

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP1

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:00:00 AM

Lab ID: 1906E39-001

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 6:12:24 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/29/2019 2:58:52 AM	45871
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/29/2019 2:58:52 AM	45871
Surr: DNOP	88.3	70-130		%Rec	1	6/29/2019 2:58:52 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/27/2019 11:43:27 PM	45844
Surr: BFB	106	73.8-119		%Rec	1	6/27/2019 11:43:27 PM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/27/2019 11:43:27 PM	45844
Toluene	ND	0.050		mg/Kg	1	6/27/2019 11:43:27 PM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/27/2019 11:43:27 PM	45844
Xylenes, Total	ND	0.099		mg/Kg	1	6/27/2019 11:43:27 PM	45844
Surr: 4-Bromofluorobenzene	98.6	80-120		%Rec	1	6/27/2019 11:43:27 PM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP2

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:00:00 AM

Lab ID: 1906E39-002

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 7:14:26 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/29/2019 4:12:05 AM	45871
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/29/2019 4:12:05 AM	45871
Surr: DNOP	89.7	70-130		%Rec	1	6/29/2019 4:12:05 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 12:06:08 AM	45844
Surr: BFB	103	73.8-119		%Rec	1	6/28/2019 12:06:08 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 12:06:08 AM	45844
Toluene	ND	0.050		mg/Kg	1	6/28/2019 12:06:08 AM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 12:06:08 AM	45844
Xylenes, Total	ND	0.10		mg/Kg	1	6/28/2019 12:06:08 AM	45844
Surr: 4-Bromofluorobenzene	95.8	80-120		%Rec	1	6/28/2019 12:06:08 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP3

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:00:00 AM

Lab ID: 1906E39-003

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 7:26:51 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	10	9.8		mg/Kg	1	6/29/2019 4:36:29 AM	45871
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/29/2019 4:36:29 AM	45871
Surr: DNOP	85.3	70-130		%Rec	1	6/29/2019 4:36:29 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 12:28:55 AM	45844
Surr: BFB	104	73.8-119		%Rec	1	6/28/2019 12:28:55 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 12:28:55 AM	45844
Toluene	ND	0.050		mg/Kg	1	6/28/2019 12:28:55 AM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 12:28:55 AM	45844
Xylenes, Total	ND	0.099		mg/Kg	1	6/28/2019 12:28:55 AM	45844
Surr: 4-Bromofluorobenzene	94.6	80-120		%Rec	1	6/28/2019 12:28:55 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP4

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:00:00 AM

Lab ID: 1906E39-004

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 7:39:15 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	21	10		mg/Kg	1	6/29/2019 5:00:57 AM	45871
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/29/2019 5:00:57 AM	45871
Surr: DNOP	79.6	70-130		%Rec	1	6/29/2019 5:00:57 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 12:51:46 AM	45844
Surr: BFB	103	73.8-119		%Rec	1	6/28/2019 12:51:46 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 12:51:46 AM	45844
Toluene	ND	0.050		mg/Kg	1	6/28/2019 12:51:46 AM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 12:51:46 AM	45844
Xylenes, Total	ND	0.10		mg/Kg	1	6/28/2019 12:51:46 AM	45844
Surr: 4-Bromofluorobenzene	95.8	80-120		%Rec	1	6/28/2019 12:51:46 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP5

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:00:00 AM

Lab ID: 1906E39-005

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 7:51:40 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/29/2019 5:25:23 AM	45871
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/29/2019 5:25:23 AM	45871
Surr: DNOP	91.8	70-130		%Rec	1	6/29/2019 5:25:23 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 1:37:31 AM	45844
Surr: BFB	102	73.8-119		%Rec	1	6/28/2019 1:37:31 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 1:37:31 AM	45844
Toluene	ND	0.050		mg/Kg	1	6/28/2019 1:37:31 AM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 1:37:31 AM	45844
Xylenes, Total	ND	0.10		mg/Kg	1	6/28/2019 1:37:31 AM	45844
Surr: 4-Bromofluorobenzene	94.0	80-120		%Rec	1	6/28/2019 1:37:31 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP6

