.76	20	
Surrogate: n-Nonane	41.1		"	50.0		82.2	50-200			

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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

Nonhalogenated Organics by 8015 - GRO - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1931013 - Purge and Trap EPA 5030A
Blank (1931013-BLK1)

Prepared: 07/30/19 0 Analyzed: 08/01/19 2

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1,2-Dichloroethane-d4	0.500		"	0.500		99.9	70-130			
Surrogate: Toluene-d8	0.446		"	0.500		89.2	70-130			
Surrogate: Bromofluorobenzene	0.486		"	0.500		97.2	70-130			

LCS (1931013-BS2)

Prepared: 07/30/19 0 Analyzed: 08/01/19 2

Gasoline Range Organics (C6-C10)	43.5	20.0	mg/kg	50.0		87.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.523		"	0.500		105	70-130			
Surrogate: Toluene-d8	0.452		"	0.500		90.4	70-130			
Surrogate: Bromofluorobenzene	0.499		"	0.500		99.8	70-130			

Matrix Spike (1931013-MS2)

Source: P907116-01

Prepared: 07/30/19 0 Analyzed: 08/02/19 0

Gasoline Range Organics (C6-C10)	45.0	20.0	mg/kg	50.0	ND	90.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.513		"	0.500		103	70-130			
Surrogate: Toluene-d8	0.452		"	0.500		90.3	70-130			
Surrogate: Bromofluorobenzene	0.491		"	0.500		98.1	70-130			

Matrix Spike Dup (1931013-MSD2)

Source: P907116-01

Prepared: 07/30/19 0 Analyzed: 08/02/19 0

Gasoline Range Organics (C6-C10)	44.8	20.0	mg/kg	50.0	ND	89.6	70-130	0.392	20	
Surrogate: 1,2-Dichloroethane-d4	0.512		"	0.500		102	70-130			
Surrogate: Toluene-d8	0.450		"	0.500		89.9	70-130			
Surrogate: Bromofluorobenzene	0.497		"	0.500		99.3	70-130			

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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 13:32

Anions by 300.0/9056A - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1931012 - Anion Extraction EPA 300.0/9056A
Blank (1931012-BLK1)

Prepared: 07/30/19 0 Analyzed: 07/30/19 1

Chloride ND 20.0 mg/kg

LCS (1931012-BS1)

Prepared: 07/30/19 0 Analyzed: 07/30/19 1

Chloride 254 20.0 mg/kg 250 102 90-110

Matrix Spike (1931012-MS1)
Source: P907116-01

Prepared: 07/30/19 0 Analyzed: 07/30/19 1

Chloride 304 20.0 mg/kg 250 42.0 105 80-120

Matrix Spike Dup (1931012-MSD1)
Source: P907116-01

Prepared: 07/30/19 0 Analyzed: 07/30/19 1

Chloride 321 20.0 mg/kg 250 42.0 112 80-120 5.48 20

QC Summary Report
Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Whiptail Midstream LLC
504 S. Bloomfield Blvd.
Bloomfield NM, 87413

Project Name: 4-1 CDP
Project Number: 17010-0011
Project Manager: Gunner Westerman

Reported:
08/02/19 13:32

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
RPD Relative Percent Difference
** Methods marked with ** are non-accredited methods.

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Project Information

Client: Whiptail Midstream LLC
 Project: 4-1 LOT
 Project Manager: Guana Western
 Address: 45 Mercado ST.
 City, State, Zip: Durango CO 81301
 Phone: 970-683-0668
 Email:

Chain of Custody

Report Attention

Report due by:
 Attention:
 Address:
 City, State, Zip
 Phone:
 Email:

Lab Use Only

TAT

Page 1 of 7
EPA Program

Lab WO#

Job Number

1D

3D

RCRA

CWA

SDWA

P 907116

17010-0011

Analysis and Method

State

NM

CO

UT

AZ

X

Remarks

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1							
11:13 AM	7/29/19	S	1	F-1	1	X	X	X			X								
11:14 AM	7/29/19			F2	2	X	X	X			X								
11:15 AM	7/29/19			F3	3	X	X	X			X								
11:16 AM	7/29/19			F4	4	X	X	X			X								
11:17 AM	7/29/19			F5	5	X	X	X			X								
11:18 AM	7/29/19			F6	6	X	X	X			X								
11:19 AM	7/29/19			F7	7	X	X	X			X								
11:20 AM	7/29/19			F8	8	X	X	X			X								
11:21 AM	7/29/19			F9	9	X	X	X			X								
11:22 AM	7/29/19			F10	10	X	X	X			X								

