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

* Attach Additional Sheets If Necessary

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

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

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

	1		Rel	ease Notific	atio	n and Co	orrective A	ction	1				
						OPERA'	TOR		☐ Initi	al Report	\boxtimes	Final Repor	
		VPX Energy	Production	on			borah Watson						
Address PC		11001				Telephone No. 505-333-1880							
Facility Na	me Rita Co	om #004				Facility Typ	be Well Site						
Surface Ow	vner Federa	al		Mineral O	wner l	Federal			API No	o. 30-039-23	3378		
				LOCA	TIO	N OF RE	LEASE						
Unit Letter	Section	Township	Range	Feet from the	North	/South Line	Feet from the	East/	West Line	County			
F	8	23N	06W	1880	North		1730	West		Rio Arriba			
						OF REL	W107.495567						
Type of Rele	ase historic	c		112.2	CILL		Release unknow	m	Volume l	Recovered 0	bbls		
Source of Re						Date and I- unknown	Hour of Occurrence			Hour of Disc		/	
Was Immedi		Given? Not Required				Cory Smith	o Whom? Diemer (BLM-FF h (NMOCD) ields (NMOCD)	FO)					
By Whom?							Iour 4/28/16 via	CONTRACTOR OF THE					
Was a Water	course Read		Yes 🗵] No		If YES, Vo	olume Impacting t	the Wate	ercourse.				
N/A Describe Car	use of Probl	em and Reme	dial Actio	n Taken.*					A	CONS. DIV	DIS	7. 3	
His Im On BT On Fir rep WI I hereby cert regulations a public health should their or the enviro	storic contar pacted soils in May 19, 2 TEX and TP in June 6, 200 nal confirmation.) PX received iffy that the interpretations in or the environment. In a interpretation in a contact of the environment. In a in or local law	were remove 2016, 11 5-po H (GRO/DRO 16, an addition ation sampling approval to be information g are required to ronment. The have failed to addition, NMO ws and/or regi	overed beld and displint composition of the composi	cen.* ow the former proposed of at the land site samples (SC-esentative from NN vas collected. A refere reported below location from BL is true and compled/or file certain refere of a C-141 report investigate and restance of a C-141 report and confidence of a C-1	farm. 1 throughout throughout the second of	agh SC-11) we was present of tative from NI CD action level and NMOCI the best of my otifications are NMOCD me e contaminati	during sample col MOCD was prese vels. (Laboratory D on June 7, 2016 knowledge and und perform correct arked as "Final R on that pose a three the operator of	m the e lection. ent durin analytic 5. No fun inderstantive act eport" de eat to grespons	excavation. In grample contains a reports a reports a reports a reports for relicons for relicons for relicons not relicond water ibility for contains a report of the relicons for relico	The samples collection. are included in required. Suant to NMC eases which rieve the open, surface was compliance w	OCD r may en ator of ter, hu	e analyzed for enclosed final rules and ndanger f liability uman health	
Signature:	No.	nah Wit	The		_	Approved by	OIL CON			DIVISIO			
Title: Enviro						Approval Dat	te: 9/21/20	6	Expiration				
	× 4	n.watson@wp	xenergy.co	om		Conditions of				Attached			
Date: 08/12/2	2016		-	Phone: 505-386-9	693	MYFI	1612329	383	3	Attached			



Rita Com #004 Historic Release Report Unit Letter F, Section 8, Township 23N, Range 6W Rio Arriba County, NM

August 12, 2016

1.0 Introduction

In April 2016, hydrocarbon impacted soils were discovered during plugging and abandonment (P&A) activities at the Rita Com #004, located in Section 8, Township 23N, Range 6W, Rio Arriba County, New Mexico. The impacted soils were initially discovered beneath the production tank dump line. Removal of impacted soil and gravel began during the week of April 25, 2016.

A topographic map of the location is included as Figure 1 and an aerial site map is included as Figure 2.

2.0 Release Summary

Well Location: Rita Com #004

API #:30-039-23378

Site Location Description: Unit Letter F, Section 8, Township 23N, Range 6W

Wellhead Latitude/Longitude: N36.2411842, W107.4955139 Release Latitude/Longitude: N36.24193, W107.495567

Land Jurisdiction: Federal, Bureau of Land Management (BLM)

Agency Notification: New Mexico Oil Conservation Division (NMOCD) and BLM Farmington Field

Office (BLM-FFO)

Agency Notification Date(s): April 28, 2016

Source of Release: unknown Release Contents: unknown Volume Released: historic release Volume Recovered: historic release

NMOCD Ranking: 20

3.0 Land Jurisdiction and Site Ranking

The referenced well is located on BLM land within the Farmington Field Office jurisdiction in Rio Arriba County, New Mexico.

In accordance with NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (August 1993), this site was assigned a ranking score of 20. Based on a ranking score of 20, recommended remedial action levels (RRAL) for remediated soils at the site are as follows: 10 mg/kg benzene, 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX), and 100 mg/kg total petroleum hydrocarbons (TPH).

Depth to groundwater at the site is estimated to be 61 feet below ground surface (bgs) based on the April 2015 ground bed drilling log for the NE Chaco Com #199H which recorded depth to water at 86 feet bgs. The NE Chaco Com #199H is located 0.43 miles SSW and approximately 25 feet higher in elevation than the location.

A review was completed of the New Mexico Office of the State Engineer Online New Mexico Water Rights Reporting System and no water wells were identified within a 1,000 feet radius of the location.

