3R-1040

W. Lybrook Well Pad #6

Work Plan Approval/General Correspondence

Date 2016

(22)

Smith, Cory, EMNRD

From: Smith, Cory, EMNRD
Sent: Monday, August 15, 2016 8:59 AM
To: 'Watson, Debbie'; Diemer, Katherina
Cc: Smith, Lucas; Decker, Lisa; Felix, Andrea; VanDenBerg, Randy; Riley, Heather; Foeller, Christopher; Fields, Vanessa, EMNRD; Powell, Brandon, EMNRD; Perrin, Charlie, EMNRD
Subject: RE: Remediation Plan W Lybrook Unit 707H Well Pad
Attachments: Remediation Plan 707H 080816.pdf

Good morning Debbie,

The OCD has approved the Remediation Plan for the W. Lybrook Unit 707H well pad submitted on August 9, 2016, with the following condition of approval.

The Recommend Remediation Action Levels (RRAL) as described by the New Mexico Oil Conservation Division (OCD) Guidelines for Remediation of Leaks and Spills, and Release (August 1993) is to be used as a guide on all federal, state and fee lands when remediating contaminants resulting from leaks, spills and releases of oilfield wastes or products. The **Total** Petroleum Hydrocarbon (TPH) recommend remediation levels are to include DRO, GRO and the MRO/ORO ranges of hydrocarbons. The OCD also requires that corrective actions be taken for leaks, spills or releases of any material which has a reasonable probability to injure or be detrimental to public health, fresh waters, animal or plant life, or property or unreasonably interfere with the public welfare or use of the property.

With that in mind additional remediation may be required based upon the results of the conformation sampling.

If you have any additional questions please give me a call.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Watson, Debbie [mailto:Deborah.Watson@wpxenergy.com]
Sent: Tuesday, August 09, 2016 3:49 PM
To: Smith, Cory, EMNRD; Fields, Vanessa, EMNRD; Diemer, Katherina; rafields@blm.gov; Joe, Maureen
Cc: Smith, Lucas; Decker, Lisa; Felix, Andrea; VanDenBerg, Randy; Riley, Heather; Foeller, Christopher
Subject: Remediation Plan W Lybrook Unit 707H Well Pad

Good Afternoon,

Attached is the Remediation Plan for the W Lybrook Unit #707H Well Pad.

Please contact me with any questions or for additional information. Thank you.

Have a great evening,

Remediation Plan West Lybrook Unit #707H Well Pad
W Lybrook Unit #707H, W Lybrook Unit #708H, W Lybrook Unit #709H,
W Lybrook Unit #747H, W Lybrook Unit #748H, and W Lybrook Unit #749
Unit Letter P, Section 12, Township 23N, Range 9W
San Juan County, New Mexico

This remediation plan is being submitted to Bureau of Land Management Farmington Field Office (BLM-FFO) and New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division (NMOCD) in response to a fire which occurred at the W Lybrook Unit #707H Well Pad. The proposed remediation activities are presented below.

Incident Description
On July 11, 2016, there was a fire at the W Lybrook Unit #707H Well Pad. The fire impacted 36 temporary storage tanks containing produced water and crude oil; most of the fluids contained in the impacted tanks were consumed by the fire. The government authorities in charge of the fire-fighting activities determined that the fire should be allowed to burn itself out, and the fire was extinguished on Thursday, July 14, 2016. The cause of the fire is currently under investigation. All fluids remained on the well pad.

Site Information
The W Lybrook Unit #707H Well Pad is located on Indian Allotted Lands along County Road 7890 near Nageezi, San Juan County, New Mexico. Wells also located on the W Lybrook Unit #707H Well Pad include: W Lybrook Unit #708H, W Lybrook Unit #709H, W Lybrook Unit #747H, W Lybrook Unit #748H, and W Lybrook Unit #749H. The legal description for the site is: Unit Letter P, Section 12, Township 23N, Range 9W, with GPS coordinates N36.236637 and W107.732892. The ignition point is approximated with GPS coordinates N36.236505, W107.732568.