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: M. Guana Western

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only
<u>[Signature]</u>	7/29/19	7:22 PM	<u>Raine Lopez</u>	7/30/19	7:45 AM	Received on ice: <u>Y</u> / N
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	T1
						AVG Temp °C <u>4</u>
						T2
						T3

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



5796 US Highway 64, Farmington, NM 87401

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (505) 632-0615 Fx (505) 632-1865

Ph (970) 259-0615 Fr (800) 362-1879

envirotech.com
 Laboratory - envirotech.com

Project Information

Client: Whipal
 Project: 4-1 CDP
 Project Manager: Summer Westerman
 Address: 65 Mercado St
 City, State, Zip: Durango Co 81301
 Phone: 970 633-0668
 Email:

Chain of Custody

Report Attention

Report due by:
 Attention:
 Address:
 City, State, Zip
 Phone:
 Email:

Lab Use Only

Lab WO# P907116 Job Number 17010-0011

TAT

1D 3D

Page 2 of 7

EPA Program

RCRA CWA SDWA

Analysis and Method

State

NM CO UT AZ
 X

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1	Remarks
11:23 AM	7/29/19	S	1	F-11	11	X	X	X			X		
11:24 AM				F12	12								
11:25 AM				F13	13								
11:26 AM				F14	14								
11:27 AM				F15	15								
11:28 AM				F16	16								
11:29 AM				F17	17								
11:30 AM				F18	18								
11:31 AM				F19	19								
11:32 AM				F20	20								

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: R. Gunnar Westerman

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <u>R. Gunnar Westerman</u>	Date <u>7/29/19</u>	Time <u>7:22 PM</u>	Received by: (Signature) <u>Rama Lopez</u>	Date <u>7/30/19</u>	Time <u>7:45 AM</u>	Lab Use Only Received on ice: <u>Y</u> / N
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	T1 T2 T3 AVG Temp °C <u>4</u>

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



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 Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

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 Ph (970) 259-0615 Fr (800) 362-1879

envirotech inc. com
 Laboratory: envirotech-inc. com

Analytical Report

Report Summary

Client: Whiptail Midstream LLC

Samples Received: 7/30/2019

Job Number: 17010-0011

Work Order: P907117

Project Name/Location: 4-1 CDP

Report Reviewed By:



Date: 8/2/19

Walter Hinchman, Laboratory Director

Supplement to analytical report generated on: 8/2/19 3:51 pm



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
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Envirotech, Inc, currently holds the appropriate and available Utah TNI certification NM009792018-1 for the data reported.

Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
F21	P907117-01A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F22	P907117-02A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F23	P907117-03A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F24	P907117-04A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F25	P907117-05A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F26	P907117-06A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F27	P907117-07A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F28	P907117-08A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F29	P907117-09A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F30	P907117-10A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F31	P907117-11A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F32	P907117-12A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F33	P907117-13A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F34	P907117-14A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F35	P907117-15A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F36	P907117-16A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F37	P907117-17A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F38	P907117-18A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F39	P907117-19A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.
F40	P907117-20A	Soil	07/29/19	07/30/19	Glass Jar, 4 oz.

