

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

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification **NG22A-190920-C-1410**

Responsible Party

Responsible Party: WPX Energy Permian, LLC	OGRID: 246289
Contact Name: Deborah Watson	Contact Telephone: 575-885-7561
Contact email: deborah.watson@wpxenergy.com	Incident # 2RP-5520
Contact mailing address: 5315 Buena Vista Drive, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.01578 Longitude -103.86667
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Ross Draw Unit #055	Site Type: Pipeline ROW
Date of Discovery: June 21, 2019 @ 4:30 AM	API# (if applicable) 30-015-41976

Unit Letter	Section	Township	Range	County
G	27	26S	30E	Eddy

Surface Owner: State Federal Tribal Private

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) 6	Volume Recovered (bbls) 2
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 24	Volume Recovered (bbls) 8
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" 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

Equipment failure along flowline between wellhead and tank battery.

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

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

Printed Name: Deborah Watson

Title: HSE Specialist

Signature:

Date: September 20, 2019

email: deborah.watson@wpenergy.com

Telephone: 575-885-7561

OCD Only

Received by: _____

Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____

Title: _____



September 20, 2019

Deborah Watson
Environmental Specialist - Permian Basin
5315 Buena Vista Dr.
Carlsbad, NM 88220

NG22A-190920-C-1410

Closure Report
Ross Draw Unit #055
2RP-5520
API #: 30-015-41976
Eddy County, New Mexico

Mrs. Watson:

On behalf of WPX Energy Permian, LLC, HRL Compliance Solutions, Inc. (HRL) is pleased to submit the attached closure report summarizing the closure actions taken in regards to the release which occurred along the access road and pasture field adjacent to the Ross Draw Unit #055 well site. The purpose of the report is to obtain approval from the New Mexico Oil Conservation Division (NMOCD) for the remediation and closure of the release that occurred on June 21, 2019. Table 1 below summarizes information regarding the release.

Table 1: Release Summary

Site Name	Ross Draw Unit #055		
Location	Lat.	Long.	Unit Letter, Section, Township, Range
	32.01578°	-103.86667°	Unit Letter G, Section 27, Township 26S, Range 30E
District RP	2RP-5520		
Date Release Discovered	6/21/2019 at 4:30 AM		
Date Reported	6/21/2019 at 2:15 PM		
Reported To	NMOCD and BLM via email		
Surface Owner	Federal		
Cause of Release	A failure of the pipeline due to corrosion		
Released Material	Produced Water and Crude Oil		
Volume Release	24 bbls of Produced Water and 6 bbls of Crude Oil		
Volume Recovered	8 bbls of Produced Water and 2 bbls of Crude Oil		
Net Release	16 bbls of Produced Water and 4 bbls of Crude Oil		
Depth To Groundwater	>50 feet below ground surface		
Nearest waterway	Red Bluff Reservoir, 4.7 miles southwest of release		



1.0 Initial Response & Notification

A release of 30 bbls of production fluid occurred on June 21, 2019 along the access road and pasture field adjacent to the Ross Draw Unit #055 well pad. BLM and NMOCD were notified on June 21, 2019 by Deborah Watson via phone call and email. The access road and pasture are both located on federal property. The cause of the release was due to a pipeline failure which occurred as a result of corrosion along the pipe. HRL personnel were present at the release site on June 21, 2019 to verify that the release had been stabilized. A vacuum truck recovered 8 bbls of produced water and 2 bbls of crude oil. All free-standing liquids were removed from the impacted area.

2.0 Site Assessment and Characterization

The location of the release is approximately 18.4 miles Southeast of Malaga, New Mexico with an elevation of approximately 3,020 feet above sea level. A site location map is provided on Figure 1. The nearest surface water, Red Bluff reservoir, is located approximately 4.7 miles southwest of the release (Figure 2).

Depth-to-groundwater at the release site is estimated to be greater than 50 feet below ground surface as determined by review of the United States Geological Survey (USGS) National Water Information System. A 3-mile radius search of the USGS National Water Information System revealed 3 water wells with an average depth to groundwater of 92 feet. Figure 2 contains a site location map of water wells relevant to the depth-to-groundwater determination.

An assessment of wetlands and springs was conducted using a USGS topographical 7.5-minute map of Tucker Draw, New Mexico. No wetlands were identified within 300 feet of the release location. There are no springs within 1000 feet of this location. Figure 3 contains the topographic map used for assessment.

The release location is not within an area identified as an unstable karst geology area. An area map generated with data from the USGS displaying geologic units and structural features is shown in Figure 4.

Based on the assessments outlined above the following closure criteria was implemented to remediate the site.

Table 2: Closure Criteria

Depth to Ground Water	Constituent	Limit
Greater than 50 feet	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg



3.0 Soil Remediation

Remedial activity at the Ross Draw Unit #055 consisted of the following actions:

- June 21, 2019- HRL personnel were present at the release location, to assess the impacted areas and conduct initial site delineation. GPS data was collected for the impacted area and the resulting spill map is shown on Figure 5.
- July 15, 2019- Following permission granted by BLM to begin remediating impacted areas, Kelley Oilfield Services began remediation activity by excavating material from the impacted pasture field. HRL personnel were at the release site to collect field screens, using an electrical conductivity (EC) meter, a photoionization detector (PID) unit and Petroflag unit. The field screen data results were utilized to guide the excavation to soil concentrations below the limits outlined in the NMOCD closure criteria.
- Excavation of the impacted soil in the pasture field was completed to a total depth of 3 feet below ground surface for a majority of areas. Several impacted areas within the pasture were excavated to a total depth of 4 feet below ground surface to complete soil concentrations below NMOCD closure criteria. A total volume of approximately 365 cubic yards of contaminated soil was removed from the pasture. Total excavation depth of a specific area can be found in the Analytical Summary chart attached as Table A.
- Excavation of the impacted areas on the access road was completed to a total depth ranging from 2 to 3 below ground surface depending on the sample area. A total volume of approximately 275 cubic yards of contaminated soil was removed from the access road. Photos of the excavation areas are attached as Appendix D.
- An estimated 640 cubic yards of impacted soil was removed from the location and transported to R360 Red Bluff waste management facility located in Orla, Texas. Disposal was conducted by Kelley Oilfield Services and took place continuously throughout the excavation process.
- To prevent hazardous road conditions Kelley Oilfield Services backfilled and compacted the access road excavation area with approximately 275 cubic yards of clean caliche immediately after confirmation samples were collected.
- As of the writing of this report the excavated pasture field has yet to be backfilled and reseeded with BLM #2 seed mix. Kelley Oilfield Services will complete backfilling of the excavation and reseeded at the direction of WPX.



4.0 Soil Sampling and Analytical Results

Confirmation sampling took place on July 24, 2019 following NMOCD notification, attached as Appendix B. A confirmation sample plan was implemented where 5 point composite samples were collected such that they represented areas less than 200 square feet, in accordance with Subparagraph (c) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC. Confirmation sample locations are depicted on Figures 6A, 6B and 6C. A total of 68 confirmation samples were collected, including 51 excavation footprint samples and 17 sidewall samples.

Samples which exceeded NMOCD closure criteria from the first sampling event were resampled on August 22, 2019 following notification (Appendix B). Two samples, SP6 and SP 35, exceeded the 600 ppm chloride limit from the second sampling and were resampled on September 10, 2019. All confirmation samples were submitted to Envirotech Inc., a National Environmental Laboratory Accreditation Program (NELAP) laboratory, in accordance with NMOCD soil sampling procedures. The samples were analyzed for chlorides by EPA Method 300.0/9056A, volatile organics (BTEX) by EPA Method 8021B, and DRO, GRO and MRO by EPA Method 8015D. A summary of the laboratory results are attached as Table A with the raw analytical reports included as Appendix C.

5.0 Summary

A release of 30 bbls of production fluids occurred on June 21, 2019 on the access road and pasture field adjacent to the Ross Draw Unit #055 well pad. The cause of the release was due to a pipeline failure. BLM and NMOCD were both notified on the day of discovery. The impacted access road and pasture field are both located on federal property. Soil remediation activities involved excavating the impacted areas within the pasture field to a total depth of 3 to 4 feet below ground surface depending on the impacted area. The impacted areas in the pasture and access road were excavated to a depth of 2 to 3 feet below ground surface. An estimated 640 cubic yards of impacted soil was transported for disposal to R360 Red Bluff waste management facility located in Orla, Texas

A total of 68 confirmation samples were collected from within the excavation to verify cleanup at the location. Analytical results for all 68 samples were reported below the concentration limits outlined in Table 1 of Subsection E of NMAC 19.15.29.12. No further remedial action is recommended.

6.0 Scope and Limitations

The scope of HRL's services consists of conducting site delineation, verification of release stabilization, regulatory liaison, guiding remediation activity, collecting confirmation soil samples, and preparation of this closure report. All work has been performed in accordance with 19.15.29 NMAC.



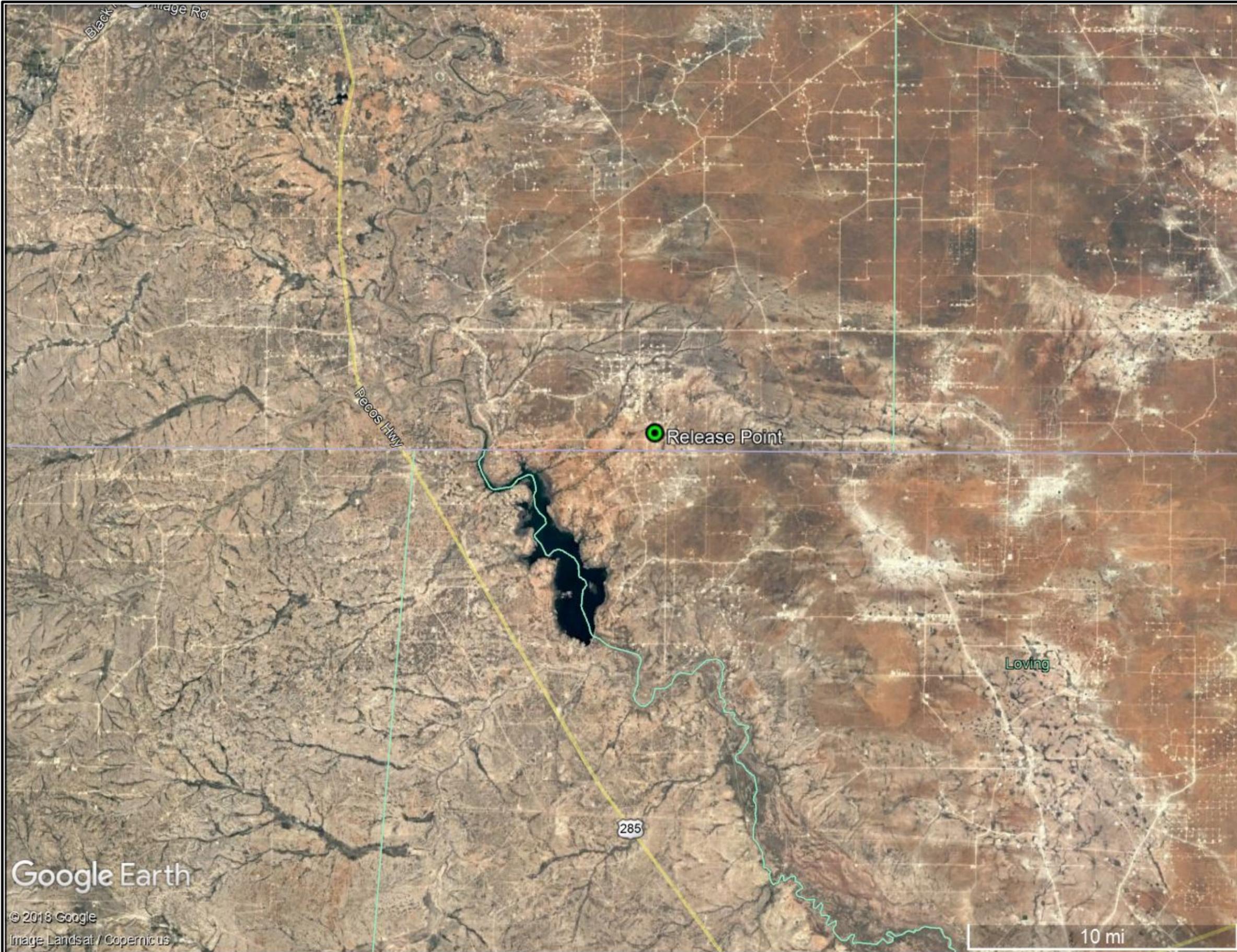
If there are any questions regarding this report, please contact Kevin Smith at 575-616-7398 Ext. 435.

Prepared by:
HRL Compliance Solutions, Inc.

Kevin Smith
Environmental Scientist – Permian

Attachments:

- Figure 1: Site Location Map
- Figure 2: Depth to Groundwater Map
- Figure 3: Site Topographic Assessment
- Figure 4: Karst Assessment Map
- Figure 5: Spill Area Map
- Figure 6A: Confirmation Sample Location Map – Footprint
- Figure 6B: Confirmation Sample Location Map – Footprint
- Figure 6C: Confirmation Sample Location Map – Sidewalls
- Table A: Analytical Results Summary
- Appendix A: C-141 Release Notification
- Appendix B: Confirmation Sampling Notification
- Appendix C: Laboratory Analytical Reports
- Appendix D: Site Photographs



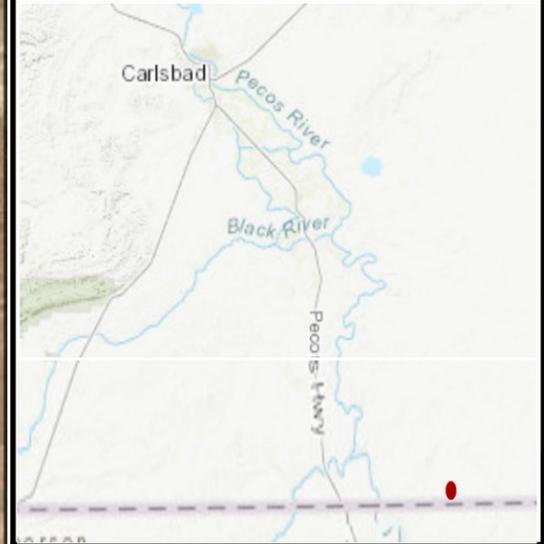
WPXENERGY

**Figure 1:
Site Location Map**
Ross Draw Unit #55
 32.015789560 -103.866670069
 Section 27, Township 26 South, Range 30 East

Mapped Features

-  Ross Draw Unit #55

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: K. Smith
 Rev: 0
 Date: 7/1/2019

Google Earth
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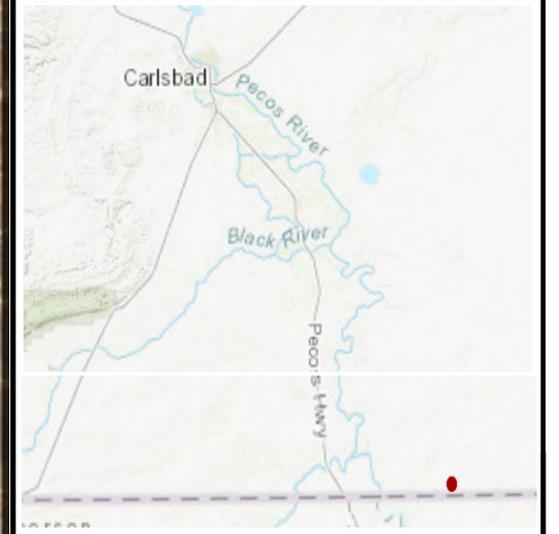
Figure 2: Depth to Groundwater Map
Ross Draw Unit #055