The wash in Escrito Canyon is located approximately 382 feet NW of the location.

4.0 Field Activities

During P&A activities at the location impacted soil was discovered below the dump line associated with the production tank. Excavation and removal of impacted soil was initiated during the week of April 25, 2016. Approximately 2,090 cubic yards of hydrocarbon impacted soils were removed from an area of excavation measuring approximately 45 feet wide x 55 feet long x 2 to 15 feet deep. Sample locations are included as Figure 3. A copy of the executed C-138 Solid Waste Acceptance Form is attached.

5.0 Soil Sampling

On May 19, 2016, eleven confirmation soil samples (SC-1 through SC-11) were collected from the excavation. Ms. Vanessa Fields, NMOCD, was present during collection of the confirmation samples. Soil samples composited for laboratory analysis were placed into laboratory supplied glassware, labeled, and shipped on ice to Hall Environmental Analysis Laboratory. Each sample was analyzed for the following:

- BTEX per U.S. Environmental Protection Agency (USEPA) Method 8021B, and
- TPH (GRO/DRO) per USEPA Method 8015D, and

An additional SC-9 was collected on June 6, 2016. Ms. Vanessa Fields, NMOCD, was present during collection of the additional sample. Sample SC-9 (June) was analyzed for BTEX per USEPA Method 8021B and TPH per USEPA Method 8015.

6.0 Analytical Results

Final laboratory analytical results for soil confirmation samples (SC-1 through SC-11) reported benzene and BTEX concentrations below the NMOCD RRAL of 10 mg/kg and 50 mg/kg, respectively. All final soil confirmation samples reported TPH concentrations below the NMOCD RRAL of 1,000 mg/kg,

Laboratory analytical results are summarized in Table 1 and the analytical laboratory reports are attached.

7.0 Conclusions

Historic contamination was discovered during P&A activities at the Rita Com #004 located in Section 8, Township 23N, Range 6W, Rio Arriba County, New Mexico. Cleanup consisted of removal of approximately 2,090 cubic yards of impacted soils from the location. Confirmation samples were collected from the excavation which measured approximately 45 feet x 55 feet x 2 to 15 feet deep. Laboratory analytical results for soil confirmation samples (SC-1 through SC-11) reported benzene, total BTEX, and total TPH (GRO/DRO) concentrations below the NMOCD RRAL. On June 7, 2016, WPX received permission from BLM-FFO and NMOCD to backfill the location. Based on laboratory analytical results of the confirmation soil samples, no further work is recommended.

For additional information or questions regarding site conditions, please contact me at 505-333-1880.

Sincerely,

Deborah Watson

Environmental Specialist

Debrah Water

Rita #004 Historic Release Report

Attachments

Figure 1. Topographic Map

Figure 2. Aerial Site Map

Figure 3. Soil Analytical Map

Table 1. Soil Sampling Results

Hall Analytical Laboratory Reports (Report #1605975 and Report #1606252)

Executed Certificate of Waste

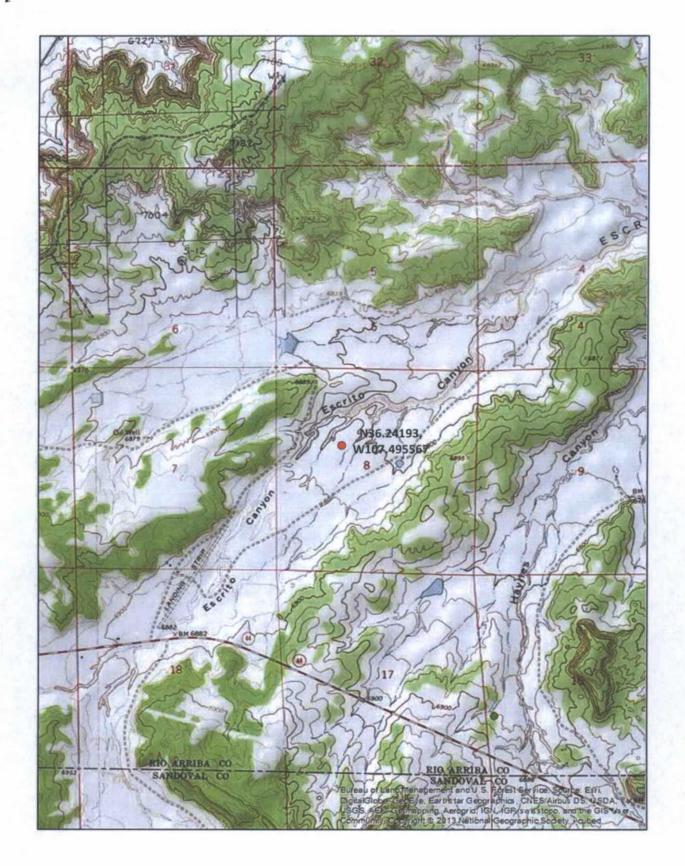


Figure 1. Topographic Map Rita Com #004

Section 8, Township 23N, Range 06W N36.2411842, W107.4955139 Rio Arriba County, NM Scale 1:24,000



Figure 2. Aerial Site Map Rita Com #004 Section 8, Township 23N, Range 06W N36.2411842, W107.4955139 Rio Arriba County, NM



Figure 3. Soil Analytical Map Rita Com #004 Section 8, Township 23N, Range 06W N36.2411842, W107.4955139 Rio Arriba County, NM