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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F21
P907117-01 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		102 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		93.0 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.7 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	82.8	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		77.0 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		102 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		93.0 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.7 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	48.8	20.0	mg/kg	1	1931015	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F22
P907117-02 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		94.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		96.1 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	67.7	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		73.9 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		94.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		96.1 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	47.8	20.0	mg/kg	1	1931015	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F23
P907117-03 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		104 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		94.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.1 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		76.9 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		104 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		94.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.1 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	1931015	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F24
P907117-04 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		93.6 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		99.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	27.4	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		73.5 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		93.6 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		99.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	20.2	20.0	mg/kg	1	1931015	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F25
P907117-05 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		102 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		93.8 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.8 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	173	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	87.4	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		74.1 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		102 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		93.8 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.8 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	1931015	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F26
P907117-06 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		96.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		98.7 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	35.7	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		67.8 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		96.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		98.7 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	64.8	20.0	mg/kg	1	1931015	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F27
P907117-07 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		103 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		93.0 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		98.5 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	25.6	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		69.1 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		103 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		93.0 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		98.5 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	76.2	20.0	mg/kg	1	1931015	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F28
P907117-08 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		99.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		94.9 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.7 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	120	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	58.6	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		70.2 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		99.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		94.9 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.7 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	27.1	20.0	mg/kg	1	1931015	07/30/19	07/30/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F29
P907117-09 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		93.5 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		97.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	56.9	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		71.9 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		93.5 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		97.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	24.9	20.0	mg/kg	1	1931015	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F30
P907117-10 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		100 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		92.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		98.7 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	166	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	95.8	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		72.0 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		100 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		92.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		98.7 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	44.1	20.0	mg/kg	1	1931015	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F31
P907117-11 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		105 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		94.6 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		98.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	83.9	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		76.6 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		105 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		94.6 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		98.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	1931015	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F32
P907117-12 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		102 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		94.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.0 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	251	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	117	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		77.0 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		102 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		94.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.0 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	48.8	20.0	mg/kg	1	1931015	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F33
P907117-13 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		94.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		97.5 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	318	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	120	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		74.6 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		94.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		97.5 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	77.6	20.0	mg/kg	1	1931015	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F34
P907117-14 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		98.9 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		97.0 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		96.5 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	144	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	62.4	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		74.8 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		98.9 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		97.0 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		96.5 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	25.4	20.0	mg/kg	1	1931015	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F35
P907117-15 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		98.1 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		95.8 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		98.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	215	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	80.6	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		76.3 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		98.1 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		95.8 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		98.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	20.3	20.0	mg/kg	1	1931015	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F36
P907117-16 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		94.9 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		98.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	504	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	205	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		91.0 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		94.9 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		98.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	30.4	20.0	mg/kg	1	1931015	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F37
P907117-17 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		98.8 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		95.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		99.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	153	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	87.5	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		75.0 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		98.8 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		95.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		99.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	46.4	20.0	mg/kg	1	1931015	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F38
P907117-18 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		94.1 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		96.6 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	235	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	106	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		76.8 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		101 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		94.1 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		96.6 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	37.2	20.0	mg/kg	1	1931015	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F39
P907117-19 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		98.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		94.8 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		98.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	404	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	164	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		88.4 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		98.3 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		94.8 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		98.4 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	44.3	20.0	mg/kg	1	1931015	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

F40
P907117-20 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		98.7 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Toluene-d8		95.0 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	
Surrogate: Bromofluorobenzene		98.5 %		70-130	1931014	07/30/19	07/31/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	584	25.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Oil Range Organics (C28-C40)	270	50.0	mg/kg	1	1931020	07/30/19	07/31/19	EPA 8015D	
Surrogate: n-Nonane		97.6 %		50-200	1931020	07/30/19	07/31/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		98.7 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Toluene-d8		95.0 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	
Surrogate: Bromofluorobenzene		98.5 %		70-130	1931014	07/30/19	07/31/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	1931015	07/30/19	07/31/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
504 S. Bloomfield Blvd.
Bloomfield NM, 87413

Project Name: 4-1 CDP
Project Number: 17010-0011
Project Manager: Gunner Westerman

Reported:
08/02/19 16:05

Volatile Organic Compounds by 8260 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1931014 - Purge and Trap EPA 5030A
Blank (1931014-BLK1)

Prepared: 07/30/19 1 Analyzed: 08/02/19 0

Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 1,2-Dichloroethane-d4	0.510		"	0.500		102	70-130			
Surrogate: Toluene-d8	0.449		"	0.500		89.8	70-130			
Surrogate: Bromofluorobenzene	0.492		"	0.500		98.3	70-130			

LCS (1931014-BS1)

Prepared: 07/30/19 1 Analyzed: 08/02/19 0

Benzene	2.70	0.0250	mg/kg	2.50		108	70-130			
Toluene	2.30	0.0250	"	2.50		92.1	70-130			
Ethylbenzene	2.28	0.0250	"	2.50		91.1	70-130			
p,m-Xylene	4.65	0.0500	"	5.00		93.0	70-130			
o-Xylene	2.29	0.0250	"	2.50		91.6	70-130			
Total Xylenes	6.94	0.0250	"	7.50		92.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.519		"	0.500		104	70-130			
Surrogate: Toluene-d8	0.453		"	0.500		90.5	70-130			
Surrogate: Bromofluorobenzene	0.498		"	0.500		99.5	70-130			

Matrix Spike (1931014-MS1)

Source: P907117-01

Prepared: 07/30/19 1 Analyzed: 08/02/19 0

Benzene	2.71	0.0250	mg/kg	2.50	ND	108	48-131			
Toluene	2.27	0.0250	"	2.50	ND	90.9	48-130			
Ethylbenzene	2.26	0.0250	"	2.50	ND	90.4	45-135			
p,m-Xylene	4.62	0.0500	"	5.00	ND	92.4	43-135			
o-Xylene	2.29	0.0250	"	2.50	ND	91.8	43-135			
Total Xylenes	6.92	0.0250	"	7.50	ND	92.2	43-135			
Surrogate: 1,2-Dichloroethane-d4	0.521		"	0.500		104	70-130			
Surrogate: Toluene-d8	0.445		"	0.500		88.9	70-130			
Surrogate: Bromofluorobenzene	0.507		"	0.500		101	70-130			