32.015789560 -103.866670069
 Section 27, Township 26 South, Range 30 East

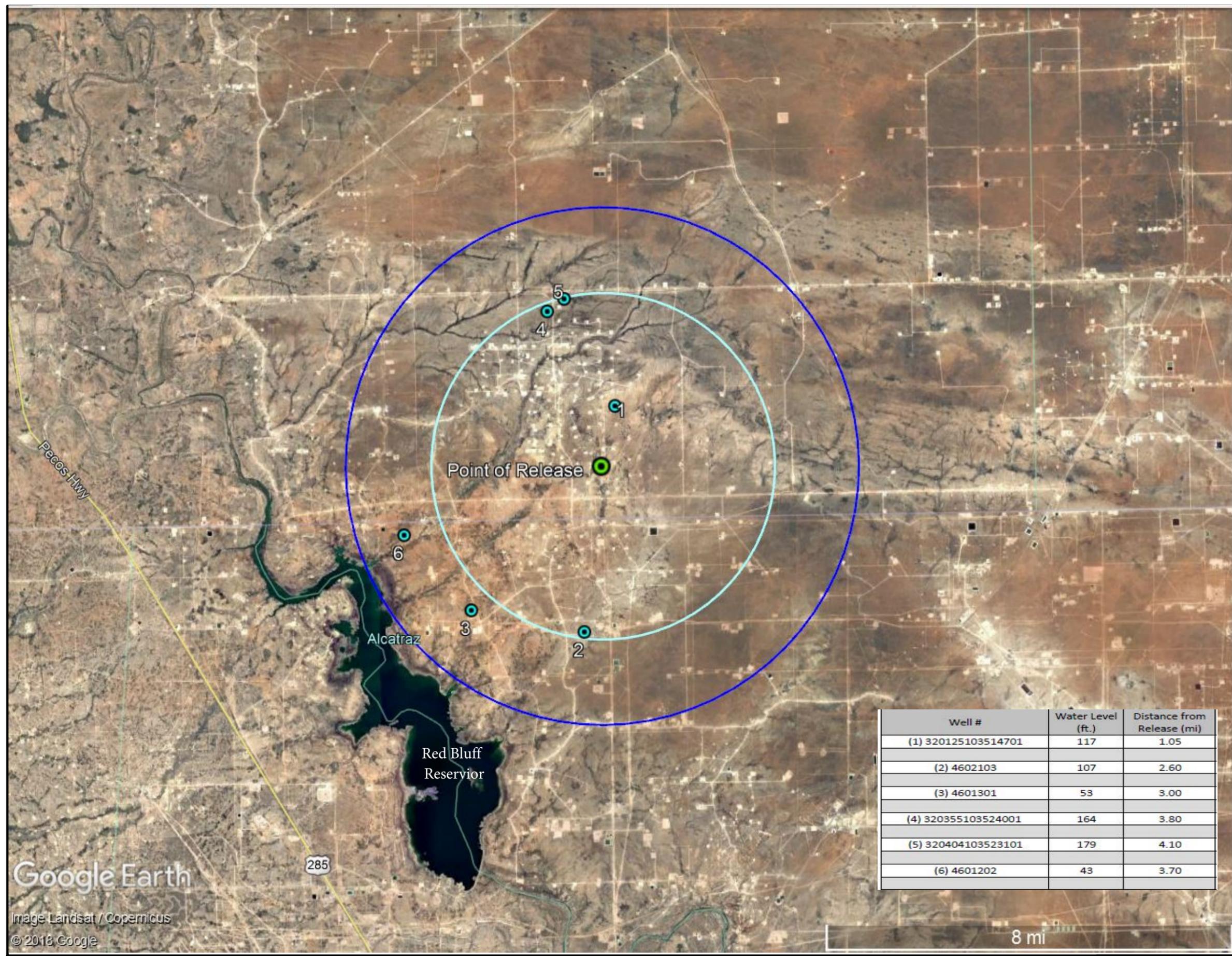
Mapped Features

-  Ross Draw Unit #055 Well Site
-  Water Well Locations
-  5 Radius From Release
-  3 Radius From Release

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Well #	Water Level (ft.)	Distance from Release (mi)
(1) 320125103514701	117	1.05
(2) 4602103	107	2.60
(3) 4601301	53	3.00
(4) 320355103524001	164	3.80
(5) 320404103523101	179	4.10
(6) 4601202	43	3.70



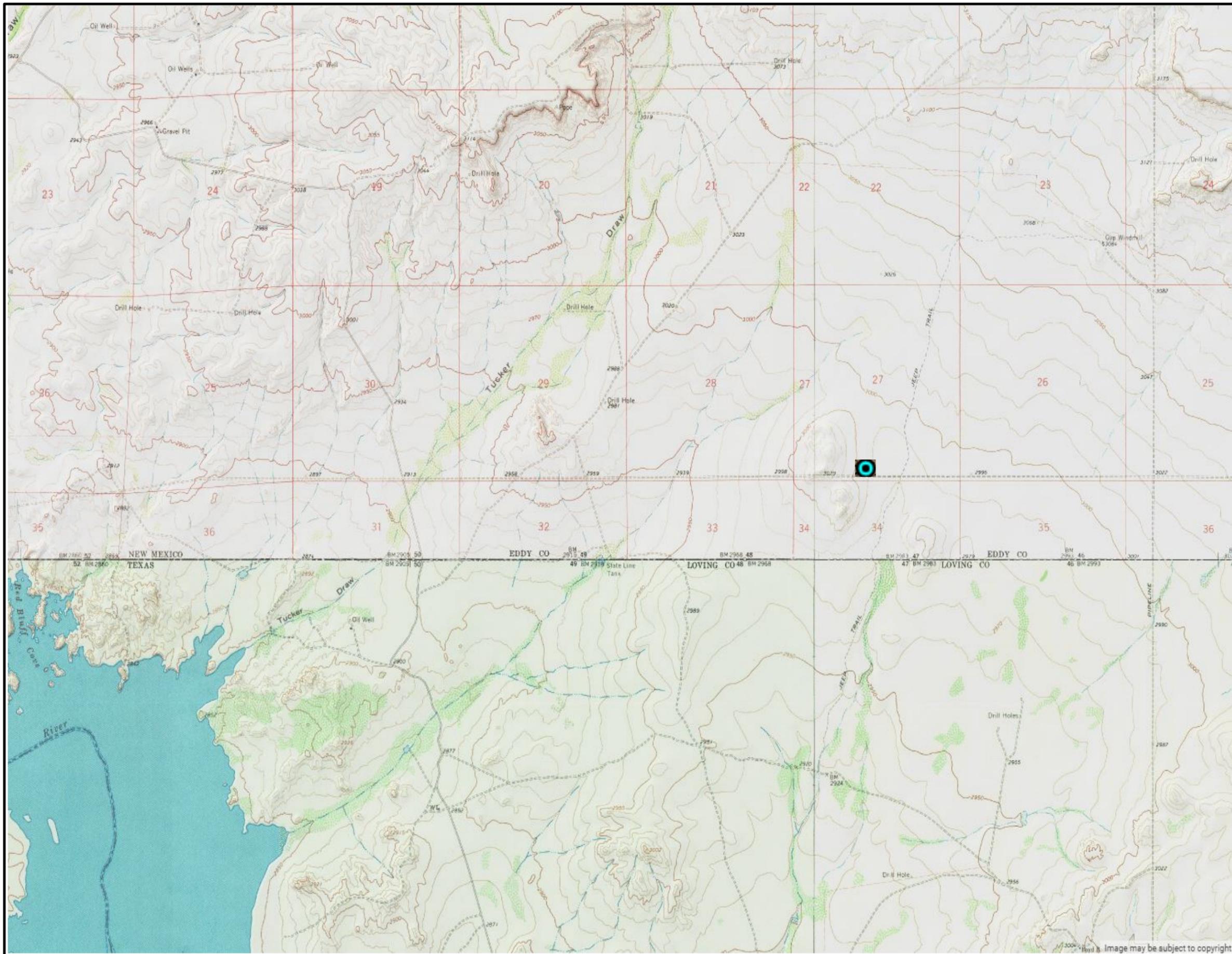


Figure 3: Topographic Assessment Map

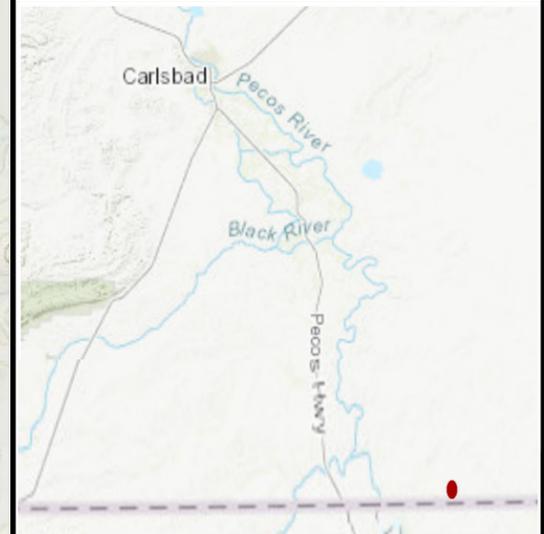
Ross Draw Unit #055
 32.015789560 -103.866670069
 Section 27, Township 26 South, Range 30 East

Mapped Features



Ross Draw Unit #055
 Well Site

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Author: K. Smith
 Rev: 0
 Date: 9/201/2019

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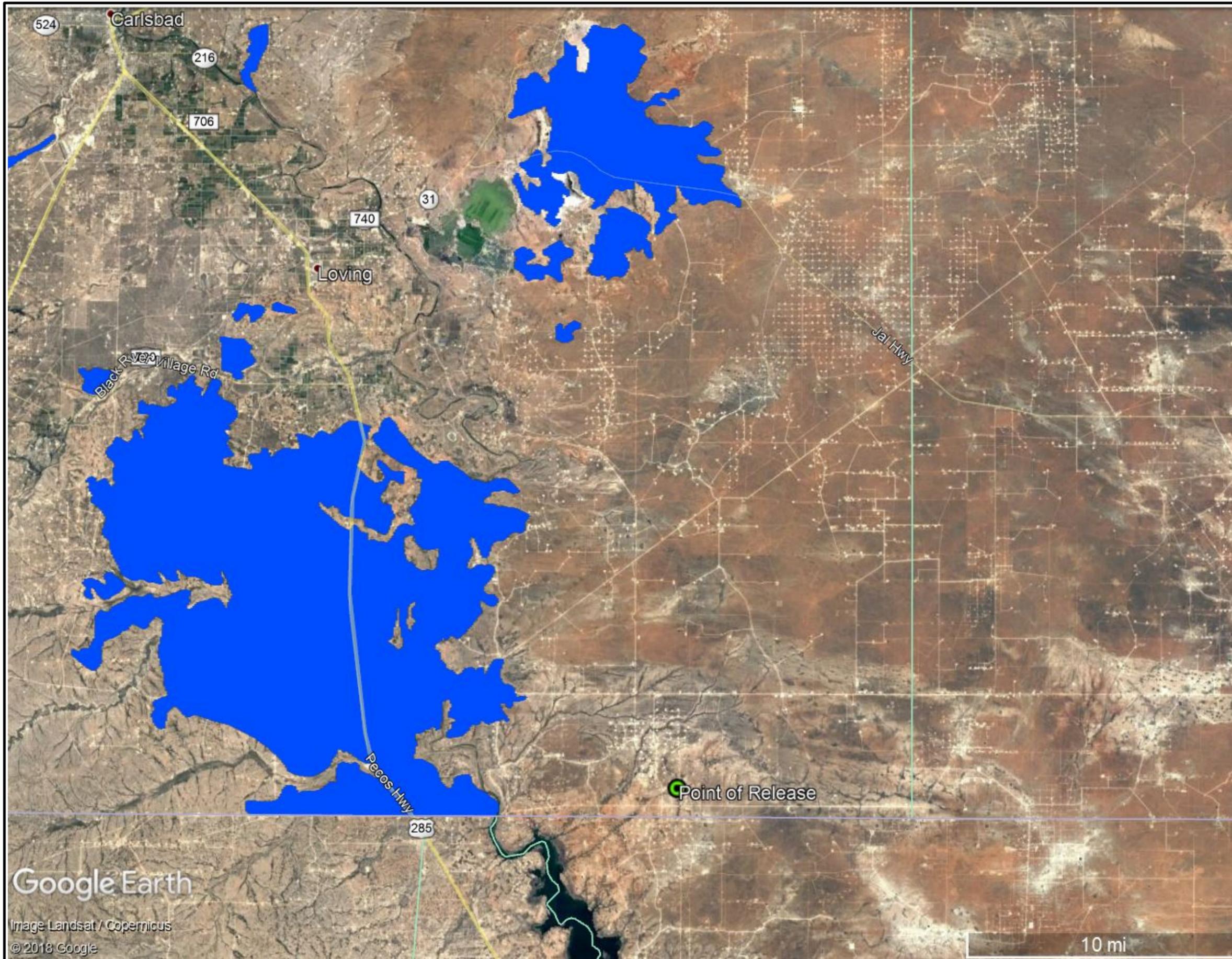
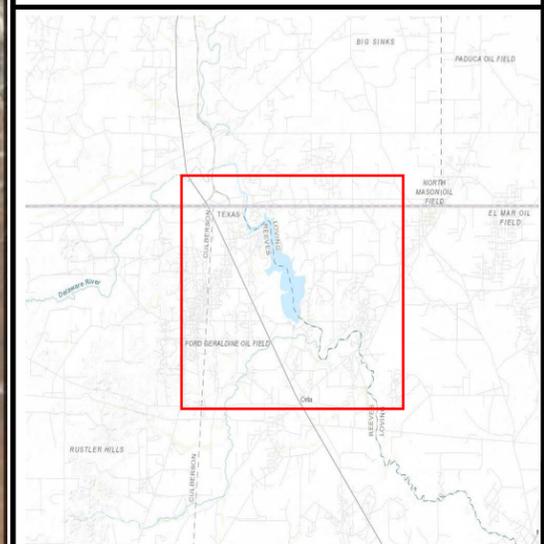


Figure 4:
Karst Location Map
 Ross Draw Unit #055
 32.015789560 -103.866670069
 Section 27, Township 26 South, Range 30 East

Mapped Features

-  Karst Formations
-  Ross Draw Unit #055 Well Site

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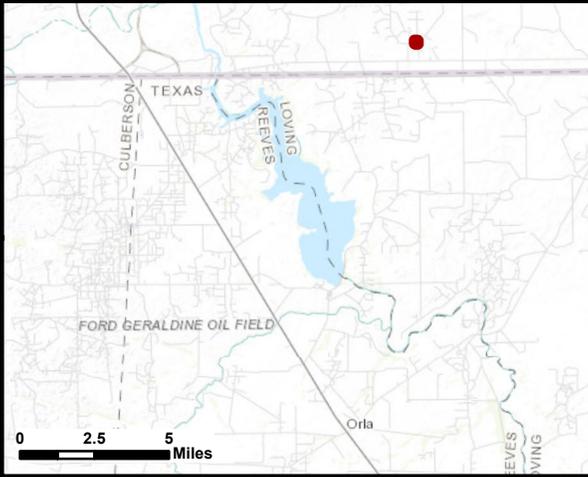
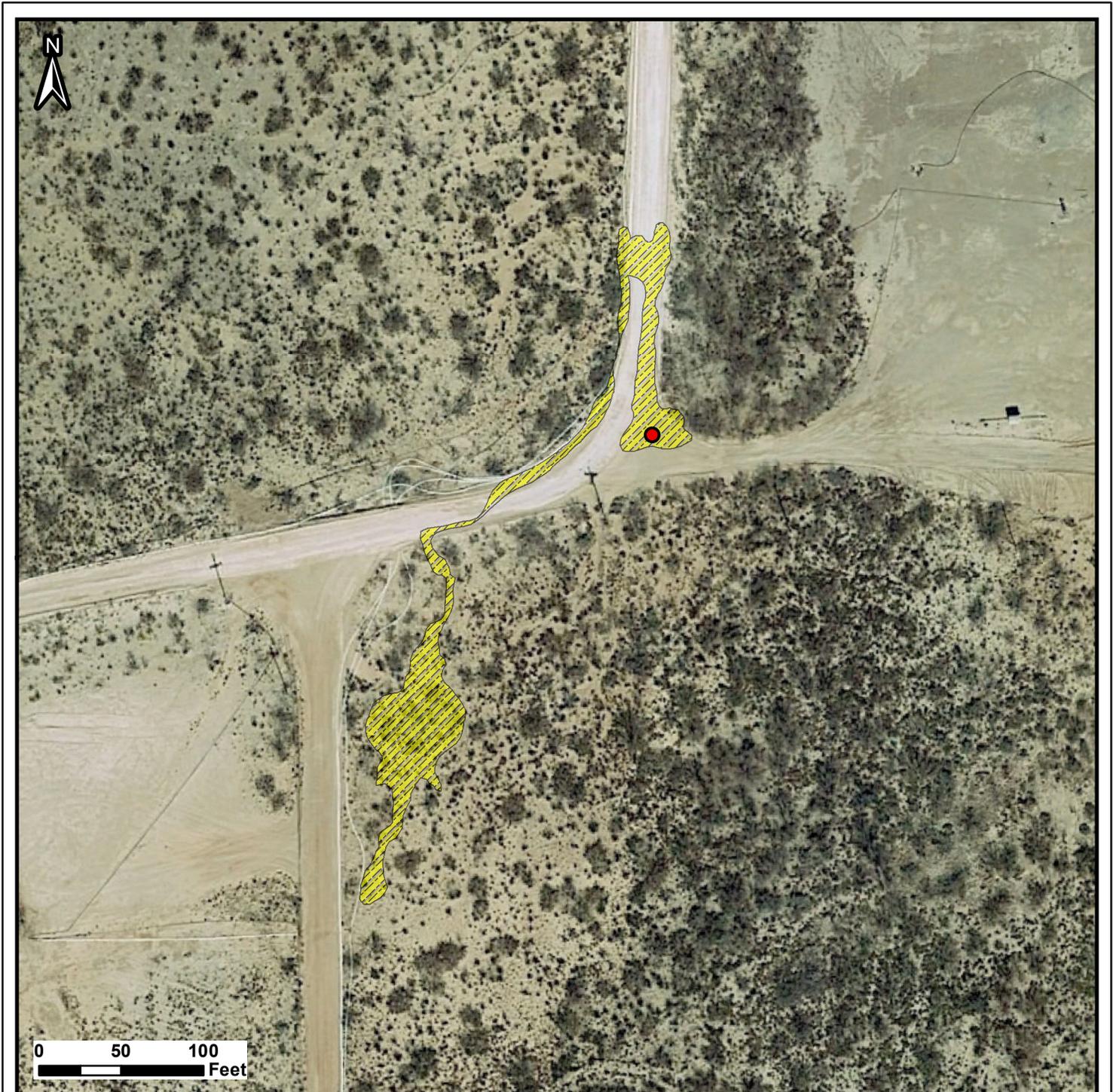