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

Site Ranking and RRAL
In accordance with *New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), this site was assigned a ranking score of 30. Based on a ranking score of 30, Recommended Remediation Action Levels (RRAL) for impacted 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) as gasoline-range organics (GRO) and diesel range organics (DRO).

Depth to groundwater at the site is estimated to be less than 50 feet below ground surface (bgs) based on elevation differential between the site and Kimbeto Wash.

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.

Kimbeto Wash is located approximately 445 feet NNW from the estimated point of ignition.

Remedial Actions
Cleanup activities are being managed by Allied International Emergency, an emergency response and remediation service company. Cleanup activities at the site include:

- All tanks and equipment are being power-washed and cleaned prior to removal from the location. Washing activities are being limited to fire impacted areas on location, fluids are being collected. No fluid migration is expected outside of fire impacted area. No fluids will flow off location.
- Damaged and cleaned equipment is being dismantled and collected by the property owner or transported to a recycling/disposal facility.
- Impacted and residual fluids (waste crude oil and produced water) and tank washout fluid are being trucked off location to the disposal facility.
- Fire impacted soils are being mechanically excavated and removed from the location for disposal. It is estimated that approximately 4,500 cubic yards of impacted soil will be excavated from the location.
- Following removal of impacted soils, confirmation samples will be collected from within the fire impacted areas. If any sample exceeds the NMOCD RRAL for benzene, total BTEX and total TPH, further excavation will continue within the impacted area until soil sample analytical results are reported below the NMOCD RRAL.
- On July 27, 2016, the area beneath the meter skids (located within Area 1) was remediated. The meter skids were reset on July 28, 2016, following collection of one confirmation soil sample from the area documenting that RRAL standards were met.

Disposal Location
Tank washout and residual fluids (waste crude oil and produced water) are being collected and disposed of at Envirotech, Inc. Soil Remediation Facility, Permit #NM 01-0011, located at #43 Road 7175, south of Bloomfield, New Mexico.

Impacted soils are being disposed of at Envirotech, Inc. Soil Remediation Facility, Permit #NM 01-0011 located at #43 Road 7175, south of Bloomfield, New Mexico.

Non-hazardous waste is being disposed of at WCA Bondad Landfill, located at 1500 CR 318, Bondad, Colorado.

Soil Sampling
On July 28, 2016, one composite sample was collected from beneath the meter skids following remediation. Mr. Cory Smith, NMOCD, was onsite for collection of the sample (072816-1). The sample was submitted to Hall Environmental Analysis Laboratory for analysis of volatile organic compounds (VOC) per U.S. Environmental Protection Agency (USEPA) Method 8260B, TPH (as motor oil/lube oil range organics (MRO)/DRO/GRO) per USEPA Method 8015, and chlorides per USEPA Method 300.0.

On August 2, 2016, WPX met with Ms. Katherina Diemer, BLM-FFO, Ms. Anita Ahill, Federal Indian Minerals Office (FIMO), and Mr. Cory Smith, NMOCD, at the site to discuss cleanup activities and the proposed confirmation sampling plan. All parties agreed to the following sampling plan during the site meeting.

Once impacted soils have been remediated at the site, WPX will schedule confirmation sampling. WPX anticipates being able to provide notification at least 24-hours in advance of the confirmation sampling event to BLM, FIMO, and NMOCD. Confirmation sampling will consist of the collection of the following:

- Collection of 12 five-point composite samples collected from within the fire impacted area. Each sampling area (Areas 1 through 12) will measure approximately 100 to 105 feet in length by 80 feet wide. A sampling grid will be in place prior to sample collection. Samples will be analyzed for VOC per USEPA Method 8260B and TPH (as MRO/DRO/GRO) per USEPA Method 8015.

- Collection of three composite samples for analysis of RCRA 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) per USEPA SW 846. These samples will be collected from areas where temporary storage tanks, separators, piping, and pumping units were located. Metals-1 will be collected from within Areas 1 and 6, Metals-2 will be collected from within Areas 2 through 5, and Metals-3 will be collected from within Areas 9 and 11.