Matrix Spike Dup (1931014-MSD1)

Source: P907117-01

Prepared: 07/30/19 1 Analyzed: 08/02/19 0

Benzene	2.76	0.0250	mg/kg	2.50	ND	111	48-131	2.14	23	
Toluene	2.31	0.0250	"	2.50	ND	92.4	48-130	1.59	24	
Ethylbenzene	2.31	0.0250	"	2.50	ND	92.3	45-135	2.08	27	
p,m-Xylene	4.71	0.0500	"	5.00	ND	94.2	43-135	1.84	27	
o-Xylene	2.32	0.0250	"	2.50	ND	92.7	43-135	1.06	27	
Total Xylenes	7.03	0.0250	"	7.50	ND	93.7	43-135	1.59	27	
Surrogate: 1,2-Dichloroethane-d4	0.519		"	0.500		104	70-130			
Surrogate: Toluene-d8	0.450		"	0.500		90.0	70-130			
Surrogate: Bromofluorobenzene	0.491		"	0.500		98.2	70-130			

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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1931020 - DRO Extraction EPA 3570
Blank (1931020-BLK1)

Prepared: 07/30/19 1 Analyzed: 08/02/19 1

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	39.2		"	50.0		78.4	50-200			

LCS (1931020-BS1)

Prepared: 07/30/19 1 Analyzed: 08/02/19 1

Diesel Range Organics (C10-C28)	487	25.0	mg/kg	500		97.4	38-132			
Surrogate: n-Nonane	38.8		"	50.0		77.6	50-200			

Matrix Spike (1931020-MS1)

Source: P907117-01

Prepared: 07/30/19 1 Analyzed: 08/02/19 1

Diesel Range Organics (C10-C28)	556	25.0	mg/kg	500	82.8	94.6	38-132			
Surrogate: n-Nonane	39.5		"	50.0		79.0	50-200			

Matrix Spike Dup (1931020-MSD1)

Source: P907117-01

Prepared: 07/30/19 1 Analyzed: 08/02/19 1

Diesel Range Organics (C10-C28)	568	25.0	mg/kg	500	82.8	97.0	38-132	2.10	20	
Surrogate: n-Nonane	39.9		"	50.0		79.8	50-200			

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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

Nonhalogenated Organics by 8015 - GRO - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1931014 - Purge and Trap EPA 5030A
Blank (1931014-BLK1)

Prepared: 07/30/19 1 Analyzed: 08/02/19 0

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1,2-Dichloroethane-d4	0.510		"	0.500		102	70-130			
Surrogate: Toluene-d8	0.449		"	0.500		89.8	70-130			
Surrogate: Bromofluorobenzene	0.492		"	0.500		98.3	70-130			

LCS (1931014-BS2)

Prepared: 07/30/19 1 Analyzed: 08/02/19 0

Gasoline Range Organics (C6-C10)	46.0	20.0	mg/kg	50.0		92.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.530		"	0.500		106	70-130			
Surrogate: Toluene-d8	0.456		"	0.500		91.1	70-130			
Surrogate: Bromofluorobenzene	0.503		"	0.500		101	70-130			

Matrix Spike (1931014-MS2)

Source: P907117-01

Prepared: 07/30/19 1 Analyzed: 08/02/19 0

Gasoline Range Organics (C6-C10)	44.1	20.0	mg/kg	50.0	ND	88.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.518		"	0.500		104	70-130			
Surrogate: Toluene-d8	0.450		"	0.500		89.9	70-130			
Surrogate: Bromofluorobenzene	0.510		"	0.500		102	70-130			

Matrix Spike Dup (1931014-MSD2)

Source: P907117-01

Prepared: 07/30/19 1 Analyzed: 08/02/19 0

Gasoline Range Organics (C6-C10)	44.7	20.0	mg/kg	50.0	ND	89.3	70-130	1.19	20	
Surrogate: 1,2-Dichloroethane-d4	0.528		"	0.500		106	70-130			
Surrogate: Toluene-d8	0.452		"	0.500		90.4	70-130			
Surrogate: Bromofluorobenzene	0.496		"	0.500		99.1	70-130			

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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

Anions by 300.0/9056A - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1931015 - Anion Extraction EPA 300.0/9056A
Blank (1931015-BLK1)

Prepared & Analyzed: 07/30/19 1

Chloride	ND	20.0	mg/kg
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LCS (1931015-BS1)

Prepared & Analyzed: 07/30/19 1

Chloride	264	20.0	mg/kg	250	106	90-110
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Matrix Spike (1931015-MS1)
Source: P907117-01

Prepared: 07/30/19 1 Analyzed: 07/30/19 2

Chloride	329	20.0	mg/kg	250	48.8	112	80-120
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Matrix Spike Dup (1931015-MSD1)
Source: P907117-01

Prepared: 07/30/19 1 Analyzed: 07/30/19 2

Chloride	179	20.0	mg/kg	250	48.8	52.2	80-120	58.9	20	D1, SPK1
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QC Summary Report
Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Gunner Westerman

Reported:
 08/02/19 16:05

Notes and Definitions

SPK1 The spike recovery is outside of quality control limits.