Google Earth
 Image Landsat / Copernicus
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10 mi



Author: K.Smith
 Rev: 0
 Date: 9/20/2019



Spill Location Map

Ross Draw Unit #55

32.015789560 -103.866670069
Section 27, Township 26 South, Range 30 East

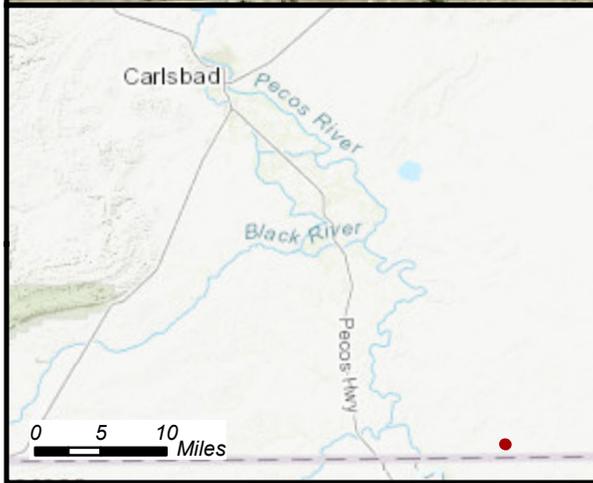
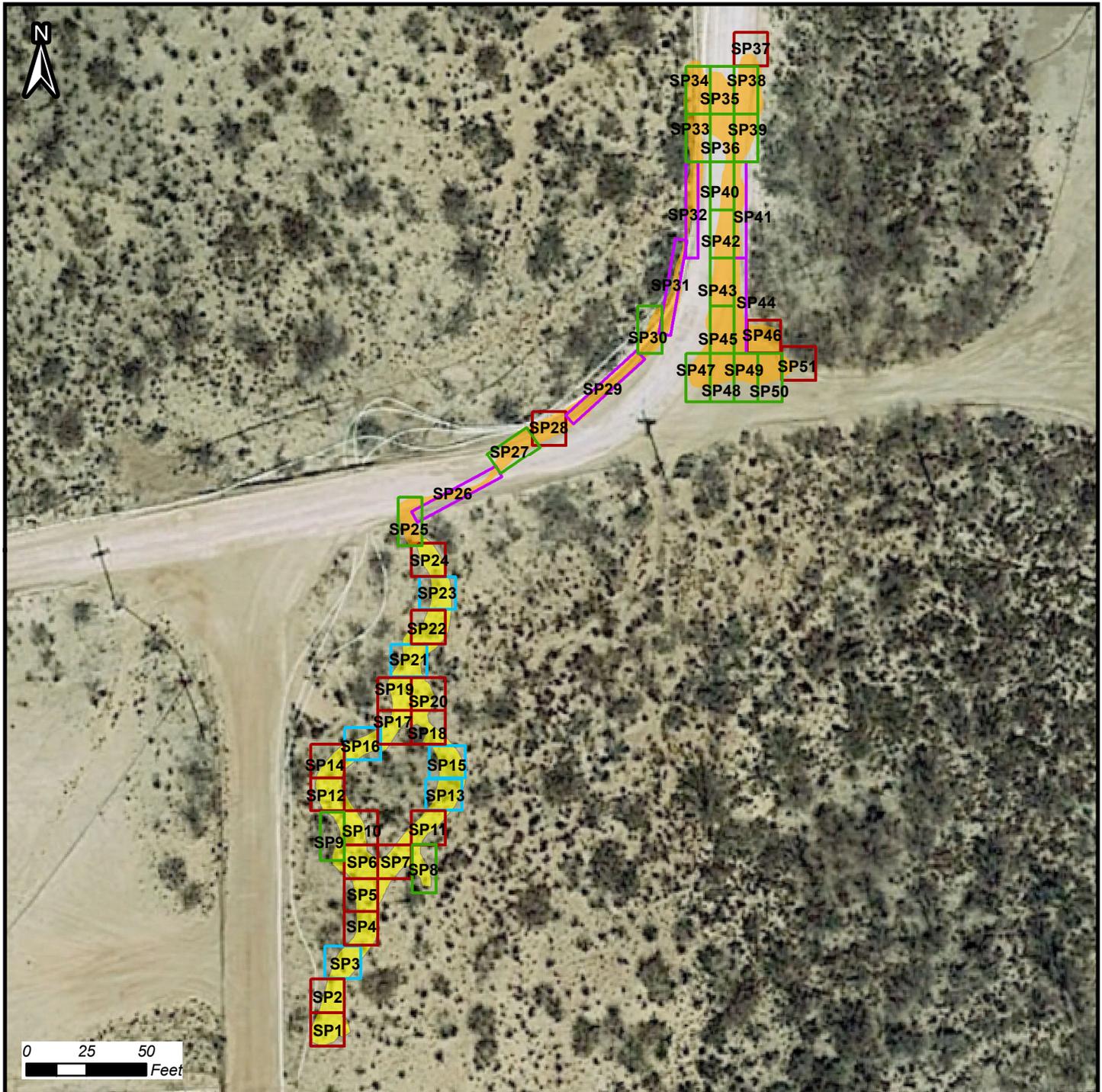
Mapped Features

-  Point of Release
-  Impacted Area

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Author: A. Asay
Revision: 0
Date: 6/26/2019



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Confirmation Sample Map

Ross Draw Unit #55
Excavation Footprint

32.015789560 -103.866670069
Section 27, Township 26 South, Range 30 East

Mapped Features

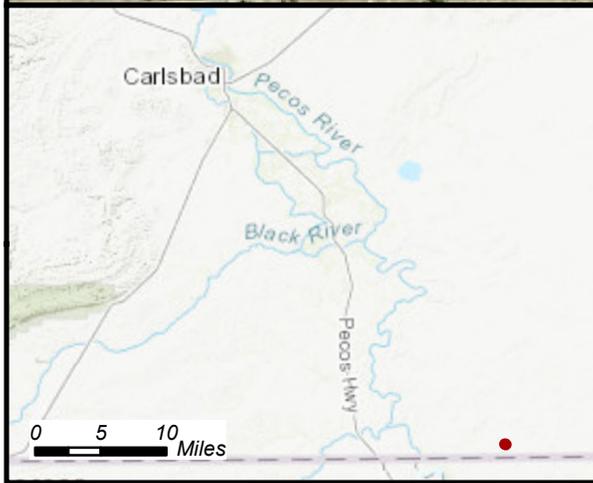
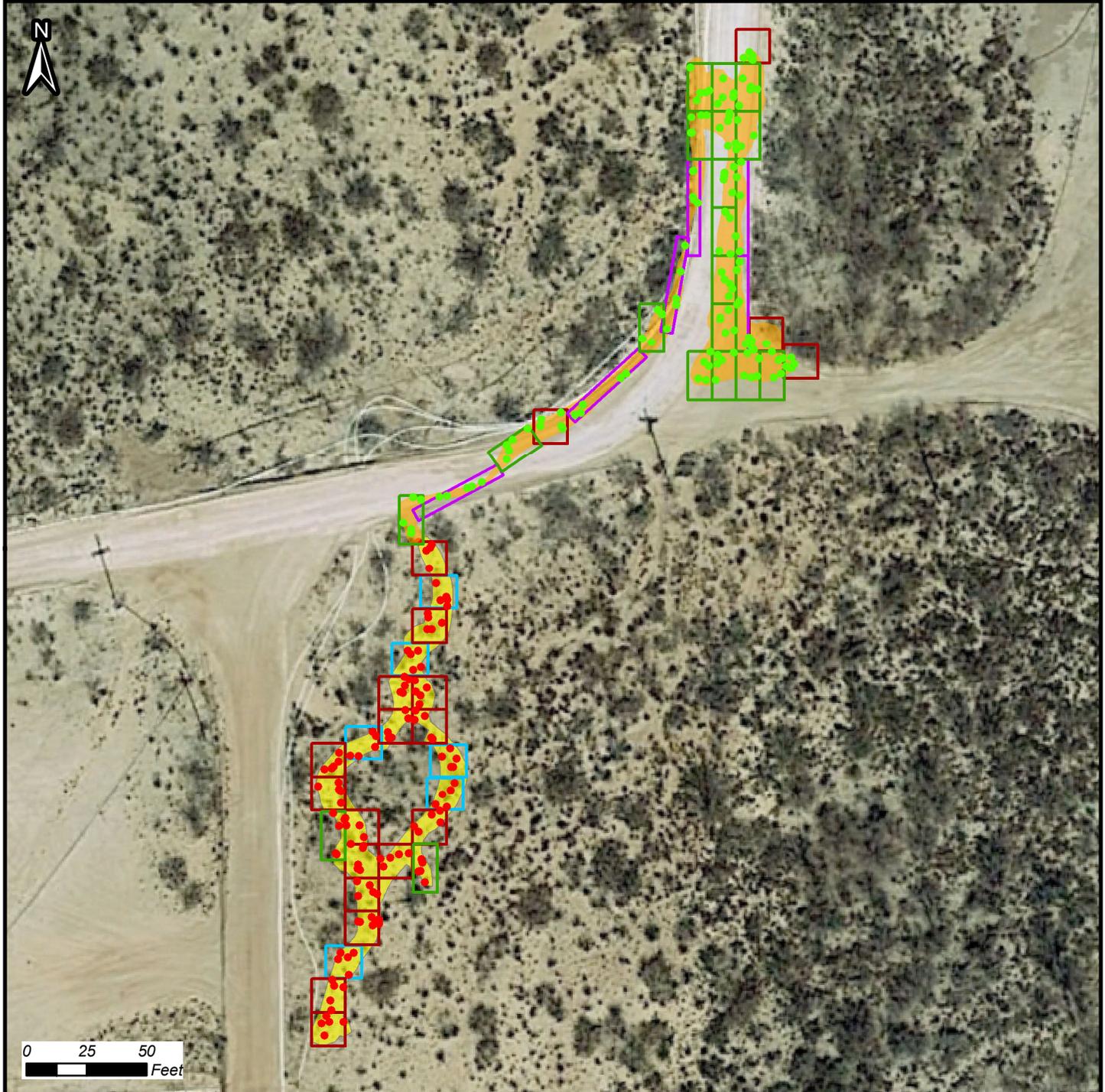
14' X 14' Grid	5' X 40' Grid	Pasture Excavation Area
10' X 20' Grid	15' X 13.33' Grid	Access Road Excavation Area

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Author: A. Asay
Revision: 0
Date: 7/25/2019

T:\CLIENTS\WPX\2019\PERMIAN\Ross Draw Unit #55\MAPS\Ross Draw Unit #55 Stratified Random Sample Map (Labeled) 072519.mxd





Confirmation Sample Map

Ross Draw Unit #55
Excavation Footprint

32.015789560 -103.866670069
Section 27, Township 26 South, Range 30 East

Mapped Features		
● Pasture Composite Sample Location	■ 14' X 14' Grid	■ 15' X 13.33' Grid
● Access Road Composite Sample Location	■ 10' X 20' Grid	■ Pasture Excavation Area
	■ 5' X 40' Grid	■ Access Road Excavation Area

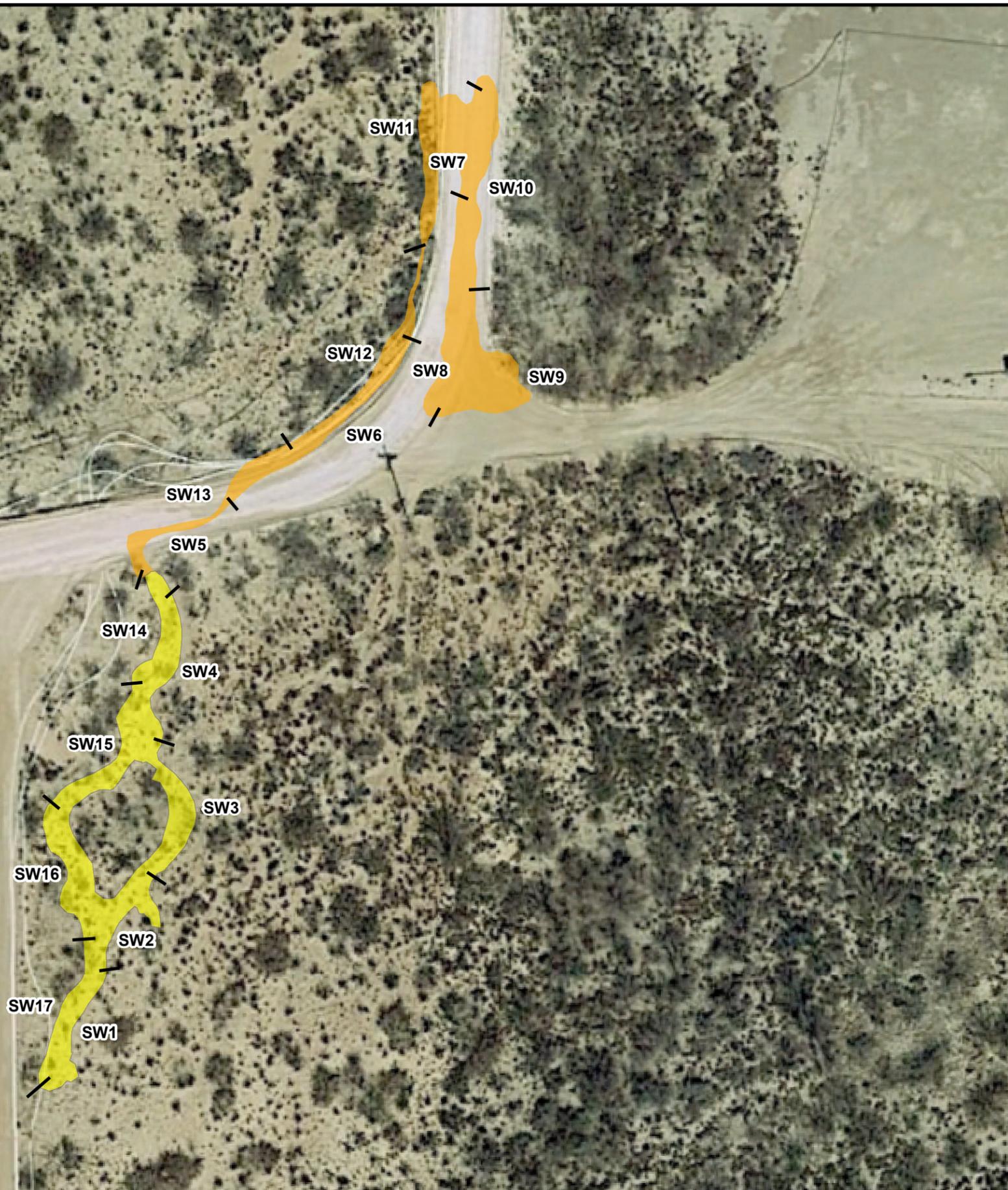
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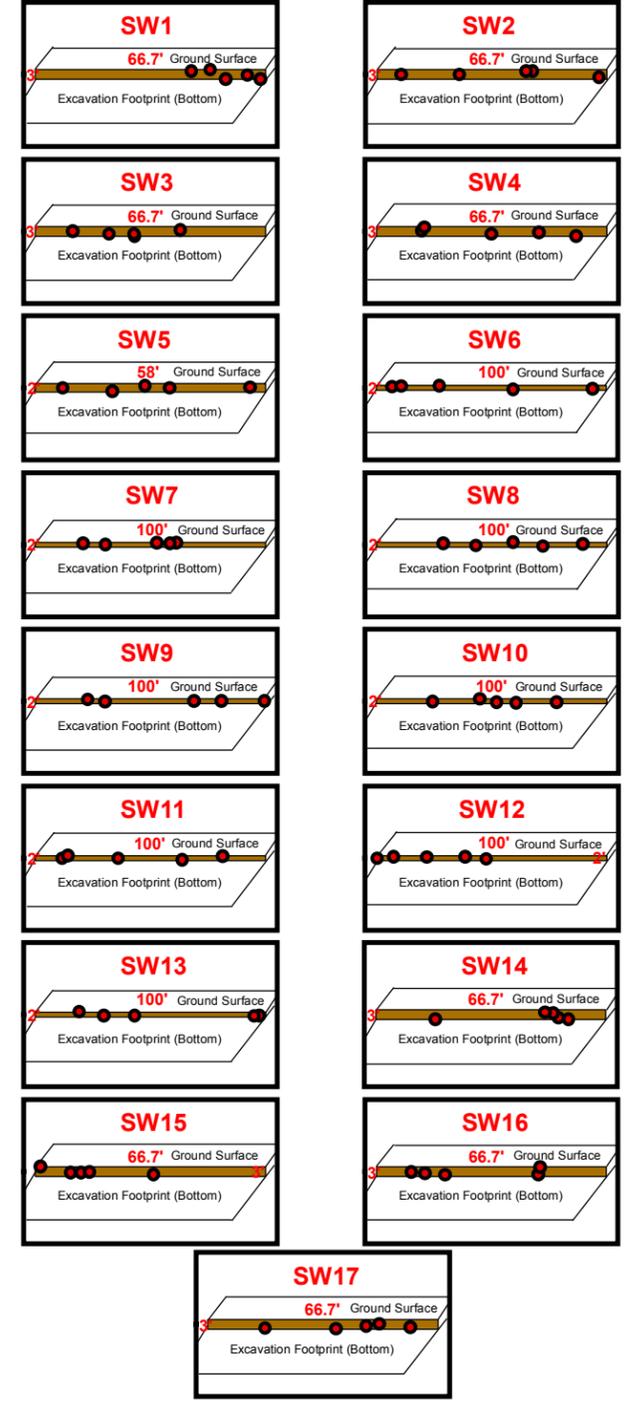
Author: A. Asay