- Collection of one composite sample for analysis of chlorides per USEPA Method 300.0. This sample will be collected from within the produced water tank area. The produced water sample (PW-1) will be collected from within Area 4.

- One additional sample will be collected off-pad within the heat impacted area located northeast of the pad (Area 13). This sample will be analyzed for BTEX per USEPA Method 8015 and TPH (as MRO/DRO/GRO) per USEPA Method 8015.

Soil samples composited for laboratory analysis will be placed into laboratory supplied glassware, labeled, and shipped on ice to Hall Environmental Analysis Laboratory, Albuquerque, New Mexico. Proposed sample locations are identified on Figure 3.

Laboratory Analytical Results

On July 28, 2016, one confirmation soil sample was collected from within the impacted area below the meter skids (within Area 1). Analytical results for confirmation soil sample 072816-1 were reported as non-detect for VOC and TPH. The chloride concentration was reported at 45 mg/kg. Based on laboratory analytical results, no further sampling or remediation is planned beneath the meter skids. A copy of the analytical laboratory report is attached.

Reclamation

As part of final site reclamation, an estimated 4,500 cubic yards of soil for backfill will be hauled from Envirotech located South of Bloomfield, NM to the W Lybrook Unit #707H Well Pad. Soils hauled to the location for backfill will consist of clean virgin soils (not land-farmed, same soil type, texture, color, weed-free).

In addition, WPX will seed the off pad fire/heat impacted areas with native seed in order to revegetate in compliance with BLM requirements. This includes raking and tilling (as needed) and dispersing of an approved BLM seed mix. The reseeded areas will be monitored approximately 30 days later to determine if additional actions are needed. In the event of noxious weeds, a roustabout crew will remove weeds manually and the area will be seeded again.

Upon completion of activities, a final report will be prepared and submitted to BLM-FFO and NMOCD.

Attachments:

Figure 1. Topographic Map
Figure 2. Aerial Site Map
Figure 3. Proposed Soil Sample Location Map
Hall Environmental Laboratory Report (Order # 1607F33)