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:00:00 AM

Lab ID: 1906E39-006

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 8:04:04 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	24	9.6		mg/Kg	1	6/29/2019 5:49:49 AM	45871
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/29/2019 5:49:49 AM	45871
Surr: DNOP	82.4	70-130		%Rec	1	6/29/2019 5:49:49 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 2:00:13 AM	45844
Surr: BFB	110	73.8-119		%Rec	1	6/28/2019 2:00:13 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 2:00:13 AM	45844
Toluene	ND	0.050		mg/Kg	1	6/28/2019 2:00:13 AM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 2:00:13 AM	45844
Xylenes, Total	ND	0.10		mg/Kg	1	6/28/2019 2:00:13 AM	45844
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	6/28/2019 2:00:13 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP7

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:00:00 AM

Lab ID: 1906E39-007

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 8:16:29 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/29/2019 6:14:16 AM	45871
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/29/2019 6:14:16 AM	45871
Surr: DNOP	74.0	70-130		%Rec	1	6/29/2019 6:14:16 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 2:22:59 AM	45844
Surr: BFB	106	73.8-119		%Rec	1	6/28/2019 2:22:59 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 2:22:59 AM	45844
Toluene	ND	0.050		mg/Kg	1	6/28/2019 2:22:59 AM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 2:22:59 AM	45844
Xylenes, Total	ND	0.099		mg/Kg	1	6/28/2019 2:22:59 AM	45844
Surr: 4-Bromofluorobenzene	98.2	80-120		%Rec	1	6/28/2019 2:22:59 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP8

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:00:00 AM

Lab ID: 1906E39-008

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 8:28:54 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	24	9.3		mg/Kg	1	6/29/2019 6:38:42 AM	45871
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/29/2019 6:38:42 AM	45871
Surr: DNOP	99.1	70-130		%Rec	1	6/29/2019 6:38:42 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 2:45:42 AM	45844
Surr: BFB	107	73.8-119		%Rec	1	6/28/2019 2:45:42 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 2:45:42 AM	45844
Toluene	ND	0.050		mg/Kg	1	6/28/2019 2:45:42 AM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 2:45:42 AM	45844
Xylenes, Total	ND	0.099		mg/Kg	1	6/28/2019 2:45:42 AM	45844
Surr: 4-Bromofluorobenzene	99.2	80-120		%Rec	1	6/28/2019 2:45:42 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP9

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:00:00 AM

Lab ID: 1906E39-009

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 8:41:19 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	28	9.8		mg/Kg	1	6/29/2019 7:02:49 AM	45871
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/29/2019 7:02:49 AM	45871
Surr: DNOP	95.7	70-130		%Rec	1	6/29/2019 7:02:49 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 3:08:28 AM	45844
Surr: BFB	105	73.8-119		%Rec	1	6/28/2019 3:08:28 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 3:08:28 AM	45844
Toluene	ND	0.050		mg/Kg	1	6/28/2019 3:08:28 AM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 3:08:28 AM	45844
Xylenes, Total	ND	0.10		mg/Kg	1	6/28/2019 3:08:28 AM	45844
Surr: 4-Bromofluorobenzene	97.8	80-120		%Rec	1	6/28/2019 3:08:28 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP10

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:00:00 AM

Lab ID: 1906E39-010

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 9:18:32 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/29/2019 7:27:00 AM	45871
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/29/2019 7:27:00 AM	45871
Surr: DNOP	91.0	70-130		%Rec	1	6/29/2019 7:27:00 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 3:31:27 AM	45844
Surr: BFB	106	73.8-119		%Rec	1	6/28/2019 3:31:27 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 3:31:27 AM	45844
Toluene	ND	0.050		mg/Kg	1	6/28/2019 3:31:27 AM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 3:31:27 AM	45844
Xylenes, Total	ND	0.099		mg/Kg	1	6/28/2019 3:31:27 AM	45844
Surr: 4-Bromofluorobenzene	99.4	80-120		%Rec	1	6/28/2019 3:31:27 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP11