Revision: 0

Date: 7/24/2019



Composite Sample Diagrams



Confirmation Sample Map

WPXENERGY Ross Draw Unit #55 Sidewalls
 32.015789560 -103.866670069
 Section 27, Township 26 South, Range 30 East

- Mapped Features**
- Pasture Excav. Area
 - Sidewall Sample Location
 - Access Road Excav. Area

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Author: A. Asay
 Revision: 0
 Date: 7/25/2019



Table A: Laboratory Results Summary

Ross Draw Unit #055 - WPX Energy			Analytical Results - Envirotech Inc.						
Excavation Footprint/Sidewalls			Reported in mg/kg						
NM OCD Table 1 Thresholds (GW <50')			600	10	50	100			
Sample ID	Depth (ft)	Sampling Date	Chloride	Benzene	BTEX	GRO	DRO	ORO	Total TPH
SP1	3	7/24/2019	98.8	< 0.0250	<0.15	<20.0	53.8	< 50.0	<123.8
SP2	3	7/24/2019	333	< 0.0250	<0.15	<20.0	182	94.3	<296.3
	3.5	8/22/2019					<25.0	< 50.0	<75
SP3	3	7/24/2019	183	< 0.0250	<0.15	<20.0	264	119.0	<403
	3.5	8/22/2019					<25.0	< 50.0	<75
SP4	3	7/24/2019	186	< 0.0250	<0.15	<20.0	127	87.5	<234.5
	3.5	8/22/2019					<25.0	< 50.0	<75
SP5	3	7/24/2019	<20.0	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP6	3	7/24/2019	1010	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
	3.5	8/22/2019	2630						
	4.0	9/10/2019	215						
SP7	3	7/24/2019	761	< 0.0250	<0.15	<20.0	36.2	< 50.0	<106.2
	3.5	8/22/2019	290						
SP8	3	7/24/2019	498	< 0.0250	<0.15	<20.0	89.0	< 50.0	<159
SP9	3	7/24/2019	273	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP10	3	7/24/2019	68.1	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP11	3	7/24/2019	114	< 0.0250	<0.15	<20.0	68.0	< 50.0	<138
SP12	3	7/24/2019	43	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP13	3	7/24/2019	54.9	< 0.0250	<0.15	<20.0	139	62.7	<221.7
	3.5	8/22/2019					<25.0	< 50.0	<75
SP14	3	7/24/2019	98.2	< 0.0250	<0.15	<20.0	76.2	< 50.0	<146.2
SP15	3	7/24/2019	62.2	< 0.0250	<0.15	<20.0	81.9	< 50.0	<151.9
SP16	3	7/24/2019	1070	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
	3.5	8/22/2019	168						
SP17	3	7/24/2019	59.6	< 0.0250	<0.15	<20.0	110	< 50.0	<180
	3.5	8/22/2019					<25.0	< 50.0	<75
SP18	3	7/24/2019	43.8	< 0.0250	<0.15	<20.0	130	50.6	<200.6
	3.5	8/22/2019					30.4	<50	<80.4
SP19	3	7/24/2019	307	< 0.0250	<0.15	<20.0	46.1	< 50.0	<116.1
SP20	3	7/24/2019	56.7	< 0.0250	<0.15	<20.0	81.5	< 50.0	<151.5
SP21	3	7/24/2019	126	< 0.0250	<0.15	<20.0	61.6	< 50.0	<131.6
SP22	3	7/24/2019	25.8	< 0.0250	<0.15	<20.0	51.0	< 50.0	<121
SP23	3	7/24/2019	303	< 0.0250	<0.15	<20.0	39.6	< 50.0	<109.6

Ross Draw Unit #055 - WPX Energy			Analytical Results - Envirotech Inc.						
Excavation Footprint/Sidewalls									Reported in mg/kg
NM OCD Table 1 Thresholds (GW <50')			600	10	50	100			
Sample ID	Depth (ft)	Sampling Date	Chloride	Benzene	BTEX	GRO	DRO	ORO	Total TPH
SP24	3	7/24/2019	674	< 0.0250	<0.15	<20.0	86.3	< 50.0	<156.3
	3.5	8/22/2019	319						
SP25	3	7/24/2019	175	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP26	2	7/24/2019	489	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP27	2	7/24/2019	262	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP28	2	7/24/2019	893	< 0.0250	<0.15	<20.0	30.3	< 50.0	<100.3
	3	8/22/2019	412						
SP29	2	7/24/2019	255	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP30	2	7/24/2019	224	< 0.0250	<0.15	<20.0	206	104	<330
	3	8/22/2019					<25.0	< 50.0	<75
SP31	2	7/24/2019	46.5	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP32	2	7/24/2019	<20.0	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP33	2	7/24/2019	688	< 0.0250	<0.15	<20.0	29.2	< 50.0	<99.2
	3	8/22/2019	165						
SP34	2	7/24/2019	38.0	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP35	2	7/24/2019	953	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
	3	8/22/2019	7420						
	3.5	9/10/2019	226						
SP36	2	7/24/2019	658	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
	3	8/22/2019	475						
SP37	2	7/24/2019	29.8	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP38	2	7/24/2019	503	< 0.0250	<0.15	<20.0	122	78.5	<220.5
	3	8/22/2019					<25.0	< 50.0	<75
SP39	2	7/24/2019	223	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP40		7/24/2019	468	< 0.0250	<0.15	<20.0	69.5	< 50.0	<139.5
SP41	2	7/24/2019	35.3	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP42	2	7/24/2019	529	< 0.0250	<0.15	<20.0	55.4	< 50.0	<125.4
SP43	2	7/24/2019	39.1	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP44	2	7/24/2019	269	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP45	2	7/24/2019	23.8	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP46	2	7/24/2019	853	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
	3	8/22/2019	336						

Ross Draw Unit #055 - WPX Energy			Analytical Results - Envirotech Inc.						
Excavation Footprint/Sidewalls			Reported in mg/kg						
NM OCD Table 1 Thresholds (GW <50')			600	10	50	100			
Sample ID	Depth (ft)	Sampling Date	Chloride	Benzene	BTEX	GRO	DRO	ORO	Total TPH
SP47	2	7/24/2019	115	< 0.0250	<0.15	<20.0	68.7	< 50.0	<138.7
SP48	2	7/24/2019	84.2	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP49	2	7/24/2019	95.5	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SP50	2	7/24/2019	172	< 0.0250	<0.15	<20.0	176	89.2	<285.2
	3	8/22/2019					<25.0	< 50.0	<75
SP51	2	7/24/2019	95.6	< 0.0250	<0.15	<20.0	68.7	< 50.0	<138.7
SP52	2	7/24/2019	94.1	< 0.0250	<0.15	<20.0	35.0	< 50.0	<105
SW1	Composite	7/24/2019	108	< 0.0250	<0.15	<20.0	46.0	< 50.0	<116
SW2	Composite	7/24/2019	1180	< 0.0250	<0.15	<20.0	70.7	< 50.0	<140.7
	Composite	8/22/2019	198						
SW3	Composite	7/24/2019	470	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SW4	Composite	7/24/2019	1130	< 0.0250	<0.15	<20.0	68.2	< 50.0	<138.2
	Composite	8/22/2019	543						
SW5	Composite	7/24/2019	108	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SW6	Composite	7/24/2019	1340	< 0.0250	<0.15	<20.0	61.3	< 50.0	<131.3
	Composite	8/22/2019	258						
SW7	Composite	7/24/2019	168	< 0.0250	<0.15	<20.0	172	85.3	<277.3
	Composite	8/22/2019					<25.0	< 50.0	<75
SW8	Composite	7/24/2019	473	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SW9	Composite	7/24/2019	339	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SW10	Composite	7/24/2019	306	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SW11	Composite	7/24/2019	568	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SW12	Composite	7/24/2019	306	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SW13	Composite	7/24/2019	511	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SW14	Composite	7/24/2019	23.6	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SW15	Composite	7/24/2019	<20.0	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0
SW16	Composite	7/24/2019	240	< 0.0250	<0.15	<20.0	36.3	< 50.0	<106.3
SW17	Composite	7/24/2019	120	< 0.0250	<0.15	<20.0	<25.0	< 50.0	< 95.0



Appendix A: C-141 Release Notification

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

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

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

Incident ID	NAB1919048994
District RP	2RP-5520
Facility ID	
Application ID	pAB1919042558

Release Notification

Responsible Party

Responsible Party: WPX Energy Permian, LLC	OGRID: 246289
Contact Name: Deborah Watson	Contact Telephone: 575-885-7561
Contact email: deborah.watson@wpxenergy.com	Incident # (assigned by OCD) NAB1919048994
Contact mailing address: 5315 Buena Vista Drive, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.01578 Longitude -103.86667
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Ross Draw Unit #055	Site Type: Pipeline ROW
Date of Discovery: June 21, 2019 @ 4:30 AM	API# (if applicable) 30-015-41976

Unit Letter	Section	Township	Range	County
G	27	26S	30E	Eddy

Surface Owner: State Federal Tribal Private

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) 6	Volume Recovered (bbls) 2
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 24	Volume Recovered (bbls) 8
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" 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

Equipment failure along flowline between wellhead and tank battery.

Incident ID	NAB1919048994
District RP	2RP-5520
Facility ID	
Application ID	pAB1919042558

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? Volume of release.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Reported to Mike Bratcher (NMOCD), Jim Amos (BLM-CFO), Jim Griswold (NMOCD) on Friday, June 21 at approximately 2:15 PM via phone call. Follow-up email was sent to the group.	

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: Deborah Watson Title: Environmental Specialist <div style="display: flex; justify-content: space-between;"> <div> Signature:  email: deborah.watson@wpenergy.com </div> <div> Date: 06/27/2019 Telephone: 575-885-7561 </div> </div>
<p><u>OCD Only</u></p> Received by: <u>Amalia Bustamante</u> Date: <u>7/9/2019</u>



Appendix B: Confirmation Sampling Notification

From: [Watson, Debbie](#)
To: [Amos, James](#); [Bratcher, Mike, EMNRD](#); [Venegas, Victoria, EMNRD](#); [Hamlet, Robert, EMNRD](#)
Cc: [Watson, Debbie](#); [Kevin Smith](#)
Subject: Confirmation Sampling Notification RDU #055 (2RP-5520)
Date: Monday, July 22, 2019 5:56:38 AM

Good Morning,

This email serves as confirmation sampling notification for spill 2RP-5520 (Ross Draw Unit #055) which occurred on June 21, 2019. HRL will be on location on Wednesday, July 24 around 10:00 am to begin collection of confirmation samples from within the impacted area.

Please contact me with any questions.

Thank you,

Debbie

Deborah Watson
Environmental Specialist
5315 Buena Vista Drive | Carlsbad, NM 88220
office 575.885.7561 | cell 505.386.9693
deborah.watson@wpenergy.com

-



If you have received this message in error, please reply to advise the sender of the error and then immediately delete this message. Thank you.

From: Kevin Smith
To: ["mike.bratcher@state.nm.us"](mailto:mike.bratcher@state.nm.us); ["Victoria.Venegas@state.nm.us"](mailto:Victoria.Venegas@state.nm.us); ["Robert.Hamlet@state.nm.us"](mailto:Robert.Hamlet@state.nm.us); [Amos, James; Billings, Bradford, EMNRD](#)
Cc: ["deborah.watson@wpenergy.com"](mailto:deborah.watson@wpenergy.com); [Lori O'Brien](#)
Subject: Confirmation Sampling Notification RDU #055 (2RP-5520) - Resamples
Date: Tuesday, August 20, 2019 8:09:00 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)

Good Morning,

This email serves as confirmation sampling notification for the Ross Draw Unit #55 spill (2RP-5520) which occurred on June 21, 2019. HRL will be on location to collect resamples of areas that exceeded closure standards from the first sampling event. Sampling is scheduled to take place on Thursday, August 22 around 8:00 AM.

Please let me know if you any questions.

Thanks,

Kevin Smith | Environmental Scientist

HRL Compliance Solutions, Inc.

P.O. Box 1708 | Artesia, NM 88211-1708

main 575.616.7398 | mobile 936.689.0078

[Web](#) | [vCard](#) | [Map](#) | [f](#) | [in](#)



Confidentiality Note: This email and any attachments are confidential and only for the use as authorized by HRL Compliance Solutions, Inc. If you receive this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this information. Permanently delete the e-mail and any attachments or copies.

From: [Watson, Debbie](#)
To: [Bratcher, Mike, EMNRD](#); [Hamlet, Robert, EMNRD](#); [Venegas, Victoria, EMNRD](#); [Amos, James](#)
Cc: [Kevin Smith](#); [Lori O'Brien](#)
Subject: Confirmation Sampling Notification RDU #055 (2RP-5520) - Resamples SP6 and SP35
Date: Friday, September 06, 2019 12:40:01 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)

Good Afternoon,

This email serves as confirmation sampling notification for the Ross Draw Unit #55 (2RP-5520). Two samples (SP6 and SP35) from the August 20 sampling event did not clear the 600ppm chloride closure standard. HRL will be on location on Tuesday, September 10 around 1 PM to resample SP6 and SP35.

Please contact me with any questions. Thank you.

Have a great weekend,

Debbie

Deborah Watson
HSE Specialist
5315 Buena Vista Drive | Carlsbad, NM 88220
office 575.885.7561 | cell 505.386.9693
deborah.watson@wpxenergy.com



If you have received this message in error, please reply to advise the sender of the error and then immediately delete this message. Thank you.

From: Kevin Smith <ksmith@hrlcomp.com>
Sent: Tuesday, August 20, 2019 8:10 AM
To: mike.bratcher@state.nm.us; Victoria.Venegas@state.nm.us; Robert.Hamlet@state.nm.us;
[Amos, James <jamos@blm.gov>](mailto:jamos@blm.gov); [Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>](mailto:Bradford.Billings@state.nm.us)
Cc: [Watson, Debbie <deborah.watson@wpxenergy.com>](mailto:deborah.watson@wpxenergy.com); [Lori O'Brien <lobrien@hrlcomp.com>](mailto:lobrien@hrlcomp.com)
Subject: [EXTERNAL] Confirmation Sampling Notification RDU #055 (2RP-5520) - Resamples

CAUTION: This email was sent from an EXTERNAL source. Use caution when clicking links or opening attachments.

Good Morning,

This email serves as confirmation sampling notification for the Ross Draw Unit #55 spill (2RP-5520) which occurred on June 21, 2019. HRL will be on location to collect resamples of areas that



Appendix C: Laboratory Analytical Results

Analytical Report

Report Summary

Client: WPX (Carlsbad)

Samples Received: 7/26/2019

Job Number: 04108-0639

Work Order: P907097

Project Name/Location: Ross Draw Unit #55 (2019
Spill)

Report Reviewed By:



Date: 8/5/19

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.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
Envirotech, Inc, currently holds the appropriate and available Utah TNi certification NM009792018-1 for the data reported.

WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP1	P907097-01A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP2	P907097-02A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP3	P907097-03A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP4	P907097-04A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP5	P907097-05A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP6	P907097-06A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP7	P907097-07A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP8	P907097-08A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP9	P907097-09A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP10	P907097-10A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP11	P907097-11A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP12	P907097-12A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP13	P907097-13A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP14	P907097-14A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP15	P907097-15A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP16	P907097-16A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP17	P907097-17A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP18	P907097-18A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP19	P907097-19A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP20	P907097-20A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP1
P907097-01 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		107 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	53.8	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		82.0 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.9 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	98.8	20.0	mg/kg	1	1931009	07/29/19	07/29/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP2
P907097-02 (Solid)

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	182	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	94.3	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		78.1 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.1 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	333	20.0	mg/kg	1	1931009	07/29/19	07/29/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP3
P907097-03 (Solid)

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	264	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	119	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		75.7 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.5 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	183	20.0	mg/kg	1	1931009	07/29/19	07/29/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP4
P907097-04 (Solid)

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		106 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	127	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	87.5	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		75.0 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.6 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	186	20.0	mg/kg	1	1931009	07/29/19	07/29/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP5
P907097-05 (Solid)

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		79.6 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.2 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	1931009	07/29/19	07/29/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP6
P907097-06 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		78.3 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		91.6 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	1010	20.0	mg/kg	1	1931009	07/29/19	07/29/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP7
P907097-07 (Solid)

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	36.2	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		80.9 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.7 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	761	20.0	mg/kg	1	1931009	07/29/19	07/29/19	EPA 300.0/9056A	

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SP8
P907097-08 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	89.0	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		82.6 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.2 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	498	20.0	mg/kg	1	1931009	07/29/19	07/29/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP9
P907097-09 (Solid)

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		79.4 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.6 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	273	20.0	mg/kg	1	1931009	07/29/19	07/30/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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**SP10
P907097-10 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		83.4 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.3 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	68.1	20.0	mg/kg	1	1931009	07/29/19	07/30/19	EPA 300.0/9056A	
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SP11
P907097-11 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	68.0	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		83.6 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.1 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	114	20.0	mg/kg	1	1931009	07/29/19	07/30/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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**SP12
P907097-12 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		79.9 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.2 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	43.0	20.0	mg/kg	1	1931009	07/29/19	07/30/19	EPA 300.0/9056A	
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SP13
P907097-13 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/05/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/05/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/05/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/05/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/05/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/05/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1930047	07/27/19	08/05/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	139	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	62.7	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		81.9 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/05/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.9 %		50-150	1930047	07/27/19	08/05/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	54.9	20.0	mg/kg	1	1931009	07/29/19	07/30/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP14
P907097-14 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	76.2	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		86.8 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.7 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	98.2	20.0	mg/kg	1	1931009	07/29/19	07/30/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP15
P907097-15 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	81.9	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		84.7 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.0 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	62.2	20.0	mg/kg	1	1931009	07/29/19	07/30/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP16
P907097-16 (Solid)

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		84.1 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.9 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	1070	20.0	mg/kg	1	1931009	07/29/19	07/30/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP17
P907097-17 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	110	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		83.9 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.0 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	59.6	20.0	mg/kg	1	1931009	07/29/19	07/30/19	EPA 300.0/9056A	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP18
P907097-18 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	130	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	50.6	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		84.4 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.4 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	43.8	20.0	mg/kg	1	1931009	07/29/19	07/30/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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**SP19
P907097-19 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	46.1	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		87.9 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.3 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	307	20.0	mg/kg	1	1931009	07/29/19	07/30/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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SP20
P907097-20 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		108 %		50-150	1930047	07/27/19	08/03/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	81.5	25.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931005	07/29/19	07/30/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		85.1 %		50-200	1931005	07/29/19	07/30/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930047	07/27/19	08/03/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.2 %		50-150	1930047	07/27/19	08/03/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	56.7	20.0	mg/kg	1	1931009	07/29/19	07/30/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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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 1930047 - Purge and Trap EPA 5030A

Blank (1930047-BLK1)

Prepared: 07/27/19 1 Analyzed: 08/02/19 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	"							
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	8.55		"	8.00		107	50-150			

LCS (1930047-BS1)

Prepared: 07/27/19 1 Analyzed: 08/02/19 2

Benzene	3.90	0.0250	mg/kg	5.00		78.0	70-130			
Toluene	4.74	0.0250	"	5.00		94.7	70-130			
Ethylbenzene	4.95	0.0250	"	5.00		99.1	70-130			
p,m-Xylene	10.2	0.0500	"	10.0		102	70-130			
o-Xylene	4.96	0.0250	"	5.00		99.2	70-130			
Total Xylenes	15.1	0.0250	"	15.0		101	70-130			
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	8.55		"	8.00		107	50-150			

Matrix Spike (1930047-MS1)

Source: P907097-01

Prepared: 07/27/19 1 Analyzed: 08/03/19 0

Benzene	3.77	0.0250	mg/kg	5.00	ND	75.3	54.3-133			
Toluene	4.59	0.0250	"	5.00	ND	91.8	61.4-130			
Ethylbenzene	4.82	0.0250	"	5.00	ND	96.4	61.4-133			
p,m-Xylene	9.89	0.0500	"	10.0	ND	98.9	63.3-131			
o-Xylene	4.85	0.0250	"	5.00	ND	96.9	63.3-131			
Total Xylenes	14.7	0.0250	"	15.0	ND	98.2	63.3-131			
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	8.58		"	8.00		107	50-150			

Matrix Spike Dup (1930047-MSD1)

Source: P907097-01

Prepared: 07/27/19 1 Analyzed: 08/03/19 0

Benzene	3.81	0.0250	mg/kg	5.00	ND	76.1	54.3-133	1.08	20	
Toluene	4.67	0.0250	"	5.00	ND	93.4	61.4-130	1.65	20	
Ethylbenzene	4.93	0.0250	"	5.00	ND	98.6	61.4-133	2.24	20	
p,m-Xylene	10.1	0.0500	"	10.0	ND	101	63.3-131	2.28	20	
o-Xylene	4.95	0.0250	"	5.00	ND	99.1	63.3-131	2.18	20	
Total Xylenes	15.1	0.0250	"	15.0	ND	100	63.3-131	2.25	20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	8.56		"	8.00		107	50-150			

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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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 1931005 - DRO Extraction EPA 3570

Blank (1931005-BLK1)

Prepared: 07/29/19 0 Analyzed: 07/29/19 2

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	40.4		"	50.0		80.9	50-200			

LCS (1931005-BS1)

Prepared: 07/29/19 0 Analyzed: 07/30/19 0

Diesel Range Organics (C10-C28)	502	25.0	mg/kg	500		100	38-132			
Surrogate: n-Nonane	39.2		"	50.0		78.3	50-200			

Matrix Spike (1931005-MS1)

Source: P907097-01

Prepared: 07/29/19 0 Analyzed: 07/30/19 0

Diesel Range Organics (C10-C28)	518	25.0	mg/kg	500	53.8	92.9	38-132			
Surrogate: n-Nonane	38.9		"	50.0		77.8	50-200			

Matrix Spike Dup (1931005-MSD1)

Source: P907097-01

Prepared: 07/29/19 0 Analyzed: 07/30/19 0

Diesel Range Organics (C10-C28)	524	25.0	mg/kg	500	53.8	93.9	38-132	1.03	20	
Surrogate: n-Nonane	39.3		"	50.0		78.6	50-200			

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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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 1930047 - Purge and Trap EPA 5030A

Blank (1930047-BLK1)

Prepared: 07/27/19 1 Analyzed: 08/02/19 2

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.50		"	8.00		93.7	50-150			

LCS (1930047-BS2)

Prepared: 07/27/19 1 Analyzed: 08/03/19 0

Gasoline Range Organics (C6-C10)	47.4	20.0	mg/kg	50.0		94.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.59		"	8.00		94.9	50-150			

Matrix Spike (1930047-MS2)

Source: P907097-01

Prepared: 07/27/19 1 Analyzed: 08/03/19 0

Gasoline Range Organics (C6-C10)	45.6	20.0	mg/kg	50.0	ND	91.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.59		"	8.00		94.9	50-150			

Matrix Spike Dup (1930047-MSD2)

Source: P907097-01

Prepared: 07/27/19 1 Analyzed: 08/03/19 0

Gasoline Range Organics (C6-C10)	46.0	20.0	mg/kg	50.0	ND	92.0	70-130	0.862	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.63		"	8.00		95.4	50-150			

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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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 1931009 - Anion Extraction EPA 300.0/9056A

Blank (1931009-BLK1)

Prepared & Analyzed: 07/29/19 1

Chloride	ND	20.0	mg/kg							
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LCS (1931009-BS1)

Prepared & Analyzed: 07/29/19 1

Chloride	253	20.0	mg/kg	250		101	90-110			
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Matrix Spike (1931009-MS1)

Source: P907097-01

Prepared: 07/29/19 1 Analyzed: 07/29/19 2

Chloride	381	20.0	mg/kg	250	98.8	113	80-120			
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Matrix Spike Dup (1931009-MSD1)

Source: P907097-01

Prepared: 07/29/19 1 Analyzed: 07/29/19 2

Chloride	348	20.0	mg/kg	250	98.8	99.8	80-120	8.96	20	
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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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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/05/19 15:41
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Notes and Definitions

- CON09 Container not intact (cracked, broken etc)
- 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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Client: <u>WPX (Carl Sand)</u> Project: <u>Ross Draw Unit #55 (2019 Spill)</u> Project Manager: <u>Kris Rowe</u> Address: <u>on file</u> City, State, Zip: _____ Phone: _____ Email: _____	Report Attention Report due by: _____ Attention: _____ Address: _____ City, State, Zip: _____ Phone: _____ Email: _____	Lab Use Only Lab WO# <u>P0107097</u> Job Number <u>04108-0039</u>	TAT 1D _____ 3D _____	EPA Program RCRA _____ CWA _____ SDWA _____
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Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	Analysis and Method							State				Remarks			
						DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	1D	3D	RCRA	CWA	SDWA		NM	CO	UT
11:00 am	7/27/19	Soil	1	SP1	1	X	X	X			X									
				SP2	2															
				SP3	3															
				SP4	4															
				SP5	5															
				SP6	6															
				SP7	7															
				SP8	8															
				SP9	9															
				SP10	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: Kevin Smith

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>Kevin Smith</u>	Date <u>7-25-19</u>	Time <u>9:00 am</u>	Received by: (Signature) <u>Austrey Stovall</u>	Date <u>7/25/19</u>	Time <u>9:00</u>	Lab Use Only Received on ice: <u>Ⓢ</u> / N
Relinquished by: (Signature) <u>FedEx</u>	Date <u>7/26/19</u>	Time <u>9:49 am</u>	Received by: (Signature) <u>Rain Lopez</u>	Date <u>7/26/19</u>	Time <u>9:45</u>	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.

Client: <u>WPX (Carlsbad)</u> Project: <u>Ross Draw Unit #55 (2014 Spill)</u> Project Manager: <u>Kris Rowe</u> Address: <u>on file</u> City, State, Zip: _____ Phone: _____ Email: _____	Report Attention Report due by: _____ Attention: _____ Address: _____ City, State, Zip: _____ Phone: _____ Email: _____	Lab Use Only Lab WO# <u>P907097</u> Job Number <u>04108-0639</u>	TAT 1D <input type="checkbox"/> 3D <input type="checkbox"/>	EPA Program RCRA <input type="checkbox"/> CWA <input type="checkbox"/> SDWA <input type="checkbox"/>
Analysis and Method DRO/ORO by 8015 <input checked="" type="checkbox"/> GRO/DRO by 8015 <input checked="" type="checkbox"/> BTEX by 8021 <input checked="" type="checkbox"/> VOC by 8260 <input type="checkbox"/> Metals 6010 <input type="checkbox"/> Chloride 300.0 <input checked="" type="checkbox"/>			State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/>	

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	1D	3D	RCRA	CWA	SDWA	Remarks	
11:30 am	7-24-19	Soil	1	SP11	11	X	X	X			X							
				SP12	12													
				SP13	13													
				SP14	14													
				SP15	15													
				SP16	16													
				SP17	17													
				SP18	18													
				SP19	19													
				SP20	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: Kevin Smith

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>Kevin Smith</u>	Date <u>7-25-19</u>	Time <u>9:00 am</u>	Received by: (Signature) <u>Courtney Stovall</u>	Date <u>7/25/19</u>	Time <u>9:00</u>	Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>Fed Ex</u>	Date <u>7/26/19</u>	Time <u>9:45 AM</u>	Received by: (Signature) <u>Raina Lopez</u>	Date <u>7/26/19</u>	Time <u>9:45</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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 24 Hour Emergency Response Phone: (800) 362-1879

Ph (505) 632-4881 Fx (505) 632-1865

envirotech-inc.com
 labadmin@envirotech-inc.com

Analytical Report

Report Summary

Client: WPX (Carlsbad)

Samples Received: 7/26/2019

Job Number: 04108-0639

Work Order: P907098

Project Name/Location: Ross Draw Unit #55 (2019
Spill)

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.

WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP21	P907098-01A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP22	P907098-02A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP23	P907098-03A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP24	P907098-04A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP25	P907098-05A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP26	P907098-06A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP27	P907098-07A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP28	P907098-08A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP29	P907098-09A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP30	P907098-10A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP31	P907098-11A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP32	P907098-12A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP33	P907098-13A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP34	P907098-14A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP35	P907098-15A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP36	P907098-16A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP37	P907098-17A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP38	P907098-18A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP39	P907098-19A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP40	P907098-20A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP21
P907098-01 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		94.5 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		95.6 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	61.6	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		79.1 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		94.5 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		95.6 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	126	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP22
P907098-02 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.7 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		92.8 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		96.7 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	51.0	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		73.2 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.7 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		92.8 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		96.7 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	25.8	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP23
P907098-03 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		93.6 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		94.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	39.6	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		78.7 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		93.6 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		94.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	303	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP24
P907098-04 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		95.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		95.6 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	86.3	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		77.8 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		95.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		95.6 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	674	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP25
P907098-05 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97.7 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		93.1 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		96.2 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		74.7 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97.7 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		93.1 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		96.2 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	175	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP26
P907098-06 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		95.1 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		94.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		97.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		77.9 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		95.1 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		94.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		97.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	489	20.0	mg/kg	1	1931028	07/30/19	07/31/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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**SP27
P907098-07 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.5 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		93.1 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		94.7 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		79.5 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.5 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		93.1 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		94.7 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	262	20.0	mg/kg	1	1931028	07/30/19	07/31/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP28
P907098-08 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		93.1 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		95.8 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	30.3	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		79.8 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		93.1 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		95.8 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	893	20.0	mg/kg	1	1931028	07/30/19	07/31/19	EPA 300.0/9056A	
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WPX (Carlsbad)
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Ross Draw Unit #55 (2019 Spill)
Project Number: 04108-0639
Project Manager: Kris Rowe

Reported:
08/02/19 14:15

SP29
P907098-09 (Solid)

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		93.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		96.5 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		79.2 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		93.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		96.5 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	255	20.0	mg/kg	1	1931028	07/30/19	07/31/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP30
P907098-10 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		94.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		96.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	206	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	104	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		80.4 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		94.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		96.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	224	20.0	mg/kg	1	1931028	07/30/19	07/31/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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**SP31
P907098-11 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B
<i>Surrogate: Toluene-d8</i>		94.6 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B
<i>Surrogate: Bromofluorobenzene</i>		96.6 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D
<i>Surrogate: n-Nonane</i>		73.8 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D
<i>Surrogate: Toluene-d8</i>		94.6 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D
<i>Surrogate: Bromofluorobenzene</i>		96.6 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D

Anions by 300.0/9056A

Chloride	46.5	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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**SP32
P907098-12 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		93.9 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		96.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		78.9 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		93.9 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		96.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP33
P907098-13 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		94.2 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		95.7 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	29.2	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		80.3 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		94.2 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		95.7 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	688	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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**SP34
P907098-14 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		94.9 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		96.7 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		73.9 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		94.9 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		96.7 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	38.0	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP35
P907098-15 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		92.5 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		96.0 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		77.1 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		92.5 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		96.0 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	953	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP36
P907098-16 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		94.0 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		98.0 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		77.0 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		94.0 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		98.0 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	658	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP37
P907098-17 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		92.2 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		96.9 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		80.5 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		92.2 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		96.9 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	29.8	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP38
P907098-18 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		94.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		98.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	122	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	78.5	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		79.6 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		94.3 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		98.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	503	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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SP39
P907098-19 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		94.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		98.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		77.5 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		94.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		98.4 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	223	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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**SP40
P907098-20 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		92.9 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		95.9 %		70-130	1930046	07/26/19	07/30/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	69.5	25.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931008	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		78.2 %		50-200	1931008	07/29/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		92.9 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		95.9 %		70-130	1930046	07/26/19	07/30/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	468	20.0	mg/kg	1	1931028	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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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 1930046 - Purge and Trap EPA 5030A