D1 Duplicates or Matrix Spike Duplicates or Laboratory Control Sample Duplicates Relative Percent Difference is outside of control limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

** Methods marked with ** are non-accredited methods.

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Project Information

Chain of Custody

Page 3 of 7

Client: See Page 1
 Project: _____
 Project Manager: _____
 Address: _____
 City, State, Zip: _____
 Phone: _____
 Email: _____

Report Attention

Report due by: _____
 Attention: _____
 Address: _____
 City, State, Zip: _____
 Phone: _____
 Email: _____

Lab Use Only

TAT

EPA Program

Lab WO#

Job Number

1D

3D

RCRA

CWA

SDWA

P907117

17010-0011

X

Analysis and Method

State

DRO/ORO by 8015

GRO/DRO by 8015

BTEX by 8021

VOC by 8260

Metals 6010

Chloride 300.0

TPH 418.1

NM

CO

UT

AZ

X

Remarks

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO	GRO/DRO	BTEX by	VOC by 8	Metals 6	Chloride	TPH 418							Remarks
11:33 AM	7/29/2019	S	1	F21	1	X	X	X			X								
11:34 AM				F22	2														
11:35 AM				F23	3														
11:36 AM				F24	4														
11:37 AM				F25	5														
11:38 AM				F26	6														
11:39 AM				F27	7														
11:40 AM				F28	8														
11:41 AM				F29	9														
11:42 AM				F30	10														

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: R. Ganner Westernman

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Date

Time

Lab Use Only

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Date

Time

Received on ice: Y / N

T1

T2

T3

AVG Temp °C

4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



5796 US Highway 64, Farmington, NM 87401

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (505) 632-0615 Fx (505) 632-1865

Ph (970) 259-0615 Fr (800) 362-1879

envirotech inc. corp
 Laboratory@envirotech-inc.com

Project Information

Chain of Custody

Page 4 of 7

Client: See Page 1
 Project:
 Project Manager:
 Address:
 City, State, Zip
 Phone:
 Email:

Report Attention

Report due by:
 Attention:
 Address:
 City, State, Zip
 Phone:
 Email:

Lab Use Only

Lab WO# P907117
 Job Number 17010-0011

TAT

1D ☒ 3D ☐

EPA Program

RCRA ☐ CWA ☐ SDWA ☐

Analysis and Method

State

NM ☒ CO ☐ UT ☐ AZ ☐

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1						Remarks
11:45 AM	7/29/19	S	1	F31	11	X	X	X			X							
11:48 AM				F32	12													
11:45 AM				F33	13													
11:46 AM				F34	14													
11:47 AM				F35	15													
11:48 AM				F36	16													
11:49 AM				F37	17													
11:50 AM				F38	18													
11:51 AM				F39	19													
11:52 AM				F40	20													

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: B. Gunnar Westerman

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <u>B. Gunnar Westerman</u>	Date 7/29/19	Time 7:22 PM	Received by: (Signature) <u>Rene Lopez</u>	Date 7/30/19	Time 7:45 AM	Lab Use Only Received on ice: <u>Y</u> / N
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	T1 AVG Temp °C <u>4</u>

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



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Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

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Ph (970) 259-0615 Fr (800) 362-1879

envirotech inc. com
 Laboratory - envirotech-inc.com

Project Information
 Client: See Page 1 Wkptal Midstream
 Project: 4-1 CDP
 Project Manager: Gunner Westernman
 Address:
 City, State, Zip
 Phone: 970-683-0668
 Email: Gunner Westernman

Chain of Custody
 Report Attention
 Report due by:
 Attention:
 Address:
 City, State, Zip
 Phone:
 Email:

Lab Use Only
 Lab WO# P907117 Job Number 17010-001
 TAT 1D ☒ 3D ☐
 Analysis and Method
 DRO/DRO by 8015 ☒ GRO/DRO by 8015 ☒ BTEX by 8021 ☒ VOC by 8260 ☐ Metals 6010 ☐ Chloride 300.0 ☒ TPH 418.1 ☐
 EPA Program RCRA ☐ CWA ☐ SDWA ☐
 State NM ☒ CO ☐ UT ☐ AZ ☐