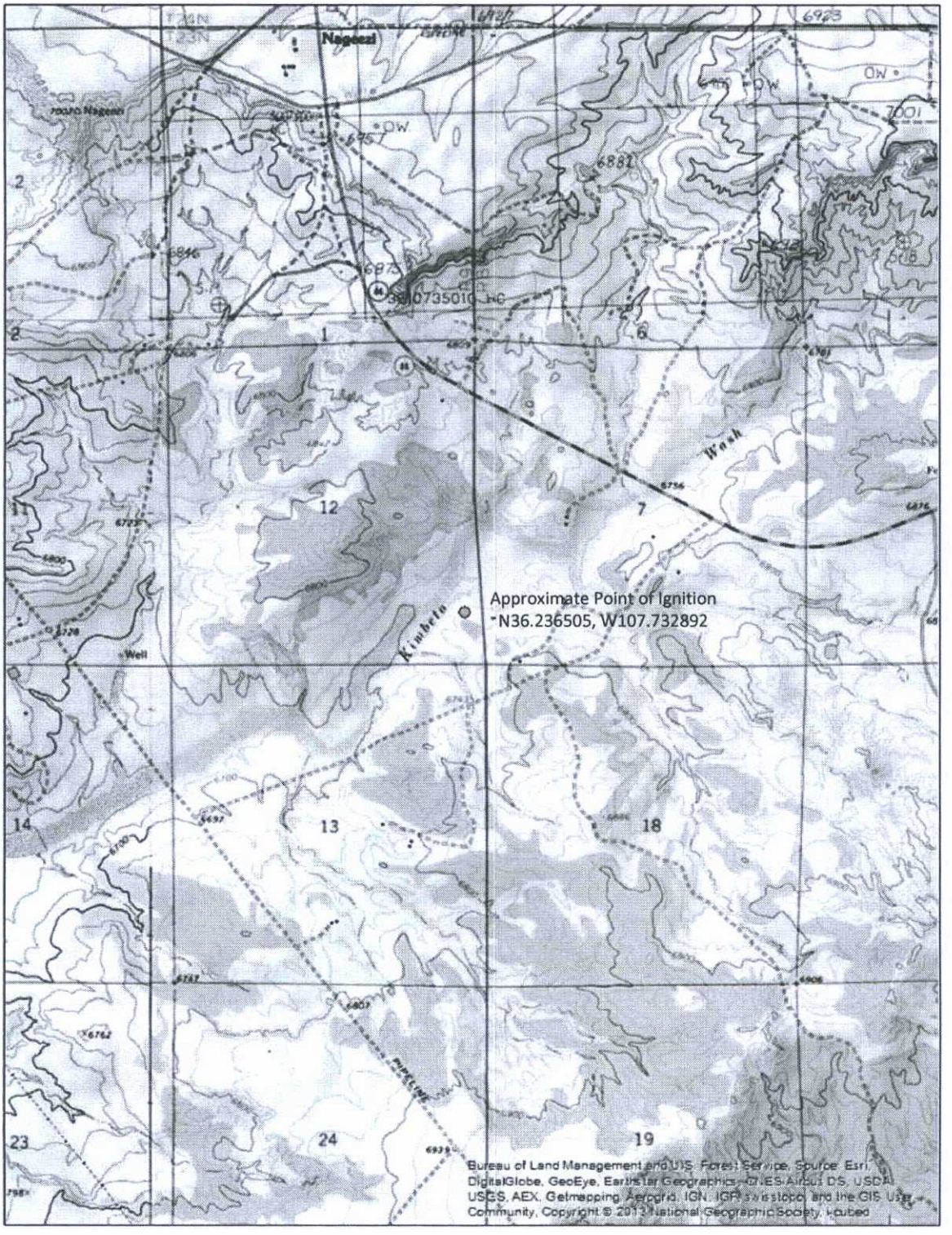

Figure 1. Topographic Map
W Lybrook Unit #707H Well Pad
Remediation Plan
Section 12, Township 23N, Range 09W
N36.236637, W107.732892
San Juan County, NM
Scale 1:24,000

Figure 2. Aerial Site Map
W Lybrook Unit #707H Well Pad
Remediation Plan
Section 12, Township 23N, Range 09W
N36.236637, W107.732892
San Juan County, NM