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:00:00 AM

Lab ID: 1906E39-011

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 9:30:57 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/29/2019 7:51:08 AM	45871
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/29/2019 7:51:08 AM	45871
Surr: DNOP	92.4	70-130		%Rec	1	6/29/2019 7:51:08 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 3:54:31 AM	45844
Surr: BFB	104	73.8-119		%Rec	1	6/28/2019 3:54:31 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 3:54:31 AM	45844
Toluene	ND	0.050		mg/Kg	1	6/28/2019 3:54:31 AM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 3:54:31 AM	45844
Xylenes, Total	ND	0.10		mg/Kg	1	6/28/2019 3:54:31 AM	45844
Surr: 4-Bromofluorobenzene	96.5	80-120		%Rec	1	6/28/2019 3:54:31 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP12

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:00:00 AM

Lab ID: 1906E39-012

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 9:43:21 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	9.6	9.4		mg/Kg	1	6/29/2019 8:15:13 AM	45871
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/29/2019 8:15:13 AM	45871
Surr: DNOP	96.0	70-130		%Rec	1	6/29/2019 8:15:13 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 4:17:31 AM	45844
Surr: BFB	104	73.8-119		%Rec	1	6/28/2019 4:17:31 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 4:17:31 AM	45844
Toluene	ND	0.050		mg/Kg	1	6/28/2019 4:17:31 AM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 4:17:31 AM	45844
Xylenes, Total	ND	0.10		mg/Kg	1	6/28/2019 4:17:31 AM	45844
Surr: 4-Bromofluorobenzene	96.8	80-120		%Rec	1	6/28/2019 4:17:31 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy**Client Sample ID:** FP13**Project:** Longview Federal 12 2H**Collection Date:** 6/25/2019 11:30:00 AM**Lab ID:** 1906E39-013**Matrix:** SOIL**Received Date:** 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 9:55:45 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	12	9.6		mg/Kg	1	6/29/2019 8:39:17 AM	45871
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/29/2019 8:39:17 AM	45871
Surr: DNOP	82.5	70-130		%Rec	1	6/29/2019 8:39:17 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/28/2019 4:40:27 AM	45844
Surr: BFB	105	73.8-119		%Rec	1	6/28/2019 4:40:27 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 4:40:27 AM	45844
Toluene	ND	0.049		mg/Kg	1	6/28/2019 4:40:27 AM	45844
Ethylbenzene	ND	0.049		mg/Kg	1	6/28/2019 4:40:27 AM	45844
Xylenes, Total	ND	0.099		mg/Kg	1	6/28/2019 4:40:27 AM	45844
Surr: 4-Bromofluorobenzene	96.6	80-120		%Rec	1	6/28/2019 4:40:27 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy**Client Sample ID:** FP14**Project:** Longview Federal 12 2H**Collection Date:** 6/25/2019 11:30:00 AM**Lab ID:** 1906E39-014**Matrix:** SOIL**Received Date:** 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	59		mg/Kg	20	6/30/2019 10:08:10 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/29/2019 9:03:24 AM	45871
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/29/2019 9:03:24 AM	45871
Surr: DNOP	81.1	70-130		%Rec	1	6/29/2019 9:03:24 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 5:03:16 AM	45844
Surr: BFB	107	73.8-119		%Rec	1	6/28/2019 5:03:16 AM	45844
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/28/2019 5:03:16 AM	45844
Toluene	ND	0.050		mg/Kg	1	6/28/2019 5:03:16 AM	45844
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 5:03:16 AM	45844
Xylenes, Total	ND	0.10		mg/Kg	1	6/28/2019 5:03:16 AM	45844
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	6/28/2019 5:03:16 AM	45844