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1	Remarks
11:33 AM	7/29/19	S	1	F21	1	X	X	X			X		
11:34 AM				F22	2								
11:35 AM				F23	3								
11:36 AM				F24	4								
11:37 AM				F25	5								
11:38 AM				F26	6								
11:39 AM				F27	7								
11:40 AM				F28	8								
11:41 AM				F29	9								
11:42 AM				F30	10								

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: R. Gunner Westernman

Relinquished by: (Signature) R. Gunner Westernman Date 7/29/19 Time 7:22 PM Received by: (Signature) Raimon Lopez Date 7/30/19 Time 7:45 AM

Relinquished by: (Signature) _____ Date _____ Time _____ Received by: (Signature) _____ Date _____ Time _____

Lab Use Only
 Received on ice: ☒ Y / ☐ N
 T1 _____ T2 _____ T3 _____
 AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA _____

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



5796 US Highway 64, Farmington, NM 87401

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (505) 632-0615 Fx (505) 632-1865

Ph (970) 259-0615 Fr (800) 362-1879

Project Information					Chain of Custody		Lab Use Only		TAT		EPA Program											
Client: <u>See Page 1 Whiptail Meadows</u>					Report Attention		Lab WO#		Job Number		1D	3D	RCRA	CWA	SDWA							
Project: <u>4-1 CDP</u>					Report due by:		<u>P907117</u>		<u>17010-0011</u>		<input checked="" type="checkbox"/>											
Project Manager: <u>Gunnar Westerman</u>					Attention:		Analysis and Method									State						
Address:					Address:											NM				CO		
City, State, Zip					City, State, Zip																	
Phone: <u>970-683-0668</u>					Phone:																	
Email: <u>Gunnar Westerman</u>					Email:																	
Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1	Remarks									
11:43 AM	7/29/19	S	1	F31	11	X	X	X			X											
11:44 AM				F32	12																	
11:45 AM				F33	13																	
11:46 AM				F34	14																	
11:47 AM				F35	15																	
11:48 AM				F36	16																	
11:49 AM				F37	17																	
11:50 AM				F38	18																	
11:51 AM				F39	19																	
11:52 AM				F40	20																	

Additional Instructions:
 I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: B. Gunnar Westerman
 Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <u>B. Gunnar Westerman</u>		Date	Time	Received by: (Signature) <u>Ronny Lopez</u>		Date	Time	Lab Use Only	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Received on ice: <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	
								T1: _____ T2: _____ T3: _____	
								AVG Temp °C <u>4</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



ATTACHMENT E

AUGUST 15, 2019 LABORATORY ANALYTICAL REPORTS

Analytical Report

Report Summary

Client: Whiptail Midstream LLC

Samples Received: 8/14/2019

Job Number: 17010-0011

Work Order: P908033

Project Name/Location: 4-1 CDP

Report Reviewed By:



Date: 8/15/19

Walter Hinchman, Laboratory Director

Supplement to analytical report generated on: 8/15/19 3:47 pm



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
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Envirotech, Inc, currently holds the appropriate and available Utah TNI certification NM009792018-1 for the data reported.

Whiptail Midstream LLC
504 S. Bloomfield Blvd.
Bloomfield NM, 87413

Project Name: 4-1 CDP
Project Number: 17010-0011
Project Manager: Kris Rowe

Reported:
08/15/19 16:02

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
F10 8/14/19	P908033-01A	Soil	08/14/19	08/14/19	Glass Jar, 4 oz.
SW 24 8/14/19	P908033-02A	Soil	08/14/19	08/14/19	Glass Jar, 4 oz.
SW 25 8/14/19	P908033-03A	Soil	08/14/19	08/14/19	Glass Jar, 4 oz.

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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Kris Rowe

Reported:
 08/15/19 16:02

F10 8/14/19
P908033-01 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		107 %		50-150	1933022	08/14/19	08/14/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1933024	08/14/19	08/14/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1933024	08/14/19	08/14/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		107 %		50-200	1933024	08/14/19	08/14/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.3 %		50-150	1933022	08/14/19	08/14/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	69.8	20.0	mg/kg	1	1933025	08/14/19	08/14/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Kris Rowe

Reported:
 08/15/19 16:02

SW 24 8/14/19
P908033-02 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1933022	08/14/19	08/14/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1933024	08/14/19	08/14/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1933024	08/14/19	08/14/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		104 %		50-200	1933024	08/14/19	08/14/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.6 %		50-150	1933022	08/14/19	08/14/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	36.1	20.0	mg/kg	1	1933025	08/14/19	08/14/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Kris Rowe