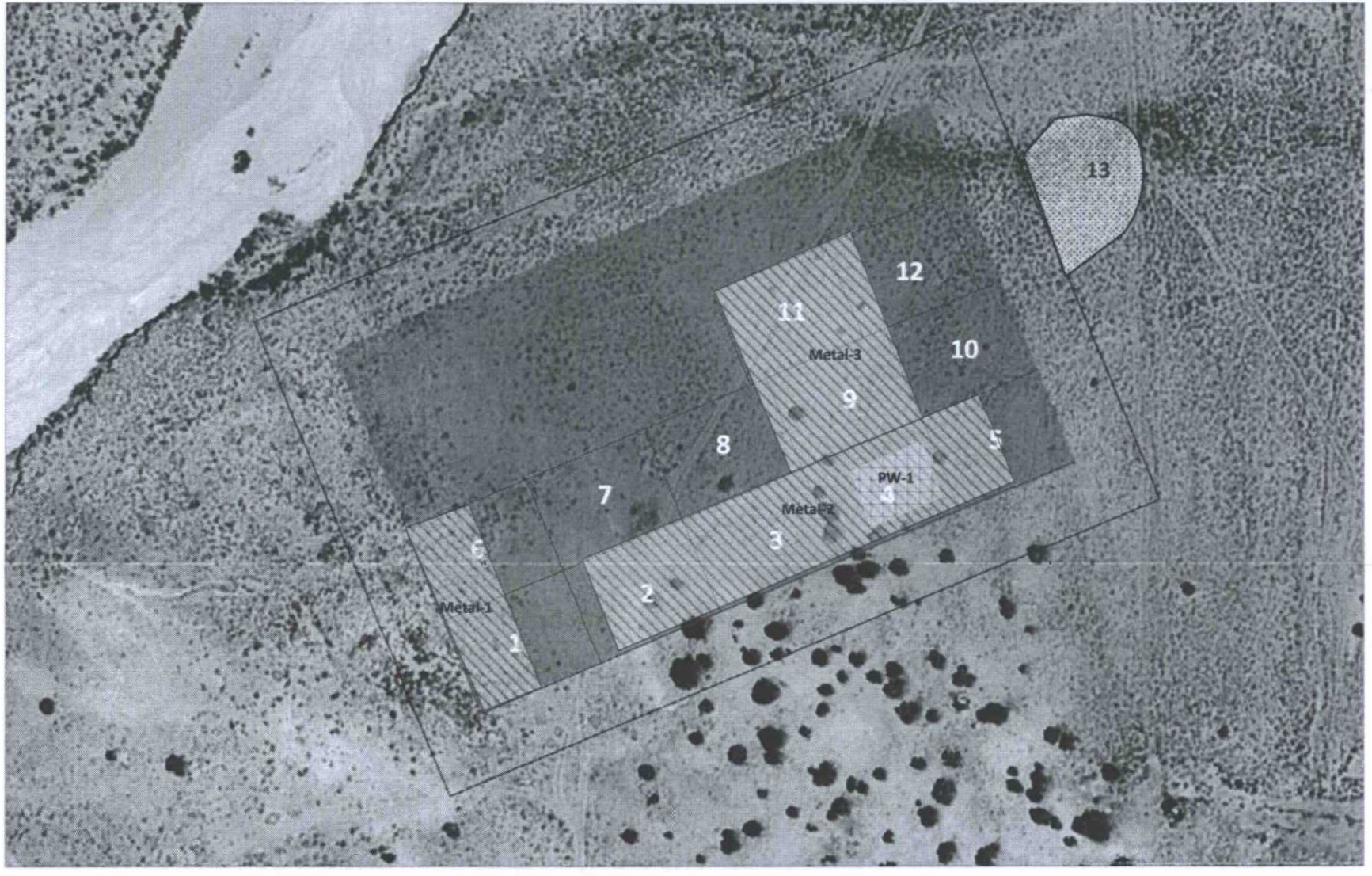

Figure 3. Proposed Soil Sample Location Map
Lybrook Unit #707H Well Pad
Remediation Plan
Section 12, Township 23N, Range 09W
N36.236637, W107.732892
San Juan County, NM

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

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

August 09, 2016

Debbie Watson

WPX Energy
721 S Main Ave
Aztec, NM 87410
TEL: (505) 333-1880
FAX

RE: WLU 6 Well Pad OrderNo.: 1607F33

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/29/2016 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
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1607F33**
Date Reported: **8/9/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy
Project: WLU 6 Well Pad
Lab ID: 1607F33-001 **Matrix:** SOIL

Client Sample ID: 072816-1 (meters)
Collection Date: 7/28/2016 9:56:00 AM
Received Date: 7/29/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	45	30		mg/Kg	20	8/2/2016 7:55:27 PM	26746
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	8/2/2016 10:12:58 PM	26715
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/2/2016 10:12:58 PM	26715
Surr: DNOP	93.6	70-130		%Rec	1	8/2/2016 10:12:58 PM	26715
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/1/2016 10:24:08 AM	26693
Surr: BFB	94.9	49.4-163		%Rec	1	8/1/2016 10:24:08 AM	26693
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Toluene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Ethylbenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Methyl tert-butyl ether (MTBE)	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,2,4-Trimethylbenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,3,5-Trimethylbenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,2-Dichloroethane (EDC)	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,2-Dibromoethane (EDB)	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Naphthalene	ND	0.092		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1-Methylnaphthalene	ND	0.18		mg/Kg	1	8/6/2016 4:20:29 AM	26693
2-Methylnaphthalene	ND	0.18		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Acetone	ND	0.69		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Bromobenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Bromodichloromethane	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Bromoform	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Bromomethane	ND	0.14		mg/Kg	1	8/6/2016 4:20:29 AM	26693
2-Butanone	ND	0.46		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Carbon disulfide	ND	0.46		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Carbon tetrachloride	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Chlorobenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Chloroethane	ND	0.092		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Chloroform	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Chloromethane	ND	0.14		mg/Kg	1	8/6/2016 4:20:29 AM	26693
2-Chlorotoluene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
4-Chlorotoluene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
cis-1,2-DCE	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
cis-1,3-Dichloropropene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,2-Dibromo-3-chloropropane	ND	0.092		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Dibromochloromethane	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy
Project: WLU 6 Well Pad
Lab ID: 1607F33-001 **Matrix:** SOIL