Blank (1930046-BLK1)

Prepared: 07/26/19 1 Analyzed: 07/30/19 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	0.513		"	0.500		103	70-130			
Surrogate: Toluene-d8	0.464		"	0.500		92.7	70-130			
Surrogate: Bromofluorobenzene	0.471		"	0.500		94.1	70-130			

LCS (1930046-BS1)

Prepared: 07/26/19 1 Analyzed: 07/30/19 0

Benzene	2.74	0.0250	mg/kg	2.50		110	70-130			
Toluene	2.46	0.0250	"	2.50		98.3	70-130			
Ethylbenzene	2.53	0.0250	"	2.50		101	70-130			
p,m-Xylene	4.98	0.0500	"	5.00		99.7	70-130			
o-Xylene	2.48	0.0250	"	2.50		99.2	70-130			
Total Xylenes	7.46	0.0250	"	7.50		99.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.542		"	0.500		108	70-130			
Surrogate: Toluene-d8	0.468		"	0.500		93.5	70-130			
Surrogate: Bromofluorobenzene	0.468		"	0.500		93.5	70-130			

Matrix Spike (1930046-MS1)

Source: P907098-01

Prepared: 07/26/19 1 Analyzed: 07/30/19 0

Benzene	2.72	0.0250	mg/kg	2.50	ND	109	48-131			
Toluene	2.42	0.0250	"	2.50	ND	96.9	48-130			
Ethylbenzene	2.48	0.0250	"	2.50	ND	99.3	45-135			
p,m-Xylene	4.93	0.0500	"	5.00	ND	98.6	43-135			
o-Xylene	2.41	0.0250	"	2.50	ND	96.6	43-135			
Total Xylenes	7.34	0.0250	"	7.50	ND	97.9	43-135			
Surrogate: 1,2-Dichloroethane-d4	0.517		"	0.500		103	70-130			
Surrogate: Toluene-d8	0.477		"	0.500		95.4	70-130			
Surrogate: Bromofluorobenzene	0.482		"	0.500		96.3	70-130			

Matrix Spike Dup (1930046-MSD1)

Source: P907098-01

Prepared: 07/26/19 1 Analyzed: 07/30/19 0

Benzene	2.67	0.0250	mg/kg	2.50	ND	107	48-131	1.80	23	
Toluene	2.45	0.0250	"	2.50	ND	98.1	48-130	1.27	24	
Ethylbenzene	2.50	0.0250	"	2.50	ND	100	45-135	0.802	27	
p,m-Xylene	4.94	0.0500	"	5.00	ND	98.8	43-135	0.263	27	
o-Xylene	2.42	0.0250	"	2.50	ND	96.9	43-135	0.331	27	
Total Xylenes	7.36	0.0250	"	7.50	ND	98.2	43-135	0.286	27	
Surrogate: 1,2-Dichloroethane-d4	0.511		"	0.500		102	70-130			
Surrogate: Toluene-d8	0.472		"	0.500		94.4	70-130			
Surrogate: Bromofluorobenzene	0.482		"	0.500		96.3	70-130			

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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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 1931008 - DRO Extraction EPA 3570

Blank (1931008-BLK1)

Prepared: 07/29/19 1 Analyzed: 08/01/19 1

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	40.9		"	50.0		81.8	50-200			

LCS (1931008-BS1)

Prepared: 07/29/19 1 Analyzed: 08/01/19 1

Diesel Range Organics (C10-C28)	504	25.0	mg/kg	500		101	38-132			
Surrogate: n-Nonane	39.8		"	50.0		79.6	50-200			

Matrix Spike (1931008-MS1)

Source: P907098-01

Prepared: 07/29/19 1 Analyzed: 08/01/19 1

Diesel Range Organics (C10-C28)	457	25.0	mg/kg	500	61.6	79.1	38-132			
Surrogate: n-Nonane	39.6		"	50.0		79.1	50-200			

Matrix Spike Dup (1931008-MSD1)

Source: P907098-01

Prepared: 07/29/19 1 Analyzed: 08/01/19 1

Diesel Range Organics (C10-C28)	394	25.0	mg/kg	500	61.6	66.6	38-132	14.8	20	
Surrogate: n-Nonane	38.1		"	50.0		76.1	50-200			

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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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 1930046 - Purge and Trap EPA 5030A

Blank (1930046-BLK1)

Prepared: 07/26/19 1 Analyzed: 07/30/19 0

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1,2-Dichloroethane-d4	0.513		"	0.500		103	70-130			
Surrogate: Toluene-d8	0.464		"	0.500		92.7	70-130			
Surrogate: Bromofluorobenzene	0.471		"	0.500		94.1	70-130			

LCS (1930046-BS2)

Prepared: 07/26/19 1 Analyzed: 07/30/19 0

Gasoline Range Organics (C6-C10)	47.0	20.0	mg/kg	50.0		94.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.521		"	0.500		104	70-130			
Surrogate: Toluene-d8	0.472		"	0.500		94.3	70-130			
Surrogate: Bromofluorobenzene	0.485		"	0.500		97.0	70-130			

Matrix Spike (1930046-MS2)

Source: P907098-01

Prepared: 07/26/19 1 Analyzed: 07/30/19 0

Gasoline Range Organics (C6-C10)	49.8	20.0	mg/kg	50.0	ND	99.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.518		"	0.500		104	70-130			
Surrogate: Toluene-d8	0.475		"	0.500		94.9	70-130			
Surrogate: Bromofluorobenzene	0.471		"	0.500		94.2	70-130			

Matrix Spike Dup (1930046-MSD2)

Source: P907098-01

Prepared: 07/26/19 1 Analyzed: 07/30/19 0

Gasoline Range Organics (C6-C10)	46.6	20.0	mg/kg	50.0	ND	93.2	70-130	6.58	20	
Surrogate: 1,2-Dichloroethane-d4	0.511		"	0.500		102	70-130			
Surrogate: Toluene-d8	0.470		"	0.500		93.9	70-130			
Surrogate: Bromofluorobenzene	0.473		"	0.500		94.5	70-130			

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 14:15
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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 1931028 - Anion Extraction EPA 300.0/9056A

Blank (1931028-BLK1)		Prepared: 07/30/19 1 Analyzed: 08/01/19 1								
Chloride	ND	20.0	mg/kg							
LCS (1931028-BS1)		Prepared: 07/30/19 1 Analyzed: 08/01/19 1								
Chloride	269	20.0	mg/kg	250		108	90-110			
Matrix Spike (1931028-MS1)		Source: P907098-01		Prepared: 07/30/19 1 Analyzed: 08/01/19 1						
Chloride	337	20.0	mg/kg	250	126	84.1	80-120			
Matrix Spike Dup (1931028-MSD1)		Source: P907098-01		Prepared: 07/30/19 1 Analyzed: 08/01/19 1						
Chloride	331	20.0	mg/kg	250	126	81.7	80-120	1.77	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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WPX (Carlsbad)
5315 Buena Vista Dr
Carlsbad NM, 88220

Project Name: Ross Draw Unit #55 (2019 Spill)
Project Number: 04108-0639
Project Manager: Kris Rowe

Reported:
08/02/19 14:15

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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Client: <u>WPA (Carlsbad)</u> Project: <u>ROSS Draw Unit #55 (2014 spill)</u> Project Manager: <u>Kris Rowe</u> Address: <u>on file</u> City, State, Zip: _____ Phone: _____ Email: _____	Report Attention Report due by: _____ Attention: _____ Address: _____ City, State, Zip: _____ Phone: _____ Email: _____	Lab Use Only Lab WO# <u>P907090</u> Job Number <u>04108-0639</u>	TAT 1D _____ 3D _____	EPA Program RCRA _____ CWA _____ SDWA _____ State: _____ NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/>
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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	Remarks				
12:00 pm	7-24-19	Soil	1	SP21	1	X	X	X			X					
				SP22	2											
				SP23	3											
				SP24	4											
				SP25	5											
				SP26	6											
				SP27	7											
				SP28	8											
				SP29	9											
				SP30	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: Kevin Smith

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>Kevin Smith</u>	Date 7-25-19	Time 9:00 am	Received by: (Signature) <u>Courtney Small</u>	Date 7/25/19	Time 9:00	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N
Relinquished by: (Signature) <u>FedEx</u>	Date 7/26/19	Time 9:45 AM	Received by: (Signature) <u>Raina Lopez</u>	Date 7/26/19	Time 9:45 AM	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.

Client: <u>WDX (Larishad)</u> Project: <u>Ross Draw Unit #55 (2019 spill)</u> Project Manager: <u>Kris Rowe</u> Address: <u>on file</u> City, State, Zip _____ Phone: _____ Email: _____	Report Attention Report due by: _____ Attention: <u>on file</u> Address: _____ City, State, Zip _____ Phone: _____ Email: _____	Lab Use Only Lab WO# <u>P907099</u> Job Number <u>04108-0639</u>	TAT 1D _____ 3D _____	EPA Program RCRA _____ CWA _____ SDWA _____ State _____ NM <input checked="" type="checkbox"/> CO _____ UT _____ AZ _____
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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	Remarks			
12:30p	7-24-19	Soil	1	SP31	11	X	X	X			X				
				SP32	12										
				SP33	13										
				SP34	14										
				SP35	15										
				SP36	16										
				SP37	17										
				SP38	18										
				SP39	19										
				SP40	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: Kevin Smith

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>Kevin Smith</u>	Date <u>7-25-19</u>	Time <u>9:00</u>	Received by: (Signature) <u>Courtney Small</u>	Date <u>7/25/19</u>	Time <u>9:00</u>	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N
Relinquished by: (Signature) <u>Fed Ex</u>	Date <u>7/25/19</u>	Time <u>9:45</u>	Received by: (Signature) <u>Raina Lopez</u>	Date <u>7/25/19</u>	Time <u>9:25</u>	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.

Analytical Report

Report Summary

Client: WPX (Carlsbad)

Samples Received: 7/26/2019

Job Number: 04108-0639

Work Order: P907099

Project Name/Location: Ross Draw Unit #55 (2019
Spill)

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.

WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP41	P907099-01A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP42	P907099-02A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP43	P907099-03A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP44	P907099-04A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP45	P907099-05A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP46	P907099-06A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP47	P907099-07A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP48	P907099-08A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP49	P907099-09A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP50	P907099-10A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP51	P907099-11A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SP52	P907099-12A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW1	P907099-13A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW2	P907099-14A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW3	P907099-15A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW4	P907099-16A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW5	P907099-17A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW6	P907099-18A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW7	P907099-19A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW8	P907099-20A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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**SP41
P907099-01 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/01/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/01/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/01/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/01/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/01/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/01/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		97.8 %		50-150	1931011	07/29/19	08/01/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		73.1 %		50-200	1931026	07/30/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/01/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.2 %		50-150	1931011	07/29/19	08/01/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	35.3	20.0	mg/kg	1	1931029	07/30/19	07/31/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SP42
P907099-02 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	55.4	25.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		75.1 %		50-200	1931026	07/30/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.6 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	529	20.0	mg/kg	1	1931029	07/30/19	07/31/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SP43
P907099-03 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		66.5 %		50-200	1931026	07/30/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.0 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	39.1	20.0	mg/kg	1	1931029	07/30/19	07/31/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SP44
P907099-04 (Solid)

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		75.3 %		50-200	1931026	07/30/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.9 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	269	20.0	mg/kg	1	1931029	07/30/19	07/31/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SP45
P907099-05 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		76.6 %		50-200	1931026	07/30/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.6 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	23.8	20.0	mg/kg	1	1931029	07/30/19	07/31/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SP46
P907099-06 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		73.7 %		50-200	1931026	07/30/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.4 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	853	20.0	mg/kg	1	1931029	07/30/19	07/31/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SP47
P907099-07 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	

Surrogate: 4-Bromochlorobenzene-PID 110 % 50-150 1931011 07/29/19 08/02/19 EPA 8021B

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	68.7	25.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	

Surrogate: n-Nonane 73.6 % 50-200 1931026 07/30/19 08/01/19 EPA 8015D

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
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Surrogate: 1-Chloro-4-fluorobenzene-FID 92.7 % 50-150 1931011 07/29/19 08/02/19 EPA 8015D

Anions by 300.0/9056A

Chloride	115	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SP48
P907099-08 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		76.2 %		50-200	1931026	07/30/19	08/01/19	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.3 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	84.2	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SP49
P907099-09 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		74.5 %		50-200	1931026	07/30/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		92.2 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	95.5	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SP50
P907099-10 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	176	25.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	89.2	50.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		76.1 %		50-200	1931026	07/30/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.6 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	172	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SP51
P907099-11 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		107 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	86.5	25.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/01/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		75.1 %		50-200	1931026	07/30/19	08/01/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.3 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	95.6	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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**SP52
P907099-12 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		107 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	35.0	25.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		72.4 %		50-200	1931026	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.9 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	94.1	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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**SW1
P907099-13 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		106 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	46.0	25.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		73.4 %		50-200	1931026	07/30/19	08/02/19	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.0 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	108	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SW2
P907099-14 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		107 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	70.7	25.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		76.1 %		50-200	1931026	07/30/19	08/02/19	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.3 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	1180	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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**SW3
P907099-15 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		106 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		71.6 %		50-200	1931026	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.4 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	470	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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**SW4
P907099-16 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		106 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	68.2	25.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		123 %		50-200	1931026	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.6 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	1130	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SW5
P907099-17 (Solid)

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		106 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		77.4 %		50-200	1931026	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.4 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	108	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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SW6
P907099-18 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		106 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	61.3	25.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		77.2 %		50-200	1931026	07/30/19	08/02/19	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.9 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	1340	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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**SW7
P907099-19 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		105 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	172	25.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	85.3	50.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		76.9 %		50-200	1931026	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.2 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	168	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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**SW8
P907099-20 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		105 %		50-150	1931011	07/29/19	08/02/19	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931026	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		78.2 %		50-200	1931026	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931011	07/29/19	08/02/19	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.9 %		50-150	1931011	07/29/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	473	20.0	mg/kg	1	1931029	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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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 1931011 - Purge and Trap EPA 5030A

Blank (1931011-BLK1)

Prepared: 07/29/19 1 Analyzed: 08/02/19 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 8.53 " 8.00 107 50-150

LCS (1931011-BS1)

Prepared: 07/29/19 1 Analyzed: 08/02/19 1

Benzene	4.04	0.0250	mg/kg	5.00		80.8	70-130			
Toluene	4.62	0.0250	"	5.00		92.5	70-130			
Ethylbenzene	4.69	0.0250	"	5.00		93.7	70-130			
p,m-Xylene	9.59	0.0500	"	10.0		95.9	70-130			
o-Xylene	4.70	0.0250	"	5.00		94.1	70-130			
Total Xylenes	14.3	0.0250	"	15.0		95.3	70-130			

Surrogate: 4-Bromochlorobenzene-PID 8.55 " 8.00 107 50-150

Matrix Spike (1931011-MS1)

Source: P907099-01

Prepared: 07/29/19 1 Analyzed: 08/02/19 1

Benzene	4.31	0.0250	mg/kg	5.00	ND	86.1	54.3-133			
Toluene	4.93	0.0250	"	5.00	ND	98.6	61.4-130			
Ethylbenzene	4.99	0.0250	"	5.00	ND	99.8	61.4-133			
p,m-Xylene	10.2	0.0500	"	10.0	ND	102	63.3-131			
o-Xylene	5.00	0.0250	"	5.00	ND	100	63.3-131			
Total Xylenes	15.2	0.0250	"	15.0	ND	101	63.3-131			

Surrogate: 4-Bromochlorobenzene-PID 8.57 " 8.00 107 50-150

Matrix Spike Dup (1931011-MSD1)

Source: P907099-01

Prepared: 07/29/19 1 Analyzed: 08/02/19 1

Benzene	4.19	0.0250	mg/kg	5.00	ND	83.7	54.3-133	2.79	20	
Toluene	4.80	0.0250	"	5.00	ND	96.1	61.4-130	2.65	20	
Ethylbenzene	4.87	0.0250	"	5.00	ND	97.4	61.4-133	2.39	20	
p,m-Xylene	9.96	0.0500	"	10.0	ND	99.6	63.3-131	2.39	20	
o-Xylene	4.89	0.0250	"	5.00	ND	97.8	63.3-131	2.29	20	
Total Xylenes	14.8	0.0250	"	15.0	ND	99.0	63.3-131	2.36	20	

Surrogate: 4-Bromochlorobenzene-PID 8.56 " 8.00 107 50-150

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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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 1931026 - DRO Extraction EPA 3570