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP15

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:30:00 AM

Lab ID: 1906E39-015

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	61	60		mg/Kg	20	6/30/2019 10:20:35 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/29/2019 9:27:29 AM	45871
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/29/2019 9:27:29 AM	45871
Surr: DNOP	90.8	70-130		%Rec	1	6/29/2019 9:27:29 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/28/2019 6:26:37 PM	45847
Surr: BFB	91.4	73.8-119		%Rec	1	6/28/2019 6:26:37 PM	45847
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	6/28/2019 6:26:37 PM	45847
Toluene	ND	0.049		mg/Kg	1	6/28/2019 6:26:37 PM	45847
Ethylbenzene	ND	0.049		mg/Kg	1	6/28/2019 6:26:37 PM	45847
Xylenes, Total	ND	0.099		mg/Kg	1	6/28/2019 6:26:37 PM	45847
Surr: 4-Bromofluorobenzene	97.2	80-120		%Rec	1	6/28/2019 6:26:37 PM	45847

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy**Client Sample ID:** FP16**Project:** Longview Federal 12 2H**Collection Date:** 6/25/2019 11:30:00 AM**Lab ID:** 1906E39-016**Matrix:** SOIL**Received Date:** 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 10:33:00 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	29	9.2		mg/Kg	1	6/29/2019 9:51:34 AM	45871
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/29/2019 9:51:34 AM	45871
Surr: DNOP	83.6	70-130		%Rec	1	6/29/2019 9:51:34 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 7:37:47 PM	45847
Surr: BFB	87.5	73.8-119		%Rec	1	6/28/2019 7:37:47 PM	45847
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	6/28/2019 7:37:47 PM	45847
Toluene	ND	0.050		mg/Kg	1	6/28/2019 7:37:47 PM	45847
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 7:37:47 PM	45847
Xylenes, Total	ND	0.10		mg/Kg	1	6/28/2019 7:37:47 PM	45847
Surr: 4-Bromofluorobenzene	93.4	80-120		%Rec	1	6/28/2019 7:37:47 PM	45847

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: FP17

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:30:00 AM

Lab ID: 1906E39-017

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 10:45:24 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	15	9.4		mg/Kg	1	6/29/2019 10:17:00 AM	45871
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/29/2019 10:17:00 AM	45871
Surr: DNOP	91.9	70-130		%Rec	1	6/29/2019 10:17:00 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/28/2019 8:48:14 PM	45847
Surr: BFB	88.3	73.8-119		%Rec	1	6/28/2019 8:48:14 PM	45847
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	6/28/2019 8:48:14 PM	45847
Toluene	ND	0.049		mg/Kg	1	6/28/2019 8:48:14 PM	45847
Ethylbenzene	ND	0.049		mg/Kg	1	6/28/2019 8:48:14 PM	45847
Xylenes, Total	ND	0.099		mg/Kg	1	6/28/2019 8:48:14 PM	45847
Surr: 4-Bromofluorobenzene	95.0	80-120		%Rec	1	6/28/2019 8:48:14 PM	45847

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy**Client Sample ID:** SW1**Project:** Longview Federal 12 2H**Collection Date:** 6/25/2019 11:30:00 AM**Lab ID:** 1906E39-018**Matrix:** SOIL**Received Date:** 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 10:57:49 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/29/2019 10:41:05 AM	45871
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/29/2019 10:41:05 AM	45871
Surr: DNOP	85.9	70-130		%Rec	1	6/29/2019 10:41:05 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/28/2019 9:11:36 PM	45847
Surr: BFB	85.0	73.8-119		%Rec	1	6/28/2019 9:11:36 PM	45847
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	6/28/2019 9:11:36 PM	45847
Toluene	ND	0.049		mg/Kg	1	6/28/2019 9:11:36 PM	45847
Ethylbenzene	ND	0.049		mg/Kg	1	6/28/2019 9:11:36 PM	45847
Xylenes, Total	ND	0.099		mg/Kg	1	6/28/2019 9:11:36 PM	45847
Surr: 4-Bromofluorobenzene	92.2	80-120		%Rec	1	6/28/2019 9:11:36 PM	45847