Client Sample ID: 072816-1 (meters)
Collection Date: 7/28/2016 9:56:00 AM
Received Date: 7/29/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Dibromomethane	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,2-Dichlorobenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,3-Dichlorobenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,4-Dichlorobenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Dichlorodifluoromethane	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,1-Dichloroethane	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,1-Dichloroethene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,2-Dichloropropane	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,3-Dichloropropane	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
2,2-Dichloropropane	ND	0.092		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,1-Dichloropropene	ND	0.092		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Hexachlorobutadiene	ND	0.092		mg/Kg	1	8/6/2016 4:20:29 AM	26693
2-Hexanone	ND	0.46		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Isopropylbenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
4-Isopropyltoluene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
4-Methyl-2-pentanone	ND	0.46		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Methylene chloride	ND	0.14		mg/Kg	1	8/6/2016 4:20:29 AM	26693
n-Butylbenzene	ND	0.14		mg/Kg	1	8/6/2016 4:20:29 AM	26693
n-Propylbenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
sec-Butylbenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Styrene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
tert-Butylbenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,1,1,2-Tetrachloroethane	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,1,2,2-Tetrachloroethane	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Tetrachloroethene (PCE)	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
trans-1,2-DCE	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
trans-1,3-Dichloropropene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,2,3-Trichlorobenzene	ND	0.092		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,2,4-Trichlorobenzene	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,1,1-Trichloroethane	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,1,2-Trichloroethane	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Trichloroethene (TCE)	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Trichlorofluoromethane	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
1,2,3-Trichloropropane	ND	0.092		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Vinyl chloride	ND	0.046		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Xylenes, Total	ND	0.092		mg/Kg	1	8/6/2016 4:20:29 AM	26693
Surr: Dibromofluoromethane	95.0	70-130		%Rec	1	8/6/2016 4:20:29 AM	26693
Surr: 1,2-Dichloroethane-d4	90.3	70-130		%Rec	1	8/6/2016 4:20:29 AM	26693
Surr: Toluene-d8	107	70-130		%Rec	1	8/6/2016 4:20:29 AM	26693

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: WPX Energy
Project: WLU 6 Well Pad
Lab ID: 1607F33-001 **Matrix:** SOIL

Client Sample ID: 072816-1 (meters)
Collection Date: 7/28/2016 9:56:00 AM
Received Date: 7/29/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	8/6/2016 4:20:29 AM	26693

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1607F33**

09-Aug-16

Client: WPX Energy

Project: WLU 6 Well Pad

Sample ID	**MB-26746**	SampType: **MBLK**			TestCode: **EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID: **26746**			RunNo: **36161**				
Prep Date:	**8/2/2016**	Analysis Date: **8/2/2016**			SeqNo: **1119923**	Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-26746**	SampType: **LCS**			TestCode: **EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID: **26746**			RunNo: **36161**				
Prep Date:	**8/2/2016**	Analysis Date: **8/2/2016**			SeqNo: **1119924**	Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.1	90	110			

Sample ID	**MB-26746**	SampType: **MBLK**			TestCode: **EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID: **26746**			RunNo: **36168**				
Prep Date:	**8/2/2016**	Analysis Date: **8/2/2016**			SeqNo: **1120448**	Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-26746**	SampType: **LCS**			TestCode: **EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID: **26746**			RunNo: **36168**				
Prep Date:	**8/2/2016**	Analysis Date: **8/2/2016**			SeqNo: **1120449**	Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.6	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1607F33**