Table 1. Soil Sampling Results Rita Com #004

Sample Name	Date	Location on Site Ranking of 20	Benzene (mg/kg)	Toluene (mg/kg) NE	Ethylbenzene (mg/kg) NE	Total Xylenes mg/kg NE	Total BTEX (mg/kg)	TPH as GRO (mg/kg) NE	TPH as DRO (mg/kg) NE	Total TPH (mg/kg)
SC-1	19-May-16	East Wall	ND	ND	ND	ND	ND	ND	ND	ND
SC-2	19-May-16	East Base	ND	ND	ND	ND	ND	ND	ND	ND
SC-3	19-May-16	North Wall	ND	ND	ND	ND	ND	ND	ND	ND
SC-4	19-May-16	NE Base	ND	ND	ND	ND	ND	ND	ND	ND
SC-5	19-May-16	NC Base	ND	ND	ND	ND	ND	ND	ND	ND
SC-6	19-May-16	NW Base	ND	ND	ND	ND	ND	ND	ND	ND
SC-7	19-May-16	Center Excavation	ND	ND	ND	ND	ND	ND	ND	ND
SC-8	19-May-16	West Wall	ND	ND	ND	ND	ND	ND	ND	ND
SC-9	19-May-16	SW base	ND	ND	ND	ND	ND	ND	410	410
SC-10	19-May-16	SC base	ND	ND	ND	ND	ND	ND	ND	ND
SC-11	19-May-16	SE base	ND	ND	ND	ND	ND	ND	ND	ND
SC-9	6-Jun-16	SW base	ND	ND	ND	ND	ND	ND	ND	ND

NE-not established

ND-not detected above laboratory reporting limits



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

May 31, 2016

Debbie Watson

WPX Energy 721 S Main Ave

Aztec, NM 87410

TEL: (505) 333-1880

FAX

RE: Rita Com 004

OrderNo.: 1605981

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 11 sample(s) on 5/20/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

Only

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1605981

Date Reported: 5/31/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy

Client Sample ID: SC-1

Project: Rita Com 004

Collection Date: 5/18/2016 5/19/2016 12:15:00 PM

Lab ID: 1605981-001

Received Date: 5/20/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst:	КЈН
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	5/25/2016 11:13:55 AM	25464
Surr: DNOP	112	70-130	%Rec	1	5/25/2016 11:13:55 AM	25464
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/24/2016 10:19:45 PM	25441
Surr: BFB	106	80-120	%Rec	1	5/24/2016 10:19:45 PM	25441
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.025	mg/Kg	1	5/24/2016 10:19:45 PM	25441
Toluene	ND	0.050	mg/Kg	1	5/24/2016 10:19:45 PM	25441
Ethylbenzene	ND	0.050	mg/Kg	1	5/24/2016 10:19:45 PM	25441
Xylenes, Total	ND	0.099	mg/Kg	1	5/24/2016 10:19:45 PM	25441
Surr: 4-Bromofluorobenzene	106	80-120	%Rec	1	5/24/2016 10:19:45 PM	25441

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1605981

Date Reported: 5/31/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy

Client Sample ID: SC-2

Project: Rita Com 004

Collection Date: 5/18/2016 5/19/2016 12:17:00 PM

Lab ID: 1605981-002 Matrix: SOIL

Received Date: 5/20/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	;			Analyst:	КЈН
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	5/25/2016 11:35:42 AM	25464
Surr: DNOP	114	70-130	%Rec	1	5/25/2016 11:35:42 AM	25464
EPA METHOD 8015D: GASOLINE RANG	E				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/24/2016 10:43:18 PM	25441
Surr: BFB	107	80-120	%Rec	1	5/24/2016 10:43:18 PM	25441
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.025	mg/Kg	1	5/24/2016 10:43:18 PM	25441
Toluene	ND	0.049	mg/Kg	1	5/24/2016 10:43:18 PM	25441
Ethylbenzene	ND	0.049	mg/Kg	1	5/24/2016 10:43:18 PM	25441
Xylenes, Total	ND	0.098	mg/Kg	1	5/24/2016 10:43:18 PM	25441
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	1	5/24/2016 10:43:18 PM	25441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1605981

Date Reported: 5/31/2016

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: SC-3

CLIENT: WPX Energy
Project: Rita Com 004

Collection Date: 5/18/2016 5/19/16 12:20:00 PM())

Lab ID: 1605981-003

Received Date: 5/20/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst:	KJH
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	5/25/2016 11:57:17 AM	25464
Surr: DNOP	82.9	70-130	%Rec	1	5/25/2016 11:57:17 AM	25464
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/24/2016 11:06:43 PM	25441
Surr: BFB	109	80-120	%Rec	1	5/24/2016 11:06:43 PM	25441
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.023	mg/Kg	1	5/24/2016 11:06:43 PM	25441
Toluene	ND	0.046	mg/Kg	1	5/24/2016 11:06:43 PM	25441
Ethylbenzene	ND	0.046	mg/Kg	1	5/24/2016 11:06:43 PM	25441
Xylenes, Total	ND	0.093	mg/Kg	1	5/24/2016 11:06:43 PM	25441
Surr: 4-Bromofluorobenzene	109	80-120	%Rec	1	5/24/2016 11:06:43 PM	25441

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1605981

Date Reported: 5/31/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy

Client Sample ID: SC-4

Project: Rita Com 004

1605981-004

Lab ID:

Collection Date: 5/18/2016 5/19/2016 12:22:00

PM Received Date: 5/20/2016 8:00:00 AM

Daw

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst:	KJH
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	5/25/2016 12:18:58 PM	25464
Surr: DNOP	84.4	70-130	%Rec	1	5/25/2016 12:18:58 PM	25464
EPA METHOD 8015D: GASOLINE RAN	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/24/2016 11:30:05 PM	25441
Surr: BFB	107	80-120	%Rec	1	5/24/2016 11:30:05 PM	25441
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.023	mg/Kg	1	5/24/2016 11:30:05 PM	25441
Toluene	ND	0.046	mg/Kg	1	5/24/2016 11:30:05 PM	25441
Ethylbenzene	ND	0.046	mg/Kg	1	5/24/2016 11:30:05 PM	25441
Xylenes, Total	ND	0.093	mg/Kg	1	5/24/2016 11:30:05 PM	25441
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	1	5/24/2016 11:30:05 PM	25441

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 4 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1605981

Date Reported: 5/31/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy

Client Sample ID: SC-5

Project: Rita Com 004

Collection Date: 5/18/2016 5/19/2016 12:25:00 PM

Lab ID: 1605981-005

Received Date: 5/20/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst:	КЈН
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/25/2016 12:40:37 PM	25464
Surr: DNOP	92.2	70-130	%Rec	1	5/25/2016 12:40:37 PM	25464
EPA METHOD 8015D: GASOLINE RAN	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/24/2016 11:53:26 PM	25441
Surr: BFB	107	80-120	%Rec	1	5/24/2016 11:53:26 PM	25441
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.024	mg/Kg	1	5/24/2016 11:53:26 PM	25441
Toluene	ND	0.048	mg/Kg	1	5/24/2016 11:53:26 PM	25441
Ethylbenzene	ND	0.048	mg/Kg	1	5/24/2016 11:53:26 PM	25441
Xylenes, Total	ND	0.096	mg/Kg	1	5/24/2016 11:53:26 PM	25441
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	1	5/24/2016 11:53:26 PM	25441

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1605981

Date Reported: 5/31/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy

Client Sample ID: SC-6

Project: Rita Com 004

Collection Date: 5/18/2016 5/19/2016 12:28:00 PM

Lab ID: 1605981-006

Received Date: 5/20/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	3			Analyst:	КЈН
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	5/25/2016 1:02:20 PM	25464
Surr: DNOP	71.1	70-130	%Rec	1	5/25/2016 1:02:20 PM	25464
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/25/2016 12:16:56 AM	25441
Surr: BFB	108	80-120	%Rec	1	5/25/2016 12:16:56 AM	25441
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.024	mg/Kg	1	5/25/2016 12:16:56 AM	25441
Toluene	ND	0.047	mg/Kg	1	5/25/2016 12:16:56 AM	25441
Ethylbenzene	ND	0.047	mg/Kg	1	5/25/2016 12:16:56 AM	25441
Xylenes, Total	ND	0.095	mg/Kg	1	5/25/2016 12:16:56 AM	25441
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	1	5/25/2016 12:16:56 AM	25441

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1605981

Date Reported: 5/31/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy

Client Sample ID: SC-7

Project: Rita Com 004

Collection Date: 5/18/2016 5/19/2016 12:32:00 PM

Lab ID: 1605981-007

Matrix: SOIL Received Date: 5/20/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst:	КЈН
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/26/2016 12:23:42 PM	25464
Surr: DNOP	76.0	70-130	%Rec	1	5/26/2016 12:23:42 PM	25464
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/25/2016 1:50:22 AM	25441
Surr: BFB	110	80-120	%Rec	1	5/25/2016 1:50:22 AM	25441
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.023	mg/Kg	1	5/25/2016 1:50:22 AM	25441
Toluene	ND	0.046	mg/Kg	1	5/25/2016 1:50:22 AM	25441
Ethylbenzene	ND	0.046	mg/Kg	1	5/25/2016 1:50:22 AM	25441
Xylenes, Total	ND	0.092	mg/Kg	1	5/25/2016 1:50:22 AM	25441
Surr: 4-Bromofluorobenzene	111	80-120	%Rec	1	5/25/2016 1:50:22 AM	25441

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 7 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1605981

Date Reported: 5/31/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy

Client Sample ID: SC-8

Project: Rita Com 004

Collection Date: 5/18/2016 5/19/2016 12:35:00 PM

Lab ID: 1605981-008

Received Date: 5/20/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	NGE ORGANICS	3			Analyst	КЈН
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	5/25/2016 1:45:39 PM	25464
Surr: DNOP	105	70-130	%Rec	1	5/25/2016 1:45:39 PM	25464
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/25/2016 2:13:40 AM	25441
Surr: BFB	108	80-120	%Rec	1	5/25/2016 2:13:40 AM	25441
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.024	mg/Kg	1	5/25/2016 2:13:40 AM	25441
Toluene	ND	0.047	mg/Kg	1	5/25/2016 2:13:40 AM	25441
Ethylbenzene	ND	0.047	mg/Kg	1	5/25/2016 2:13:40 AM	25441
Xylenes, Total	ND	0.095	mg/Kg	1	5/25/2016 2:13:40 AM	25441
Surr: 4-Bromofluorobenzene	109	80-120	%Rec	1	5/25/2016 2:13:40 AM	25441

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 8 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1605981