Reported:
 08/15/19 16:02

SW 25 8/14/19
P908033-03 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1933022	08/14/19	08/14/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	61.7	25.0	mg/kg	1	1933024	08/14/19	08/14/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1933024	08/14/19	08/14/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		104 %		50-200	1933024	08/14/19	08/14/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1933022	08/14/19	08/14/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.7 %		50-150	1933022	08/14/19	08/14/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	45.0	20.0	mg/kg	1	1933025	08/14/19	08/14/19	EPA 300.0/9056A	
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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Kris Rowe

Reported:
 08/15/19 16:02

Volatile Organics by EPA 8021 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1933022 - Purge and Trap EPA 5030A
Blank (1933022-BLK1)

Prepared & Analyzed: 08/14/19 1

Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	8.59		"	8.00		107	50-150			

LCS (1933022-BS1)

Prepared & Analyzed: 08/14/19 1

Benzene	4.98	0.0250	mg/kg	5.00		99.7	70-130			
Toluene	4.94	0.0250	"	5.00		98.9	70-130			
Ethylbenzene	4.95	0.0250	"	5.00		99.1	70-130			
p,m-Xylene	10.1	0.0500	"	10.0		101	70-130			
o-Xylene	4.94	0.0250	"	5.00		98.9	70-130			
Total Xylenes	15.0	0.0250	"	15.0		100	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.68		"	8.00		108	50-150			

Matrix Spike (1933022-MS1)

Source: P908029-01

Prepared: 08/14/19 1 Analyzed: 08/14/19 2

Benzene	5.11	0.0250	mg/kg	5.00	ND	102	54.3-133			
Toluene	5.10	0.0250	"	5.00	0.0403	101	61.4-130			
Ethylbenzene	5.08	0.0250	"	5.00	ND	102	61.4-133			
p,m-Xylene	10.4	0.0500	"	10.0	0.0730	103	63.3-131			
o-Xylene	5.03	0.0250	"	5.00	0.0276	100	63.3-131			
Total Xylenes	15.4	0.0250	"	15.0	0.101	102	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	8.16		"	8.00		102	50-150			

Matrix Spike Dup (1933022-MSD1)

Source: P908029-01

Prepared: 08/14/19 1 Analyzed: 08/14/19 2

Benzene	5.34	0.0250	mg/kg	5.00	ND	107	54.3-133	4.26	20	
Toluene	5.33	0.0250	"	5.00	0.0403	106	61.4-130	4.31	20	
Ethylbenzene	5.32	0.0250	"	5.00	ND	106	61.4-133	4.60	20	
p,m-Xylene	10.9	0.0500	"	10.0	0.0730	108	63.3-131	4.50	20	
o-Xylene	5.26	0.0250	"	5.00	0.0276	105	63.3-131	4.48	20	
Total Xylenes	16.1	0.0250	"	15.0	0.101	107	63.3-131	4.49	20	
Surrogate: 4-Bromochlorobenzene-PID	8.15		"	8.00		102	50-150			

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Whiptail Midstream LLC
504 S. Bloomfield Blvd.
Bloomfield NM, 87413

Project Name: 4-1 CDP
Project Number: 17010-0011
Project Manager: Kris Rowe

Reported:
08/15/19 16:02

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1933024 - DRO Extraction EPA 3570

Blank (1933024-BLK1)

Prepared & Analyzed: 08/14/19 1

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	55.6		"	50.0		111	50-200			

LCS (1933024-BS1)

Prepared & Analyzed: 08/14/19 1

Diesel Range Organics (C10-C28)	492	25.0	mg/kg	500		98.4	38-132			
Surrogate: n-Nonane	50.9		"	50.0		102	50-200			

Matrix Spike (1933024-MS1)

Source: P908033-01

Prepared: 08/14/19 1 Analyzed: 08/14/19 2

Diesel Range Organics (C10-C28)	512	25.0	mg/kg	500	ND	102	38-132			
Surrogate: n-Nonane	52.3		"	50.0		105	50-200			

Matrix Spike Dup (1933024-MSD1)

Source: P908033-01

Prepared: 08/14/19 1 Analyzed: 08/14/19 2

Diesel Range Organics (C10-C28)	512	25.0	mg/kg	500	ND	102	38-132	0.00174	20	
Surrogate: n-Nonane	51.1		"	50.0		102	50-200			

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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Kris Rowe

Reported:
 08/15/19 16:02

Nonhalogenated Organics by 8015 - GRO - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1933022 - Purge and Trap EPA 5030A
Blank (1933022-BLK1)