09-Aug-16

Client: WPX Energy
Project: WLU 6 Well Pad

Sample ID	LCS-26715	SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	26715		RunNo:	36150				
Prep Date:	8/1/2016	Analysis Date:	8/2/2016		SeqNo:	1120060	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.4	62.6	124			
Surr: DNOP	5.1		5.000		102	70	130			

Sample ID	LCS-26722	SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	26722		RunNo:	36150				
Prep Date:	8/1/2016	Analysis Date:	8/2/2016		SeqNo:	1120062	Units:	%Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		100	70	130			

Sample ID	MB-26715	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	26715		RunNo:	36150				
Prep Date:	8/1/2016	Analysis Date:	8/2/2016		SeqNo:	1120063	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		110	70	130			

Sample ID	MB-26722	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	26722		RunNo:	36150				
Prep Date:	8/1/2016	Analysis Date:	8/2/2016		SeqNo:	1120065	Units:	%Rec		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		91.2	70	130			

Sample ID	1607F33-001AMS	SampType:	MS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	072816-1 (meters)	Batch ID:	26715		RunNo:	36151				
Prep Date:	8/1/2016	Analysis Date:	8/2/2016		SeqNo:	1120659	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.3	46.73	8.493	105	33.9	141			
Surr: DNOP	4.6		4.673		97.8	70	130			

Sample ID	1607F33-001AMSD	SampType:	MSD		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	072816-1 (meters)	Batch ID:	26715		RunNo:	36151				
Prep Date:	8/1/2016	Analysis Date:	8/2/2016		SeqNo:	1120660	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.5	47.30	8.493	87.1	33.9	141	14.4	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1607F33**

09-Aug-16

Client: WPX Energy

Project: WLU 6 Well Pad

Sample ID	**1607F33-001AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**072816-1 (meters)**	Batch ID:	**26715**		RunNo:	**36151**					
Prep Date:	**8/1/2016**	Analysis Date:	**8/2/2016**		SeqNo:	**1120660**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	4.2		4.730		88.4	70	130	0	0		

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1607F33**

09-Aug-16

Client: WPX Energy
Project: WLU 6 Well Pad

Sample ID **MB-26693**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **26693**	RunNo: **36141**
Prep Date: **7/29/2016**	Analysis Date: **8/1/2016**	SeqNo: **1119291** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		93.5	49.4	163			

Sample ID **LCS-26693**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **26693**	RunNo: **36141**
Prep Date: **7/29/2016**	Analysis Date: **8/1/2016**	SeqNo: **1119292** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	80	120			
Surr: BFB	1000		1000		105	49.4	163			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1607F33**

09-Aug-16

Client: WPX Energy
Project: WLU 6 Well Pad

Sample ID **mb-26693**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **PBS**	Batch ID: **26693**	RunNo: **36260**
Prep Date: **7/29/2016**	Analysis Date: **8/6/2016**	SeqNo: **1124080** Units: **mg/Kg**

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								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.050								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.050								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.050								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1607F33**

09-Aug-16

Client: WPX Energy
Project: WLU 6 Well Pad

Sample ID **mb-26693**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **PBS**	Batch ID: **26693**	RunNo: **36260**
Prep Date: **7/29/2016**	Analysis Date: **8/6/2016**	SeqNo: **1124080** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: Dibromofluoromethane	0.49		0.5000		97.9	70	130			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.6	70	130			
Surr: Toluene-d8	0.55		0.5000		111	70	130			
Surr: 4-Bromofluorobenzene	0.61		0.5000		122	70	130			

Sample ID **lcs-26693**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **LCSS**	Batch ID: **26693**	RunNo: **36260**
Prep Date: **7/29/2016**	Analysis Date: **8/6/2016**	SeqNo: **1124081** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.5	70	130			
Toluene	1.0	0.050	1.000	0	101	70	130			
Chlorobenzene	1.0	0.050	1.000	0	101	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1607F33**