Date Reported: 5/31/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy

Client Sample ID: SC-9

Project: Rita Com 004

Collection Date: 5/18/2016 5/19/2016 12:40:00 PM

Lab ID: 1605981-009

Received Date: 5/20/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	3			Analyst	КЈН
Diesel Range Organics (DRO)	410	9.7	mg/Kg	1	5/25/2016 2:07:15 PM	25464
Surr: DNOP	101	70-130	%Rec	1	5/25/2016 2:07:15 PM	25464
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/25/2016 2:37:01 AM	25441
Surr: BFB	109	80-120	%Rec	1	5/25/2016 2:37:01 AM	25441
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	5/25/2016 2:37:01 AM	25441
Toluene	ND	0.048	mg/Kg	1	5/25/2016 2:37:01 AM	25441
Ethylbenzene	ND	0.048	mg/Kg	1	5/25/2016 2:37:01 AM	25441
Xylenes, Total	ND	0.096	mg/Kg	1	5/25/2016 2:37:01 AM	25441
Surr: 4-Bromofluorobenzene	110	80-120	%Rec	1	5/25/2016 2:37:01 AM	25441

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 9 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1605981

Date Reported: 5/31/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy

Client Sample ID: SC-10

Project: Rita Com 004

Collection Date: 5/18/2016 5/19/2016 12:42:00 PM

Lab ID: 1605981-010

Received Date: 5/20/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	КЈН
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	5/25/2016 2:50:34 PM	25464
Surr: DNOP	76.1	70-130	%Rec	1	5/25/2016 2:50:34 PM	25464
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/25/2016 3:00:23 AM	25441
Surr: BFB	107	80-120	%Rec	1	5/25/2016 3:00:23 AM	25441
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.025	mg/Kg	1	5/25/2016 3:00:23 AM	25441
Toluene	ND	0.050	mg/Kg	1	5/25/2016 3:00:23 AM	25441
Ethylbenzene	ND	0.050	mg/Kg	1	5/25/2016 3:00:23 AM	25441
Xylenes, Total	ND	0.10	mg/Kg	1	5/25/2016 3:00:23 AM	25441
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	1	5/25/2016 3:00:23 AM	25441

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 10 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1605981

Date Reported: 5/31/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy

Client Sample ID: SC-11

Project: Rita Com 004

Collection Date: 5/18/2016 5/19/2016 12:45:00

Lab ID: 1605981-011

PM Received Date: 5/20/2016 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAM	NGE ORGANICS	3			Analyst	: KJH
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	5/28/2016 5:17:08 AM	25528
Surr: DNOP	87.4	70-130	%Rec	1	5/28/2016 5:17:08 AM	25528
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/25/2016 3:24:04 AM	25441
Surr: BFB	105	80-120	%Rec	1	5/25/2016 3:24:04 AM	25441
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	5/25/2016 3:24:04 AM	25441
Toluene	ND	0.048	mg/Kg	1	5/25/2016 3:24:04 AM	25441
Ethylbenzene	ND	0.048	mg/Kg	1	5/25/2016 3:24:04 AM	25441
Xylenes, Total	ND	0.096	mg/Kg	1	5/25/2016 3:24:04 AM	25441
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	5/25/2016 3:24:04 AM	25441

Matrix: SOIL

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 11 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

SampType: LCS

WO#:

1605981

31-May-16

Client: Project: WPX Energy

Project: Rita Com 004

Sample ID LCS-25464

Client ID: LCSS Batch ID: 25464 RunNo: 34465 Prep Date: 5/24/2016 Analysis Date: 5/25/2016 SeqNo: 1062889 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result 54 10 50.00 0 107 62.6 124

TestCode: EPA Method 8015M/D: Diesel Range Organics

 Diesel Range Organics (DRO)
 54
 10
 50.00
 0
 107
 62.6
 124

 Surr: DNOP
 5.9
 5.000
 117
 70
 130

SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Sample ID MB-25464 Client ID: PBS Batch ID: 25464 RunNo: 34465 Prep Date: 5/24/2016 Analysis Date: 5/25/2016 SeqNo: 1062891 Units: mg/Kg Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual ND 10 Diesel Range Organics (DRO) Surr: DNOP 11 10.00 106 70 130

Sample ID LCS-25528 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 25528 RunNo: 34525 Analysis Date: 5/27/2016 SeqNo: 1064914 Prep Date: 5/26/2016 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 50.00 0 96.0 62 6 124 48 Sur: DNOP 4.3 5.000 86.7 70 130

Sample ID MB-25528 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 25528 RunNo: 34525 Prep Date: 5/26/2016 Analysis Date: 5/27/2016 SeqNo: 1064915 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10

iesel Range Organics (DRO) ND 10 Surr: DNOP 9.5 10.00 95.5 70 130

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits

Page 12 of 14

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1605981

31-May-16

Client:

WPX Energy

Project:

Rita Com 004

Sample ID MB-25441

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

LowLimit

Client ID:

PBS

Batch ID: 25441

RunNo: 34440

Prep Date: 5/23/2016

Analysis Date: 5/24/2016

SeqNo: 1062221

Result PQL Analyte 5.0 SPK value SPK Ref Val %REC Units: mg/Kg HighLimit

%RPD **RPDLimit**

Qual

Gasoline Range Organics (GRO)

ND 1100

1000

106

120

Surr: BFB

Sample ID LCS-25441

Client ID: LCSS

SampType: LCS Batch ID: 25441 TestCode: EPA Method 8015D: Gasoline Range

RunNo: 34440

Units: mg/Kg

Prep Date:

5/23/2016

Analysis Date: 5/24/2016

SeqNo: 1062222

HighLimit

Qual

Analyte Gasoline Range Organics (GRO) Surr: BFB

Result PQL 22 5.0

1200

SPK value SPK Ref Val %REC 25.00 1000

90.0 118

LowLimit 80

%RPD 120 120

RPDLimit

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit

RPD outside accepted recovery limits R

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits Page 13 of 14

P Sample pH Not In Range

Reporting Detection Limit RL Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1605981

31-May-16

Client: Project:

WPX Energy Rita Com 004

Sample ID MB-25441

SampType: MBLK

Result

ND

ND

ND

ND

1.1

TestCode: EPA Method 8021B: Volatiles

Client ID: PBS

Batch ID: 25441

RunNo: 34440

SPK value SPK Ref Val %REC LowLimit

Prep Date: 5/23/2016

Analysis Date: 5/24/2016 PQL

0.025

0.050

0.050

0.10

SeqNo: 1062259

Units: mg/Kg

HighLimit

%RPD **RPDLimit**

Qual

Qual

Benzene Toluene Ethylbenzene

Prep Date:

Analyte

Xylenes, Total Surr: 4-Bromofluorobenzene

Sample ID LCS-25441

5/23/2016

SampType: LCS

1.000

110

120

TestCode: EPA Method 8021B: Volatiles

Client ID:

LCSS

Batch ID: 25441

Analysis Date: 5/24/2016

RunNo: 34440 SeqNo: 1062260

Units: mg/Kg

HighLimit %RPD **RPDLimit** Qual

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit 0.025 1.000 109 75.3 123 Benzene 1.1 0 0.050 1.000 0 106 80 124 Toluene 1.1 0.050 1.000 0 102 82.8 121 Ethylbenzene 1.0 0 Xylenes, Total 3.0 0.10 3.000 102 83.9 122 1.000 120 Surr: 4-Bromofluorobenzene 1.2

Sample ID 1605981-001AMS

SampType: MS

TestCode: EPA Method 8021B: Volatiles

Client ID:

SC-1

5/23/2016

Batch ID: 25441

RunNo: 34440

Units: ma/Ka

Prep Date: 5/23/2016	Analysis D)ate: 5/	24/2016	5	SeqNo: 1	062262	Units: mg/k	(g	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit
Benzene	1.1	0.025	0.9911	0	107	71.5	122		
Toluene	1.0	0.050	0.9911	0.01055	105	71.2	123		
Ethylbenzene	1.0	0.050	0.9911	0	104	75.2	130		
Xylenes, Total	3.1	0.099	2.973	0	104	72.4	131		
Surr: 4-Bromofluorobenzene	1.2		0.9911		118	80	120		

Sample ID 1605981-001AMSD

SampType: MSD

TestCode: EPA Method 8021B: Volatiles

Client ID: SC-1

Batch ID: 25441

RunNo: 34440

Prep Date: 5/23/2016	Analysis I	Date: 5/	24/2016	8	SeqNo: 1	062263	Units: mg/F	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.024	0.9551	0	102	71.5	122	8.59	20	
Toluene	0.98	0.048	0.9551	0.01055	102	71.2	123	6.34	20	
Ethylbenzene	0.96	0.048	0.9551	0	101	75.2	130	6.65	20	
Xylenes, Total	2.9	0.096	2.865	0	101	72.4	131	6.28	20	
Surr: 4-Bromofluorobenzene	1.1		0.9551		116	80	120	0	0	

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Page 14 of 14

P Sample pH Not In Range

Reporting Detection Limit

Sample container temperature is out of limit as specified



Hall Environmental Analyzis Laboratory 4901 Hawkus NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

RcptNo: 1 Client Name: WPX ENERGY Work Order Number: 1605981 Received by/date: 05/2011 5/20/2016 8:00:00 AM Logged By: **Lindsay Mangin** 5/20/2016 12:49:17 PM Completed By: **Lindsay Mangin** Reviewed By: TO Chain of Custody Yes No Not Present V 1 Custody seals intact on sample bottles? No Not Present Yes V 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No NA Yes V 4. Was an attempt made to cool the samples? No NA 5. Were all samples received at a temperature of >0° C to 5.0°C Yes V Yes V No Sample(s) in proper container(s)? No 🗌 Yes V 7. Sufficient sample volume for indicated test(s)? No . 8. Are samples (except VOA and ONG) properly preserved? Yes V Yes NA 9. Was preservative added to bottles? No V No 🗌 No VOA Vials V 10. VOA viais have zero headspace? Yes Yes No V 11. Were any sample containers received broken? # of preserved bottles checked Yes V No 🗌 for pH: 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No Yes V 13. Are matrices correctly identified on Chain of Custody? No 🗌 Yes V 14 Is it clear what analyses were requested? Checked by: 15. Were all holding times able to be met? Yes V No (If no, notify customer for authorization.) Special Handling (if applicable) 16. Was client notified of all discrepancies with this order? Yes __ No _ NA V Person Notified: Date By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By 1.0 Good