Blank (1931026-BLK1)

Prepared: 07/30/19 1 Analyzed: 08/01/19 1

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	38.8		"	50.0		77.7	50-200			

LCS (1931026-BS1)

Prepared: 07/30/19 1 Analyzed: 08/01/19 1

Diesel Range Organics (C10-C28)	508	25.0	mg/kg	500		102	38-132			
Surrogate: n-Nonane	39.3		"	50.0		78.6	50-200			

Matrix Spike (1931026-MS1)

Source: P907099-01

Prepared: 07/30/19 1 Analyzed: 08/01/19 1

Diesel Range Organics (C10-C28)	363	25.0	mg/kg	500	ND	72.6	38-132			
Surrogate: n-Nonane	37.4		"	50.0		74.9	50-200			

Matrix Spike Dup (1931026-MSD1)

Source: P907099-01

Prepared: 07/30/19 1 Analyzed: 08/01/19 1

Diesel Range Organics (C10-C28)	371	25.0	mg/kg	500	ND	74.3	38-132	2.27	20	
Surrogate: n-Nonane	37.5		"	50.0		74.9	50-200			

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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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 1931011 - Purge and Trap EPA 5030A

Blank (1931011-BLK1)

Prepared: 07/29/19 1 Analyzed: 08/02/19 1

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.56		"	8.00		94.6	50-150			

LCS (1931011-BS2)

Prepared: 07/29/19 1 Analyzed: 08/02/19 1

Gasoline Range Organics (C6-C10)	43.6	20.0	mg/kg	50.0		87.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.68		"	8.00		96.0	50-150			

Matrix Spike (1931011-MS2)

Source: P907099-01

Prepared: 07/29/19 1 Analyzed: 08/02/19 1

Gasoline Range Organics (C6-C10)	46.2	20.0	mg/kg	50.0	ND	92.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.58		"	8.00		94.7	50-150			

Matrix Spike Dup (1931011-MSD2)

Source: P907099-01

Prepared: 07/29/19 1 Analyzed: 08/02/19 1

Gasoline Range Organics (C6-C10)	46.1	20.0	mg/kg	50.0	ND	92.1	70-130	0.398	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.57		"	8.00		94.7	50-150			

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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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 1931029 - Anion Extraction EPA 300.0/9056A

Blank (1931029-BLK1)

Prepared: 07/30/19 1 Analyzed: 07/31/19 1

Chloride	ND	20.0	mg/kg							
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LCS (1931029-BS1)

Prepared: 07/30/19 1 Analyzed: 07/31/19 2

Chloride	256	20.0	mg/kg	250		102	90-110			
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Matrix Spike (1931029-MS1)

Source: P907099-01

Prepared: 07/30/19 1 Analyzed: 07/31/19 2

Chloride	294	20.0	mg/kg	250	35.3	104	80-120			
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Matrix Spike Dup (1931029-MSD1)

Source: P907099-01

Prepared: 07/30/19 1 Analyzed: 07/31/19 2

Chloride	286	20.0	mg/kg	250	35.3	100	80-120	2.76	20	
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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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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 16:55
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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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Client: _____ 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# <u>P907099</u> Job Number <u>04108-2631</u>	TAT 1D <input type="checkbox"/> 3D <input type="checkbox"/>	EPA Program RCRA <input type="checkbox"/> CWA <input type="checkbox"/> SDWA <input type="checkbox"/>
Analysis and Method			State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/>	

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	1D	3D	Remarks
1:00p	7-24-19	Soil	1	SP41	1	X	X	X			X			
				SP42	2									
				SP43	3									
				SP44	4									
				SP45	5									
				SP46	6									
				SP47	7									
				SP48	8									
				SP49	9									
				SP50	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: Kern Smith

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>Kern Smith</u>	Date <u>7-25-19</u>	Time <u>9:00 am</u>	Received by: (Signature) <u>Courtney Small</u>	Date <u>7/25/19</u>	Time <u>9:00</u>	Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Relinquished by: (Signature) <u>FedEx</u>	Date <u>7/26/19</u>	Time <u>9:45 am</u>	Received by: (Signature) <u>Raina Lopez</u>	Date <u>7/26/19</u>	Time <u>9:45</u>	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.

Client: <u>WDX (Carlsbad)</u> Project: <u>Ross Draw Unit # 55 (2019 Sp11)</u> Project Manager: <u>Kris Rowe</u> Address: <u>on file</u> City, State, Zip: _____ Phone: _____ Email: _____	Report Attention Report due by: _____ Attention: _____ Address: _____ City, State, Zip: _____ Phone: _____ Email: _____	Lab Use Only Lab WO# <u>P907099</u> Job Number <u>04108-0639</u>	TAT 1D _____ 3D _____	EPA Program RCRA _____ CWA _____ SDWA _____ State _____ NM <input checked="" type="checkbox"/> CO _____ UT _____ AZ _____
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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	Analysis and Method				State				
												1D	3D	RCRA	CWA	SDWA	NM	CO	UT	AZ
<u>1:30pm</u>	<u>7-24-19</u>	<u>Soil</u>	<u>1</u>	<u>SP51</u>	<u>11</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>X</u>									
<u>X</u>	<u>X</u>	<u>X</u>	<u>K</u>	<u>SP52</u>	<u>12</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>X</u>									
				<u>SW1</u>	<u>13</u>															
				<u>SW2</u>	<u>14</u>															
				<u>SW3</u>	<u>15</u>															
				<u>SW4</u>	<u>16</u>															
				<u>SW5</u>	<u>17</u>															
				<u>SW6</u>	<u>18</u>															
				<u>SW7</u>	<u>19</u>															
				<u>SW8</u>	<u>20</u>															

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: Kevin Smith

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>Kevin Smith</u>	Date <u>7-25-19</u>	Time <u>9:00am</u>	Received by: (Signature) <u>Courtney Small</u>	Date <u>7/25/19</u>	Time <u>9:00</u>	Lab Use Only			
Relinquished by: (Signature) <u>FedEx</u>	Date <u>7/25/19</u>	Time <u>9:45</u>	Received by: (Signature) <u>Rama Lopez</u>	Date <u>7/26/19</u>	Time <u>9:45</u>	Received on ice: <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	T1 _____	T2 _____	T3 _____
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____						AVG Temp °C <u>4</u>			
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.

Per client per 7/26/19

Client: <u>WPA (Carlsbad)</u>	Report Attention Report due by: _____ Attention: _____ Address: _____ City, State, Zip _____ Phone: _____ Email: _____	Lab Use Only						TAT		EPA Program						
Project: <u>WPA Ross Draw Unit #55 (2019 spill)</u>		Lab WO# <u>P907099</u>	Job Number <u>04108-0631</u>				1D	3D	RCRA	CWA	SDWA					
Project Manager: <u>Kris Rowe</u>		Analysis and Method														
Address: <u>on file</u>		DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0						State			
City, State, Zip _____													NM	CO	UT	AZ
Phone: _____																
Email: _____																

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	Remarks				
1:00P	7-24-19	Soil	1	SP41	1	X	X	X			X					
				SP42	2											
				SP43	3											
				SP44	4											
				SP45	5											
				SP46	6											
				SP47	7											
				SP48	8											
				SP49	9											
				SP50	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: Kevin Smith

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>Kevin Smith</u>	Date <u>7-25-19</u>	Time <u>4:00 am</u>	Received by: (Signature) <u>Courtney Small</u>	Date <u>7/25/19</u>	Time <u>9:00</u>	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>FedEx</u>	Date <u>7/26/19</u>	Time <u>9:45 am</u>	Received by: (Signature) <u>Raina Lopez</u>	Date <u>7/26/19</u>	Time <u>9:45</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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 24 Hour Emergency Response Phone: (800) 962-1879

Ph (505) 632-8881 Fx (505) 632-1855

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 labadmin@envirotech-inc.com

Client: <u>WDX (Carlsbad)</u> Project: <u>Ross Draw Unit # 55 (2019 Sp11)</u> Project Manager: <u>Kris Rowe</u> Address: <u>on file</u> City, State, Zip: _____ Phone: _____ Email: _____	Report Attention Report due by: _____ Attention: _____ Address: _____ City, State, Zip: _____ Phone: _____ Email: _____	Lab Use Only Lab WO# <u>P907099</u> Job Number <u>04108-0639</u>	TAT 1D <input type="checkbox"/> 3D <input type="checkbox"/>	EPA Program RCRA <input type="checkbox"/> CWA <input type="checkbox"/> SDWA <input type="checkbox"/> State: _____ NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/>
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Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	Analysis and Method							State				Remarks	
						DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	1D	3D	RCRA	CWA	SDWA		
<u>1:30pm</u>	<u>7-24-14</u>	<u>Soil</u>	<u>1</u>	<u>SP51</u>	<u>11</u>	<u>X</u>	<u>X</u>	<u>X</u>										
<u>X</u>	<u>X</u>	<u>X</u>	<u>K</u>	<u>SP52</u>	<u>12</u>	<u>X</u>	<u>X</u>	<u>X</u>										
				<u>SW1</u>	<u>13</u>													
				<u>SW2</u>	<u>14</u>													
				<u>SW3</u>	<u>15</u>													
				<u>SW4</u>	<u>16</u>													
				<u>SW5</u>	<u>17</u>													
				<u>SW6</u>	<u>18</u>													
				<u>SW7</u>	<u>19</u>													
				<u>SW8</u>	<u>20</u>													

Additional Instructions:

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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>Kevin Smith</u>	Date <u>7-25-14</u>	Time <u>9:00am</u>	Received by: (Signature) <u>Courtney Small</u>	Date <u>7/25/14</u>	Time <u>9:00</u>	Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Relinquished by: (Signature) <u>FedEx</u>	Date <u>7/25/14</u>	Time <u>9:45</u>	Received by: (Signature) <u>Rama Lopez</u>	Date <u>7/26/14</u>	Time <u>9:45</u>	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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Analytical Report

Report Summary

Client: WPX (Carlsbad)

Samples Received: 7/26/2019

Job Number: 04108-0639

Work Order: P907100

Project Name/Location: Ross Draw Unit #55 (2019
Spill)

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.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
Envirotech, Inc, currently holds the appropriate and available Utah TNi certification NM009792018-1 for the data reported.

WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW9	P907100-01A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW10	P907100-02A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW11	P907100-03A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW12	P907100-04A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW13	P907100-05A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW14	P907100-06A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW15	P907100-07A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW16	P907100-08A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.
SW17	P907100-09A	Soil	07/24/19	07/26/19	Glass Jar, 4 oz.

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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**SW9
P907100-01 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/01/19	EPA 8260B
Toluene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/01/19	EPA 8260B
Ethylbenzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/01/19	EPA 8260B
p,m-Xylene	ND	0.0500	mg/kg	1	1931023	07/30/19	08/01/19	EPA 8260B
o-Xylene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/01/19	EPA 8260B
Total Xylenes	ND	0.0250	mg/kg	1	1931023	07/30/19	08/01/19	EPA 8260B
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %		70-130	1931023	07/30/19	08/01/19	EPA 8260B
<i>Surrogate: Toluene-d8</i>		90.4 %		70-130	1931023	07/30/19	08/01/19	EPA 8260B
<i>Surrogate: Bromofluorobenzene</i>		99.1 %		70-130	1931023	07/30/19	08/01/19	EPA 8260B

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	124	25.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D
Oil Range Organics (C28-C40)	63.4	50.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D
<i>Surrogate: n-Nonane</i>		73.8 %		50-200	1931027	07/30/19	08/02/19	EPA 8015D

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931023	07/30/19	08/01/19	EPA 8015D
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %		70-130	1931023	07/30/19	08/01/19	EPA 8015D
<i>Surrogate: Toluene-d8</i>		90.4 %		70-130	1931023	07/30/19	08/01/19	EPA 8015D
<i>Surrogate: Bromofluorobenzene</i>		99.1 %		70-130	1931023	07/30/19	08/01/19	EPA 8015D

Anions by 300.0/9056A

Chloride	339	20.0	mg/kg	1	1931025	07/30/19	08/01/19	EPA 300.0/9056A
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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**SW10
P907100-02 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		89.4 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		99.1 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		71.5 %		50-200	1931027	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		89.4 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		99.1 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	609	20.0	mg/kg	1	1931025	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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SW11
P907100-03 (Solid)

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		90.7 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		102 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		76.7 %		50-200	1931027	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		90.7 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		102 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	568	20.0	mg/kg	1	1931025	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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SW12
P907100-04 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		89.7 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		99.0 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		77.1 %		50-200	1931027	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		89.7 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		99.0 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	306	20.0	mg/kg	1	1931025	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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**SW13
P907100-05 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		90.5 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		100 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		79.0 %		50-200	1931027	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		90.5 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		100 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	511	20.0	mg/kg	1	1931025	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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SW14
P907100-06 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		90.2 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		99.1 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		75.2 %		50-200	1931027	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		90.2 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		99.1 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	23.6	20.0	mg/kg	1	1931025	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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**SW15
P907100-07 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		95.5 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		89.1 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		98.6 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		80.4 %		50-200	1931027	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		95.5 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		89.1 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		98.6 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	1931025	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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SW16
P907100-08 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		89.9 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		99.7 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	36.3	25.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		74.1 %		50-200	1931027	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		89.9 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		99.7 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	240	20.0	mg/kg	1	1931025	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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SW17
P907100-09 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organic Compounds by 8260

Benzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Toluene-d8</i>		88.9 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	
<i>Surrogate: Bromofluorobenzene</i>		98.9 %		70-130	1931023	07/30/19	08/02/19	EPA 8260B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1931027	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: n-Nonane</i>		73.7 %		50-200	1931027	07/30/19	08/02/19	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Toluene-d8</i>		88.9 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	
<i>Surrogate: Bromofluorobenzene</i>		98.9 %		70-130	1931023	07/30/19	08/02/19	EPA 8015D	

Anions by 300.0/9056A

Chloride	120	20.0	mg/kg	1	1931025	07/30/19	08/01/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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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 1931023 - Purge and Trap EPA 5030A

Blank (1931023-BLK1)

Prepared: 07/30/19 1 Analyzed: 08/01/19 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: 1,2-Dichloroethane-d4	0.512		"	0.500		102	70-130			
Surrogate: Toluene-d8	0.450		"	0.500		89.9	70-130			
Surrogate: Bromofluorobenzene	0.495		"	0.500		98.9	70-130			

LCS (1931023-BS1)

Prepared: 07/30/19 1 Analyzed: 08/01/19 1

Benzene	2.65	0.0250	mg/kg	2.50		106	70-130			
Toluene	2.27	0.0250	"	2.50		90.8	70-130			
Ethylbenzene	2.29	0.0250	"	2.50		91.5	70-130			
p,m-Xylene	4.65	0.0500	"	5.00		93.1	70-130			
o-Xylene	2.28	0.0250	"	2.50		91.1	70-130			
Total Xylenes	6.93	0.0250	"	7.50		92.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		"	0.500		100	70-130			
Surrogate: Toluene-d8	0.453		"	0.500		90.5	70-130			
Surrogate: Bromofluorobenzene	0.492		"	0.500		98.4	70-130			

Matrix Spike (1931023-MS1)

Source: P907100-01

Prepared: 07/30/19 1 Analyzed: 08/01/19 1

Benzene	2.52	0.0250	mg/kg	2.50	ND	101	48-131			
Toluene	2.15	0.0250	"	2.50	ND	86.1	48-130			
Ethylbenzene	2.15	0.0250	"	2.50	ND	86.0	45-135			
p,m-Xylene	4.41	0.0500	"	5.00	ND	88.3	43-135			
o-Xylene	2.17	0.0250	"	2.50	ND	86.8	43-135			
Total Xylenes	6.58	0.0250	"	7.50	ND	87.8	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	0.493		"	0.500		98.6	70-130			

Matrix Spike Dup (1931023-MSD1)

Source: P907100-01

Prepared: 07/30/19 1 Analyzed: 08/01/19 1

Benzene	2.62	0.0250	mg/kg	2.50	ND	105	48-131	4.13	23	
Toluene	2.29	0.0250	"	2.50	ND	91.7	48-130	6.39	24	
Ethylbenzene	2.30	0.0250	"	2.50	ND	92.0	45-135	6.70	27	
p,m-Xylene	4.69	0.0500	"	5.00	ND	93.8	43-135	6.12	27	
o-Xylene	2.33	0.0250	"	2.50	ND	93.0	43-135	6.89	27	
Total Xylenes	7.02	0.0250	"	7.50	ND	93.6	43-135	6.37	27	
Surrogate: 1,2-Dichloroethane-d4	0.503		"	0.500		101	70-130			
Surrogate: Toluene-d8	0.457		"	0.500		91.4	70-130			
Surrogate: Bromofluorobenzene	0.497		"	0.500		99.3	70-130			