Prepared & Analyzed: 08/14/19 1

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.41		"	8.00		92.6	50-150			

LCS (1933022-BS2)

Prepared & Analyzed: 08/14/19 1

Gasoline Range Organics (C6-C10)	48.5	20.0	mg/kg	50.0		96.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.47		"	8.00		93.4	50-150			

Matrix Spike (1933022-MS2)

Source: P908029-01

Prepared: 08/14/19 1 Analyzed: 08/14/19 2

Gasoline Range Organics (C6-C10)	51.3	20.0	mg/kg	50.0	ND	103	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.90		"	8.00		86.2	50-150			

Matrix Spike Dup (1933022-MSD2)

Source: P908029-01

Prepared: 08/14/19 1 Analyzed: 08/14/19 2

Gasoline Range Organics (C6-C10)	51.9	20.0	mg/kg	50.0	ND	104	70-130	1.22	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.88		"	8.00		86.0	50-150			

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Whiptail Midstream LLC
 504 S. Bloomfield Blvd.
 Bloomfield NM, 87413

 Project Name: 4-1 CDP
 Project Number: 17010-0011
 Project Manager: Kris Rowe

Reported:
 08/15/19 16:02

Anions by 300.0/9056A - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1933025 - Anion Extraction EPA 300.0/9056A
Blank (1933025-BLK1)

Prepared & Analyzed: 08/14/19 1

Chloride ND 20.0 mg/kg

LCS (1933025-BS1)

Prepared & Analyzed: 08/14/19 1

Chloride 259 20.0 mg/kg 250 104 90-110

Matrix Spike (1933025-MS1)
Source: P908033-01

Prepared & Analyzed: 08/14/19 1

Chloride 338 20.0 mg/kg 250 69.8 107 80-120

Matrix Spike Dup (1933025-MSD1)
Source: P908033-01

Prepared & Analyzed: 08/14/19 1

Chloride 335 20.0 mg/kg 250 69.8 106 80-120 0.772 20

QC Summary Report
Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Whiptail Midstream LLC
504 S. Bloomfield Blvd.
Bloomfield NM, 87413

Project Name: 4-1 CDP
Project Number: 17010-0011
Project Manager: Kris Rowe

Reported:
08/15/19 16:02

Notes and Definitions

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

** Methods marked with ** are non-accredited methods.

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Project Information

Client: Whip Tail Midstream LLC
 Project: 4-1 CDP
 Project Manager: Gannon Westman
 Address: 65 Miracle Street 101
 City, State, Zip: Durango CO 81301
 Phone: 970 261 0000 2015
 Email: Krowe@hclcomp.com

Chain of Custody

Report Attention

Report due by: _____
 Attention: _____
 Address: _____
 City, State, Zip: _____
 Phone: _____
 Email: _____

Lab Use Only

Lab WO#

P908033

Job Number

17010-0011

TAT

1D

3D

X

RCRA

CWA

SDWA

Page 1 of 1

EPA Program

State

NM

CO

UT

AZ

X

Remarks

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1							
12:31 PM	8/14/19	S	1	FID 8/14/19	1	X	X	X			X								
12:35	8/14/19	S	1	SW 24 8/14/19	2	X	X	X			X								
12:42	8/14/19	S	1	SW 25 8/14/19	3	X	X	X			X								

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Brian Skyles

vs ice in cooler
 Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)

Date

8/14/19

Time

2:07 PM

Received by: (Signature)

Date

8/14/19

Time

14:06

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Date

Time

Lab Use Only

Received on ice:

Y / N

T1

T2

T3

AVG Temp °C

4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



5796 US Highway 64, Farmington, NM 87401
 Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (505) 632-0615 Fx (505) 632-1865
 Ph (970) 259-0615 Fr (800) 362-1879

envirotech inc. en
 Laboratory - envirotech inc. en



ATTACHMENT F

NMOSE DEPTH TO GROUNDWATER REPORT



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										X	Y	Depth Well	Depth Water	Water Column
	Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng						
SJ 01507	SJ	RA	3	3	4	10	23N	07W	269889	4013098*		1709	900	809	
SJ 02233	SJ	RA	1	1	2	15	23N	07W	269856	4012864*		1100			
SJ 02233 CLW223636	O	RA	1	1	2	15	23N	07W	269856	4012864*		1100			
SJ 04054 POD1	SJ	RA				1	14	23N	07W	270627	4012298		273	180	93

Average Depth to Water: **540 feet**

Minimum Depth: **180 feet**

Maximum Depth: **900 feet**

Record Count: 4

PLSS Search:

Township: 23N

Range: 07W

*UTM location was derived from PLSS - see Help

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