Ch	ain-o	f-Cust	tody Record	Turn-Around 1	ime:		-	HALL ENVIRONMENTAL
ient:	WPX Er	nergy		X Standard	□ Rush			ANALYSIS LABORATORY
				Project Name:				www.hallenvironmental.com
ailing Addr	ess:		PO Box 640	Rita Com	#004			4901 Hawkins NE - Albuquerque, NM 87109
			ztec, NM 87410	Project #:				Tel. 505-345-3975 Fax 505-345-4107
none #:	505-333		5-386-9693					Analysis Request
nail or Fax	#:	deborah.	watson@wpxenergy.com	Project Manag	er:	1		
VGC Packa Standard	ge:		☐ Level 4 (Full Validation)	D. Watson				NLY NLY
creditation	1:			Sampler: D Wa	The state of the s			00
NELAP		☐ Other		On Ice:	AND DESCRIPTION AND ADDRESS OF THE PARTY.	□ No		Day Day
EDD (Typ	e)			Sample Temp	erature: / 0			Or Or
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX (8021)	TPH (8015) GRO/DRO ONLY Air Bubbles (Y or N)
5.18.16	1215	Soil	54-1	1-402	cold	-001	X	X
1	1217	1	SC-2		1	-002	X	X
	1220		Sc-3			-003	Y	X
	1222		5(-4			-004	K	X
	1225		8(-5			-005	X	X
	1228		55-6			-006	X	X
	1232		SC-7			-007	X	X
	1235		SC-8			-108	X	X
	1240		SC -9			-009	X	X
	1242		SC-10			-010	X	X
1	1245	7	SCTI			-011	X	X X
ite:	Time:	Relinquish	ed by:	Received by:		Date Time	Rem	marks:
10 16 ite;	Time:	Relinquish	roch Water	Received by:	Dreke	5/19/10 1610 Date Time	-	
5/19/14	2020	On	ustreli alla	ave.	Cent (08/29/16 0800		

If necessary, samples submitted to Hall Environmental may be subcontracted to the analytical report.



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

June 13, 2016

Debbie Watson

WPX Energy

721 S Main Ave

Aztec, NM 87410

TEL: (505) 333-1880

FAX

RE: Rita Com 004

OrderNo.: 1606252

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/7/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1606252

Date Reported: 6/13/2016

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: SC-9

CLIENT: WPX Energy
Project: Rita Com 004

Collection Date: 6/6/2016 11:53:00 AM

Lab ID: 1606252-001

Matrix: MEOH (SOIL) Received Date: 6/7/2016 7:40:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS	3			Analysi	JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	6/7/2016 11:16:03 AM	25700
Surr: DNOP	70.8	70-130	%Rec	1	6/7/2016 11:16:03 AM	25700
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	6/7/2016 10:48:46 AM	25678
Surr: BFB	103	80-120	%Rec	1	6/7/2016 10:48:46 AM	25678
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.020	mg/Kg	1	6/7/2016 10:48:46 AM	25678
Toluene	ND	0.041	mg/Kg	1	6/7/2016 10:48:46 AM	25678
Ethylbenzene	ND	0.041	mg/Kg	1	6/7/2016 10:48:46 AM	25678
Xylenes, Total	ND	0.082	mg/Kg	1	6/7/2016 10:48:46 AM	25678
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	6/7/2016 10:48:46 AM	25678

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 4
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606252

13-Jun-16

Client:

WPX Energy

Project:

Rita Com 004

Sample ID MB-25700	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch	ID: 25	700	F	RunNo: 3	4721				
Prep Date: 6/7/2016	Analysis D	ate: 6/	7/2016	8	SeqNo: 1	071404	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	10		10.00		101	70	130			

Sample ID LCS-25700	Samp	ype: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batcl	n ID: 25	700	F	RunNo: 3	4721				
Prep Date: 6/7/2016	Analysis D)ate: 6/	7/2016	5	SeqNo: 1	071405	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	93.0	62.6	124			
Surr: DNOP	4.5		5 000		90.5	70	130			

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 2 of 4

P Sample pH Not In Range

RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606252

13-Jun-16

Client:

WPX Energy

Project:

Rita Com 004

Sample ID MB-25678

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

PBS

Batch ID: 25678

PQL

5.0

RunNo: 34739

%REC

%RPD

Prep Date: 6/6/2016 Analyte

Analysis Date: 6/7/2016

SeqNo: 1072052

Units: mg/Kg

RPDLimit

Qual

Gasoline Range Organics (GRO) Surr: BFB

Result ND 1000

1000

102

120

HighLimit

Sample ID LCS-25678

Client ID: LCSS

SampType: LCS Batch ID: 25678

RunNo: 34739

LowLimit

Prep Date: 6/6/2016

SeqNo: 1072053

Units: mg/Kg

Analyte Gasoline Range Organics (GRO) Analysis Date: 6/7/2016 Result PQL

SPK value SPK Ref Val

SPK value SPK Ref Val

%REC LowLimit 91.6

HighLimit 80

%RPD **RPDLimit**

Qual

Surr: BFB

23 1100 5.0 25.00 1000

0 110

80

TestCode: EPA Method 8015D: Gasoline Range

120

120

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix В Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Page 3 of 4

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606252

13-Jun-16

Client:

WPX Energy

Project:

Rita Com 004

Sample ID MB-25678	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: PBS	Batcl	n ID: 25	678	F	RunNo: 3	4739				
Prep Date: 6/6/2016	Analysis D)ate: 6/	7/2016	8	SeqNo: 1	072068	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID LCS-25678	Sampl	Type: LC	s	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batcl	h ID: 25	678	F	RunNo: 3	4739				
Prep Date: 6/6/2016	Analysis D	Date: 6/	7/2016	5	SeqNo: 1	072069	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.0	75.3	123			
Toluene	0.94	0.050	1.000	0	94.3	80	124			
Ethylbenzene	0.96	0.050	1.000	0	95.6	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	95.8	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 4 of 4