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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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 1931027 - DRO Extraction EPA 3570

Blank (1931027-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	40.1		"	50.0		80.2	50-200			

LCS (1931027-BS1)

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

Diesel Range Organics (C10-C28)	493	25.0	mg/kg	500		98.5	38-132			
Surrogate: n-Nonane	37.9		"	50.0		75.7	50-200			

Matrix Spike (1931027-MS1)

Source: P907100-01

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

Diesel Range Organics (C10-C28)	436	25.0	mg/kg	500	124	62.5	38-132			
Surrogate: n-Nonane	38.1		"	50.0		76.2	50-200			

Matrix Spike Dup (1931027-MSD1)

Source: P907100-01

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

Diesel Range Organics (C10-C28)	471	25.0	mg/kg	500	124	69.5	38-132	7.73	20	
Surrogate: n-Nonane	37.9		"	50.0		75.7	50-200			

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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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 1931023 - Purge and Trap EPA 5030A

Blank (1931023-BLK1)

Prepared: 07/30/19 1 Analyzed: 08/01/19 1

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
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	0.495		"	0.500		98.9	70-130			

LCS (1931023-BS2)

Prepared: 07/30/19 1 Analyzed: 08/01/19 1

Gasoline Range Organics (C6-C10)	46.0	20.0	mg/kg	50.0		92.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.533		"	0.500		107	70-130			
Surrogate: Toluene-d8	0.448		"	0.500		89.6	70-130			
Surrogate: Bromofluorobenzene	0.492		"	0.500		98.4	70-130			

Matrix Spike (1931023-MS2)

Source: P907100-01

Prepared: 07/30/19 1 Analyzed: 08/01/19 1

Gasoline Range Organics (C6-C10)	45.4	20.0	mg/kg	50.0	ND	90.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		"	0.500		100	70-130			
Surrogate: Toluene-d8	0.456		"	0.500		91.2	70-130			
Surrogate: Bromofluorobenzene	0.493		"	0.500		98.5	70-130			

Matrix Spike Dup (1931023-MSD2)

Source: P907100-01

Prepared: 07/30/19 1 Analyzed: 08/01/19 1

Gasoline Range Organics (C6-C10)	43.6	20.0	mg/kg	50.0	ND	87.3	70-130	3.94	20	
Surrogate: 1,2-Dichloroethane-d4	0.498		"	0.500		99.5	70-130			
Surrogate: Toluene-d8	0.441		"	0.500		88.1	70-130			
Surrogate: Bromofluorobenzene	0.494		"	0.500		98.7	70-130			

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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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 1931025 - Anion Extraction EPA 300.0/9056A

Blank (1931025-BLK1)				Prepared: 07/30/19 1 Analyzed: 07/31/19 1						
Chloride	ND	20.0	mg/kg							
LCS (1931025-BS1)				Prepared: 07/30/19 1 Analyzed: 07/31/19 1						
Chloride	260	20.0	mg/kg	250		104	90-110			
Matrix Spike (1931025-MS1)				Source: P907118-21 Prepared: 07/30/19 1 Analyzed: 07/31/19 1						
Chloride	286	20.0	mg/kg	250	23.9	105	80-120			
Matrix Spike Dup (1931025-MSD1)				Source: P907118-21 Prepared: 07/30/19 1 Analyzed: 07/31/19 1						
Chloride	281	20.0	mg/kg	250	23.9	103	80-120	2.07	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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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Kris Rowe	Reported: 08/02/19 17:43
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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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Client: <u>WPX (Carlsbad)</u> Project: <u>Ross Draw Unit #55 (2019-2011)</u> Project Manager: <u>Kris Rowe</u> Address: <u>on file</u> City, State, Zip: _____ Phone: _____ Email: _____	Report Attention Report due by: _____ Attention: _____ Address: _____ City, State, Zip: _____ Phone: _____ Email: _____	Lab Use Only Lab WO# <u>P907100</u> Job Number <u>04108-0639</u>	TAT 1D <input type="checkbox"/> 3D <input type="checkbox"/>	EPA Program RCRA <input type="checkbox"/> CWA <input type="checkbox"/> SDWA <input type="checkbox"/> State: _____ NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> AZ <input type="checkbox"/>
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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	1D	3D	RCRA	CWA	SDWA	Remarks	
1:45	7-24-19	Soil	1	SW9	1	X	Y	X			X							
				SW10	2													
				SW11	3													
				SW12	4													
				SW13	5													
				SW14	6													
				SW15	7													
				SW16	8													
				SW17	9													

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: Kevin Smith

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>Kevin Smith</u>	Date <u>7-25-19</u>	Time <u>9:00am</u>	Received by: (Signature) <u>Courtney Stovall</u>	Date <u>7/25/19</u>	Time <u>9:00</u>	Lab Use Only
Relinquished by: (Signature) <u>FD Ex</u>	Date <u>7/26/19</u>	Time <u>9:45am</u>	Received by: (Signature) <u>Raine Lopez</u>	Date <u>7/26/19</u>	Time <u>9:45am</u>	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.

Analytical Report

Report Summary

Client: WPX (Carlsbad)

Samples Received: 8/23/2019

Job Number: 04108-0639

Work Order: P908070

Project Name/Location: Ross Draw Unit #55 (2019
Spill)

Report Reviewed By:



Date: 8/29/19

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, holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP2	P908070-01A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP3	P908070-02A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP4	P908070-03A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP6	P908070-04A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP7	P908070-05A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP13	P908070-06A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP16	P908070-07A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP17	P908070-08A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP18	P908070-09A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP24	P908070-10A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP28	P908070-11A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP30	P908070-12A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP33	P908070-13A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP35	P908070-14A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP36	P908070-15A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP38	P908070-16A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP46	P908070-17A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SP50	P908070-18A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SW2	P908070-19A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SW4	P908070-20A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SW6	P908070-21A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.
SW7	P908070-22A	Soil	08/22/19	08/23/19	Glass Jar, 4 oz.

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP2
P908070-01 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Surrogate: <i>n</i> -Nonane		80.7 %		50-200	1935023	08/27/19	08/28/19	EPA 8015D	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP3
P908070-02 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Surrogate: <i>n</i> -Nonane		83.3 %		50-200	1935023	08/27/19	08/28/19	EPA 8015D	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP4
P908070-03 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Surrogate: <i>n</i> -Nonane		82.6 %		50-200	1935023	08/27/19	08/28/19	EPA 8015D	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP6
P908070-04 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	2630	20.0	mg/kg	1	1935018	08/27/19	08/28/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP7
P908070-05 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	290	20.0	mg/kg	1	1935018	08/27/19	08/28/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP13
P908070-06 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Surrogate: <i>n</i> -Nonane		84.2 %		50-200	1935023	08/27/19	08/28/19	EPA 8015D	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP16
P908070-07 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	168	20.0	mg/kg	1	1935018	08/27/19	08/28/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP17
P908070-08 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Surrogate: <i>n</i> -Nonane		84.3 %		50-200	1935023	08/27/19	08/28/19	EPA 8015D	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP18
P908070-09 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	30.4	25.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Surrogate: <i>n</i> -Nonane		83.0 %		50-200	1935023	08/27/19	08/28/19	EPA 8015D	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP24
P908070-10 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	319	20.0	mg/kg	1	1935018	08/27/19	08/28/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP28
P908070-11 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	412	20.0	mg/kg	1	1935018	08/27/19	08/28/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP30
P908070-12 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Surrogate: <i>n</i> -Nonane		86.4 %		50-200	1935023	08/27/19	08/28/19	EPA 8015D	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP33
P908070-13 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	165	20.0	mg/kg	1	1935018	08/27/19	08/28/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP35
P908070-14 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	7420	200	mg/kg	10	1935018	08/27/19	08/29/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP36
P908070-15 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	475	20.0	mg/kg	1	1935018	08/27/19	08/28/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP38
P908070-16 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Surrogate: <i>n</i> -Nonane		85.0 %		50-200	1935023	08/27/19	08/28/19	EPA 8015D	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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SP46
P908070-17 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	336	20.0	mg/kg	1	1935018	08/27/19	08/28/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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**SP50
P908070-18 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Surrogate: <i>n</i> -Nonane		81.8 %		50-200	1935023	08/27/19	08/28/19	EPA 8015D	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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**SW2
P908070-19 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	198	20.0	mg/kg	1	1935018	08/27/19	08/28/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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**SW4
P908070-20 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	543	20.0	mg/kg	1	1935018	08/27/19	08/28/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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**SW6
P908070-21 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	258	20.0	mg/kg	1	1935018	08/27/19	08/28/19	EPA 300.0/9056A	
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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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**SW7
P908070-22 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1935023	08/27/19	08/28/19	EPA 8015D	
Surrogate: <i>n</i> -Nonane		83.8 %		50-200	1935023	08/27/19	08/28/19	EPA 8015D	

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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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 1935023 - DRO Extraction EPA 3570

Blank (1935023-BLK1)

Prepared: 08/27/19 1 Analyzed: 08/28/19 1

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	42.3		"	50.0		84.5	50-200			

LCS (1935023-BS1)

Prepared: 08/27/19 1 Analyzed: 08/28/19 1

Diesel Range Organics (C10-C28)	482	25.0	mg/kg	500		96.5	38-132			
Surrogate: n-Nonane	41.7		"	50.0		83.4	50-200			

Matrix Spike (1935023-MS1)

Source: P908070-01

Prepared: 08/27/19 1 Analyzed: 08/28/19 1

Diesel Range Organics (C10-C28)	474	25.0	mg/kg	500	ND	94.9	38-132			
Surrogate: n-Nonane	41.7		"	50.0		83.4	50-200			

Matrix Spike Dup (1935023-MSD1)

Source: P908070-01

Prepared: 08/27/19 1 Analyzed: 08/28/19 1

Diesel Range Organics (C10-C28)	500	25.0	mg/kg	500	ND	99.9	38-132	5.20	20	
Surrogate: n-Nonane	42.1		"	50.0		84.3	50-200			

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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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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 1935018 - Anion Extraction EPA 300.0/9056A

Blank (1935018-BLK1)				Prepared: 08/27/19 0 Analyzed: 08/28/19 0						
Chloride	ND	20.0	mg/kg							
LCS (1935018-BS1)				Prepared: 08/27/19 0 Analyzed: 08/28/19 0						
Chloride	258	20.0	mg/kg	250		103	90-110			
Matrix Spike (1935018-MS1)				Prepared: 08/27/19 0 Analyzed: 08/28/19 0						
Source: P908070-04										
Chloride	2740	20.0	mg/kg	250	2630	45.2	80-120			SPK2
Matrix Spike Dup (1935018-MSD1)				Prepared: 08/27/19 0 Analyzed: 08/28/19 0						
Source: P908070-04										
Chloride	3020	20.0	mg/kg	250	2630	157	80-120	9.72	20	SPK2

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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WPX (Carlsbad) 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Ross Draw Unit #55 (2019 Spill) Project Number: 04108-0639 Project Manager: Lori O'Brien	Reported: 08/29/19 17:14
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Notes and Definitions

- SPK2 The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to native analyte concentration at 4 times or greater than the spike concentration.
 - ND Analyte NOT DETECTED at or above the reporting limit
 - NR Not Reported
 - RPD Relative Percent Difference
 - ** Methods marked with ** are non-accredited methods.
- Soil data is reported on an "as received" weight basis, unless reported otherwise.

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Client: <u>WPX Energy - Carlsbad</u> Project: <u>Ross Draw Unit #55 (2019)</u> Project Manager: <u>Lori O'Brien</u> Address: <u>ON FILE</u> City, State, Zip: _____ Phone: _____ Email: _____	Report Attention Report due by: <u>Standard TAT</u> Attention: <u>Debbie, Kevin, Lori</u> Address: <u>ON FILE</u> City, State, Zip: _____ Phone: _____ Email: _____	Lab Use Only Lab WO# <u>P908070</u> Job Number <u>04108-0639</u>	TAT 1D 3D	EPA Program RCRA CWA SDWA
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Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	Analysis and Method							State				Remarks			
						DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	1D	3D	RCRA	CWA	SDWA		NM	CO	UT
	<u>8/22/19</u>	<u>Soil</u>	<u>1</u>	<u>SP2</u>	<u>1</u>	X														
				<u>SP3</u>	<u>2</u>	X														
				<u>SP4</u>	<u>3</u>	X														
				<u>SP6</u>	<u>4</u>						X									
				<u>SP7</u>	<u>5</u>						X									
				<u>SP13</u>	<u>6</u>	X														
				<u>SP16</u>	<u>7</u>						X									
				<u>SP17</u>	<u>8</u>	X														
				<u>SP18</u>	<u>9</u>	X														
				<u>SP24</u>	<u>10</u>						X									

Additional Instructions: v.s. ice in cooler

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: Kevin Duvick

Relinquished by: (Signature) <u>Kevin Duvick</u>	Date <u>8/22/19</u>	Time <u>3:00 pm</u>	Received by: (Signature) <u>Courtney Swall</u>	Date <u>8/22/19</u>	Time <u>3:00</u>	Lab Use Only Received on ice: <u>(Y) / N</u> T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>FedEx</u>	Date <u>8/23/19</u>	Time <u>10:19</u>	Received by: (Signature) <u>Jessica A. Wall</u>	Date <u>8/23/19</u>	Time <u>10:19</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.

Client: <u>WPX Energy - Carlsbad</u> Project: <u>Ross Draw Unit #55 (2014)</u> Project Manager: <u>Lori O'Brien</u> Address: <u>on file</u> City, State, Zip: _____ Phone: _____ Email: _____	Report Attention Report due by: <u>Standard TAT</u> Attention: <u>Debbie, Kevin, Lori</u> Address: _____ City, State, Zip: <u>on file</u> Phone: _____ Email: _____	Lab Use Only Lab WQ# <u>P 908070</u> Job Number <u>04108-0639</u>	TAT 1D 3D	EPA Program RCRA CWA SDWA
Analysis and Method			State	
DRO/ORO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0			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	Remarks
				SP28	11						X	
				SP30	12	X						
				SP33	13						X	
				SP35	14						X	
				SP36	15						X	
				SP38	16	X						
				SP46	17						X	
				SP50	18	X						
				SW2	19						X	
				SW4	20						X	

Additional Instructions: v.s. ice in cooler

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: Kevin Duran

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>Kevin Duran</u>	Date <u>8/22/19</u>	Time <u>3:00 PM</u>	Received by: (Signature) <u>Antony Stovall</u>	Date <u>8/22/19</u>	Time <u>3:00</u>	Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>FedEx</u>	Date <u>8/23/19</u>	Time <u>10:19</u>	Received by: (Signature) <u>Jessie O. Hoffa</u>	Date <u>8/23/19</u>	Time <u>10:19</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.

Client: <u>WDX Energy - Carlisle</u> Project: <u>Ross Draw Unit #55 (2019)</u> Project Manager: <u>Lori O'Brien</u> Address: <u>on file</u> City, State, Zip: _____ Phone: _____ Email: _____	Report Attention Report due by: <u>Standard</u> Attention: <u>Debbie, Kevin, Lori</u> Address: <u>on file</u> City, State, Zip: _____ Phone: _____ Email: _____	Lab Use Only Lab WO# <u>P 908070</u> Job Number <u>04108-0639</u>	TAT 1D 3D	EPA Program RCRA CWA SDWA
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Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	Analysis and Method							State				Remarks		
						DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0					NM		CO	UT
	8/22/19	Soil	1	SW6	21						X								
				SW7	22	X													

Additional Instructions: v-s ice in cooler

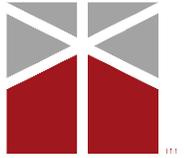
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Kevin Duvic

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>Kevin Duvic</u>	Date <u>8/22/19</u>	Time <u>3:00 pm</u>	Received by: (Signature) <u>Courtney Strall</u>	Date <u>8/22/19</u>	Time <u>3:00</u>	Lab Use Only Received on ice: <u>Y</u> / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>FedEx</u>	Date <u>8/23/19</u>	Time <u>10:19</u>	Received by: (Signature) <u>Jessie G. MHA</u>	Date <u>8/23/19</u>	Time <u>10:19</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.



Appendix D: Site Photos



Excavated Area

July 17, 2019





Excavated Area

July 17, 2019





Excavated Area

July 17, 2019





Excavated Area

July 17, 2019





Excavated Area

July 17, 2019





Excavated Area

July 17, 2019





Excavated Area

July 17, 2019





Excavated Area

July 17, 2019





Excavated Area

July 24, 2019





Excavated Area

July 24, 2019





Excavated Area

July 24, 2019





Excavated Area

July 17, 2019





Excavated Area

July 17, 2019





Excavated Area

July 17, 2019





Excavated Area

July 17, 2019





Excavated Area

July 24, 2019





Excavated Area

July 24, 2019





Excavated Area

July 24, 2019