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: SW2

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:30:00 AM

Lab ID: 1906E39-019

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 11:10:13 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/29/2019 11:05:18 AM	45871
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/29/2019 11:05:18 AM	45871
Surr: DNOP	78.4	70-130		%Rec	1	6/29/2019 11:05:18 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/28/2019 9:35:02 PM	45847
Surr: BFB	85.5	73.8-119		%Rec	1	6/28/2019 9:35:02 PM	45847
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	6/28/2019 9:35:02 PM	45847
Toluene	ND	0.049		mg/Kg	1	6/28/2019 9:35:02 PM	45847
Ethylbenzene	ND	0.049		mg/Kg	1	6/28/2019 9:35:02 PM	45847
Xylenes, Total	ND	0.099		mg/Kg	1	6/28/2019 9:35:02 PM	45847
Surr: 4-Bromofluorobenzene	93.1	80-120		%Rec	1	6/28/2019 9:35:02 PM	45847

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: SW3

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:30:00 AM

Lab ID: 1906E39-020

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/30/2019 11:47:28 PM	45920
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/29/2019 11:29:41 AM	45871
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/29/2019 11:29:41 AM	45871
Surr: DNOP	79.8	70-130		%Rec	1	6/29/2019 11:29:41 AM	45871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 9:58:33 PM	45847
Surr: BFB	85.2	73.8-119		%Rec	1	6/28/2019 9:58:33 PM	45847
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	6/28/2019 9:58:33 PM	45847
Toluene	ND	0.050		mg/Kg	1	6/28/2019 9:58:33 PM	45847
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 9:58:33 PM	45847
Xylenes, Total	ND	0.10		mg/Kg	1	6/28/2019 9:58:33 PM	45847
Surr: 4-Bromofluorobenzene	91.1	80-120		%Rec	1	6/28/2019 9:58:33 PM	45847

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: SW4

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:30:00 AM

Lab ID: 1906E39-021

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/29/2019 9:12:51 PM	45906
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/29/2019 9:12:51 PM	45906
Surr: DNOP	37.0	70-130	S	%Rec	1	6/29/2019 9:12:51 PM	45906
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/28/2019 10:22:20 PM	45847
Surr: BFB	91.1	73.8-119		%Rec	1	6/28/2019 10:22:20 PM	45847
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	6/28/2019 10:22:20 PM	45847
Toluene	ND	0.049		mg/Kg	1	6/28/2019 10:22:20 PM	45847
Ethylbenzene	ND	0.049		mg/Kg	1	6/28/2019 10:22:20 PM	45847
Xylenes, Total	ND	0.097		mg/Kg	1	6/28/2019 10:22:20 PM	45847
Surr: 4-Bromofluorobenzene	97.5	80-120		%Rec	1	6/28/2019 10:22:20 PM	45847

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906E39**

Date Reported:

CLIENT: WPX Energy

Client Sample ID: SW5

Project: Longview Federal 12 2H

Collection Date: 6/25/2019 11:30:00 AM

Lab ID: 1906E39-022

Matrix: SOIL

Received Date: 6/26/2019 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/29/2019 10:26:46 PM	45906
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/29/2019 10:26:46 PM	45906
Surr: DNOP	52.7	70-130	S	%Rec	1	6/29/2019 10:26:46 PM	45906
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/28/2019 11:33:44 PM	45847
Surr: BFB	84.7	73.8-119		%Rec	1	6/28/2019 11:33:44 PM	45847
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	6/28/2019 11:33:44 PM	45847
Toluene	ND	0.050		mg/Kg	1	6/28/2019 11:33:44 PM	45847
Ethylbenzene	ND	0.050		mg/Kg	1	6/28/2019 11:33:44 PM	45847
Xylenes, Total	ND	0.10		mg/Kg	1	6/28/2019 11:33:44 PM	45847
Surr: 4-Bromofluorobenzene	90.9	80-120		%Rec	1	6/28/2019 11:33:44 PM	45847

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		