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	WPX ENERGY	,	Work Order Number:	16062	52			Rcpt	No: 1	
Received by/dat	- 1/K									
	17	00	107/16			Andre	Man			
Logged By:	Lindsay Man		7/2016 7:40:00 AM			03	III III			
Completed By:	Lindsay Man		7/2016 7:53:10 AM			Juney	Horge			
Reviewed By:	Sh	04	6/07/16							
Chain of Cus	stody									
1. Custody sea	als intact on sam	ple bottles?		Yes				Not Present		
2. Is Chain of	Custody complet	e?		Yes		No		Not Present		
3. How was the	e sample deliver	ed?		Cour	ier					
Log In										
4. Was an atte	empt made to co	ol the samples?		Yes	*	No		NA	Π	
5. Were all sa	mples received a	at a temperature of	>0° C to 6.0°C	Yes		No	Ľ]	NA (1	
6. Sample(s)	in proper contain	er(s)?		Yes		No	[_]			
7. Sufficient sa	ample volume for	indicated test(s)?		Yes		No				
8. Are sample:	s (except VOA a	nd ONG) properly p	reserved?	Yes		No				
9. Was preser	vative added to t	oottles?		Yes		No		NA		
10.VOA vials h	nave zero headsp	ace?		Yes		No		No VOA Vials	₽	
		s received broken?		Yes		No				
								# of preserved bottles checked	i	
	work match bottl			Yes	*	No	l J	for pH:	<2 or >12 unless	noted)
	epancies on chai	n of custody) fied on Chain of Cu	stody?	Yes		No	П	Adjusted		Hotody
	hat analyses wer		olody.	Yes		7317130	1.1			
15. Were all ho	Iding times able customer for au	to be met?		Yes		No	1 !	Checked	by:	
(ii iio, iiotii)	, dustomer for de	anonization.,								
Special Hand	dling (if appli	icable)								
16. Was client	notified of all disc	crepancies with this	order?	Yes	[_]	No		NA		
Perso	on Notified:		Date:		-					
By W	hom:		Via:	eMa	ail []	Phone [Fax	[] In Person		
Rega										
Client	t Instructions:									
17. Additional	remarks:									
18. Cooler Inf			T-							
Cooler N		Condition Seal Good Yes	Intact Seal No	Seal D	ate	Signed	Ву			
								3		

CI	nain-o	f-Cust	tody Record	Turn-Around 7	ime:				HALL F	NVTRO	NMENT	FAI
ient:	WPX E	nergy		□ Standard	X Rush	same day	-				BORAT	
				Project Name:		0				allenvironm		OK!
ailing Add	Iress:		PO Box 640	Rita Com #004	1			4001 H			rque, NM 87	4nn
		Α.		Project #:	*		1			The state of the s		
	EOE 222		ztec, NM 87410					Tel. 50	5-345-3975	ysis Reque	05-345-4107	
nail or Fa			5-386-9693	Project Manag	105				Allai	ysis Reque	50	
-		deooran	watson@woxenergy.com	D. Watson	jer.							
VQC Pack Standard			□ Level 4 (Full Validation)	D. Watson								
creditatio			Level + (I dil validation)	Sampler: D W	atenn		1	O				
NELAP	<i>n</i> 1.	□ Other		On Ice:	☑ Yes	□ No		8				
EDD (Ty	pe)	1001100110000		A STATE OF THE PARTY OF THE PAR	erature: 21	Annual Control of the		O/O				Z
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX (8021)	TPH (8015) GRO/DRO ONLY				Air Bubbles (Y or N)
6.6.16	11:53	soil	SC-9	1-4oz	cold	-001	х	x				
				La La Carte		*						
felse	Time: 1729 Time: 1821	Relinquishe	n Water	Received by:	Locke Colo	Date Time 4/4/16 1729 Pate Time FILE 0740 res as notice of this possibility		narks:	data will be a			

District 1 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 04106-0552 Form C-138
Revised August 1, 2011

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

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

	REQUEST	FOR	APPROVAL	TO ACCEPT	SOLID	WASTI
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REQUEST FOR AFTROVAL TO ACCEPT SOLID WASTE
1. Generator Name and Address:
WPX Energy, PO Box 640, Aztec NM Requested by: Chad Comer
2. Originating Site:
Rita #004 (API # 30-039-23378) Rio Arriba, NM April / May 2016
3. Location of Material (Street Address, City, State or ULSTR): Unit Letter F, Section 08, T23N, R06W
4. Source and Description of Waste: Hydrocarbon impacted soils associated with a historic release. Estimated Volume 12 yd3 yd3 / bbls Known Volume (to be entered by the operator at the end of the haul) 2090 (yd3 bbls
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, Deborah Watson where the presentative or authorized agent for WPX Energy Co do hereby
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)
RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. **Operator Use Only: Waste Acceptance Frequency Monthly Meekly Per Load**
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
I, Deborah Watson Watson, representative for WPX Energy Co do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.
5. Transporter: MMT, Sweazea, 3 E Energy, Jacca, Tern co, Adobe Varies
OCD Permitted Surface Waste Management Facility
Name and Facility Permit #:Envirotech, Inc. Soil Remediation Facility Permit# NM 01-0011 Address of Facility:#43 Road 7175, south of Bloomfield, Hilltop, NM
Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other
Waste Acceptance Status:
APPROVED DENIED (Must Be Maintained As Permanent Record)
PRINT NAME: Greg Crabtree TITLE: Environmental Manager DATE: 4/25/16
SIGNATURE: TELEPHONE NO.: 505-632-0615 Surface Waste Management Facility Authorized Agent