09-Aug-16

Client: WPX Energy
Project: WLU 6 Well Pad

Sample ID **lcs-26693** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **LCSS** Batch ID: **26693** RunNo: **36260**
Prep Date: **7/29/2016** Analysis Date: **8/6/2016** SeqNo: **1124081** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.0	0.050	1.000	0	102	70	130			
Trichloroethene (TCE)	0.93	0.050	1.000	0	92.8	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.1	70	130			
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.2	70	130			
Surr: Toluene-d8	0.54		0.5000		107	70	130			
Surr: 4-Bromofluorobenzene	0.59		0.5000		118	70	130			

Sample ID **1607f33-001ams** SampType: **MS** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **072816-1 (meters)** Batch ID: **26693** RunNo: **36260**
Prep Date: **7/29/2016** Analysis Date: **8/6/2016** SeqNo: **1124083** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	0.9970	0	87.2	49.2	155			
Toluene	0.95	0.050	0.9970	0	95.1	52	154			
Chlorobenzene	0.96	0.050	0.9970	0	95.9	53.2	150			
1,1-Dichloroethene	0.90	0.050	0.9970	0	90.1	34.2	163			
Trichloroethene (TCE)	0.89	0.050	0.9970	0	89.6	48.2	151			
Surr: Dibromofluoromethane	0.48		0.4985		95.8	70	130			
Surr: 1,2-Dichloroethane-d4	0.44		0.4985		88.7	70	130			
Surr: Toluene-d8	0.53		0.4985		106	70	130			
Surr: 4-Bromofluorobenzene	0.59		0.4985		118	70	130			

Sample ID **1607f33-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles**
Client ID: **072816-1 (meters)** Batch ID: **26693** RunNo: **36260**
Prep Date: **7/29/2016** Analysis Date: **8/6/2016** SeqNo: **1124084** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.024	0.9434	0	88.9	49.2	155	3.59	20	
Toluene	0.91	0.047	0.9434	0	96.0	52	154	4.57	20	
Chlorobenzene	0.92	0.047	0.9434	0	97.3	53.2	150	4.06	20	
1,1-Dichloroethene	0.85	0.047	0.9434	0	89.9	34.2	163	5.76	20	
Trichloroethene (TCE)	0.88	0.047	0.9434	0	93.7	48.2	151	1.07	20	
Surr: Dibromofluoromethane	0.49		0.4717		104	70	130	0	0	
Surr: 1,2-Dichloroethane-d4	0.44		0.4717		94.1	70	130	0	0	
Surr: Toluene-d8	0.51		0.4717		108	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.56		0.4717		119	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1607F33 | RcptNo: 1

Received by/date: 07/29/16

Logged By: Lindsay Mangin 7/29/2016 7:30:00 AM

Completed By: Lindsay Mangin 7/29/2016 8:55:57 AM

Reviewed By: IO 7/29/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

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	3.2	Good	Yes			

Chain-of-Custody Record

Client: WPX Energy	Turn-Around Time: X Standard ☐ Rush
	Project Name: WLU 6 Well Pad
Mailing Address: PO Box 640	
Aztec, NM 87410	Project #:
Phone #: 505-333-1880/505-386-9693	
email or Fax#: deborah.watson@wpxenergy.com	Project Manager: D. Watson
QA/QC Package: X Standard ☐ Level 4 (Full Validation)	
Accreditation: ☐ NELAP ☐ Other	Sampler: D Watson
☐ EDD (Type)	On Ice: ☑ Yes ☐ No
	Sample Temperature: 4.2-1.0=3.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1607F33	VOCs (8260)	TPH (8015) GRO/DRO/MRO	Chlorides								Air Bubbles (Y or N)
7/28/2016	9:56	soil	072816-1 (meters)	1-8 oz/1-4oz	cold	-001	X	X	X								
			"					"									

Date	Time	Relinquished by	Received by	Date	Time	Remarks:
7/28/16	1540	Deborah Watson	Mat Lalt	7/28/16	1540	
7/28/16	1720	Deborah Watson		07/29/16	0730	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.