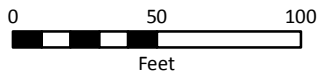




RDX 28-9H Permian Basin

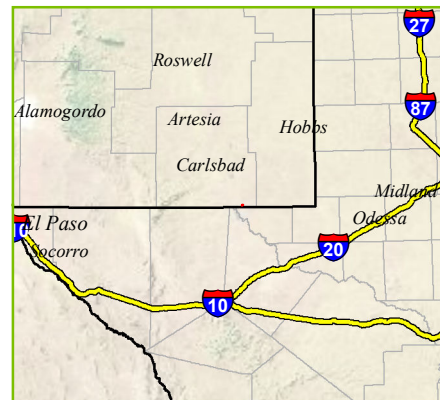


Date: 12/7/2016
Map Scale (at 8.5" x 11"): 1:800
Projection: NAD 1927 UTM Zone 13N
Created By: Jeremy Andarakes
Facilities Engineering Dept. - GIS
3500 One Williams Center
Tulsa, OK 74172



Map Symbolology

- WPX Well - Producing
- WPX Well - Permitted
- ★ Point of Interest
- Area of Interest





09-Dec-2016

Karolina Blaney
WPX Energy
5315 Buena Vista Dr.
Carlsbad, NM 88220

Re: **RDX 28-9**

Work Order: **1612170**

Dear Karolina,

ALS Environmental received 2 samples on 02-Dec-2016 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 15.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 998501

Report of Laboratory Analysis

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: WPX Energy
Project: RDX 28-9
Work Order: 1612170

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1612170-01	RDX 28-9-1	Soil		11/30/2016 12:25	12/2/2016 09:30	☐
1612170-02	RDX 28-9-2 1'	Soil		11/30/2016 12:30	12/2/2016 09:30	☐

Client: WPX Energy**Project:** RDX 28-9**Work Order:** 1612170**Case Narrative**

Batch 95515, Method DRO_8015_S, Sample 1612170-01A MS: The MS recovery was outside of the control limit for DRO. However, the MSD recovery and the RPD between the MS and MSD were in control. No qualification is required.

Client: WPX Energy**Project:** RDX 28-9**WorkOrder:** 1612170**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group, USA

Date: 09-Dec-16

Client: WPX Energy

Project: RDX 28-9

Sample ID: RDX 28-9-1

Collection Date: 11/30/2016 12:25 PM

Work Order: 1612170

Lab ID: 1612170-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3546 / 12/7/16	Analyst: IT
DRO (C10-C28)	1,300		5.6	mg/Kg-dry	1	12/8/2016 10:29 AM
ORO (C28-C40)	460		5.6	mg/Kg-dry	1	12/8/2016 10:29 AM
Surr: 4-Terphenyl-d14	60.2		39-133	%REC	1	12/8/2016 10:29 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 12/5/16	Analyst: IT
GRO (C6-C10)	50		3.1	mg/Kg-dry	1	12/5/2016 10:41 PM
Surr: Toluene-d8	109		50-150	%REC	1	12/5/2016 10:41 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 12/5/16	Analyst: LSY
Benzene	ND		0.037	mg/Kg-dry	1	12/5/2016 06:15 PM
Ethylbenzene	ND		0.037	mg/Kg-dry	1	12/5/2016 06:15 PM
m,p-Xylene	0.11		0.075	mg/Kg-dry	1	12/5/2016 06:15 PM
o-Xylene	0.072		0.037	mg/Kg-dry	1	12/5/2016 06:15 PM
Toluene	ND		0.037	mg/Kg-dry	1	12/5/2016 06:15 PM
Xylenes, Total	0.18		0.11	mg/Kg-dry	1	12/5/2016 06:15 PM
Surr: 1,2-Dichloroethane-d4	102		70-130	%REC	1	12/5/2016 06:15 PM
Surr: 4-Bromofluorobenzene	108		70-130	%REC	1	12/5/2016 06:15 PM
Surr: Dibromofluoromethane	96.8		70-130	%REC	1	12/5/2016 06:15 PM
Surr: Toluene-d8	97.3		70-130	%REC	1	12/5/2016 06:15 PM
ANIONS BY ION CHROMATOGRAPHY						
			SW9056A		Prep: EXTRACT / 12/6/16	Analyst: EE
Chloride	21		11	mg/Kg-dry	1	12/7/2016 04:07 PM
MOISTURE						
			SW3550C			Analyst: EDL
Moisture	11		0.050	% of sample	1	12/5/2016 05:50 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 09-Dec-16

Client: WPX Energy
Project: RDX 28-9
Sample ID: RDX 28-9-2 1'
Collection Date: 11/30/2016 12:30 PM

Work Order: 1612170
Lab ID: 1612170-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3546 / 12/7/16	Analyst: IT
DRO (C10-C28)	400		5.4	mg/Kg-dry	1	12/8/2016 10:59 AM
ORO (C28-C40)	94		5.4	mg/Kg-dry	1	12/8/2016 10:59 AM
Surr: 4-Terphenyl-d14	55.2		39-133	%REC	1	12/8/2016 10:59 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 12/5/16	Analyst: IT
GRO (C6-C10)	15		3.0	mg/Kg-dry	1	12/5/2016 11:06 PM
Surr: Toluene-d8	100		50-150	%REC	1	12/5/2016 11:06 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260B		Prep: SW5035 / 12/5/16	Analyst: LSY
Benzene	ND		0.036	mg/Kg-dry	1	12/6/2016 03:19 PM
Ethylbenzene	ND		0.036	mg/Kg-dry	1	12/6/2016 03:19 PM
m,p-Xylene	ND		0.072	mg/Kg-dry	1	12/6/2016 03:19 PM
o-Xylene	ND		0.036	mg/Kg-dry	1	12/6/2016 03:19 PM
Toluene	ND		0.036	mg/Kg-dry	1	12/6/2016 03:19 PM
Xylenes, Total	ND		0.11	mg/Kg-dry	1	12/6/2016 03:19 PM
Surr: 1,2-Dichloroethane-d4	109		70-130	%REC	1	12/6/2016 03:19 PM
Surr: 4-Bromofluorobenzene	102		70-130	%REC	1	12/6/2016 03:19 PM
Surr: Dibromofluoromethane	97.0		70-130	%REC	1	12/6/2016 03:19 PM
Surr: Toluene-d8	98.0		70-130	%REC	1	12/6/2016 03:19 PM
ANIONS BY ION CHROMATOGRAPHY						
			SW9056A		Prep: EXTRACT / 12/6/16	Analyst: EE
Chloride	360		53	mg/Kg-dry	5	12/7/2016 05:08 PM
MOISTURE						
			SW3550C			Analyst: EDL
Moisture	9.4		0.050	% of sample	1	12/5/2016 05:50 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: WPX Energy
Work Order: 1612170
Project: RDX 28-9

QC BATCH REPORT

Batch ID: **95515** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-95515-95515				Units: mg/Kg		Analysis Date: 12/8/2016 08:30 AM		
Client ID:		Run ID: GC8_161208A				SeqNo: 4192815		Prep Date: 12/7/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

ND

5.0

ORO (C28-C40)

ND

5.0

Surr: 4-Terphenyl-d14

2.055

0

3.33

0

61.7

39-133

0

LCS		Sample ID: DLCSS1-95515-95515				Units: mg/Kg		Analysis Date: 12/8/2016 09:00 AM		
Client ID:		Run ID: GC8_161208A				SeqNo: 4192816		Prep Date: 12/7/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

289.8

5.0

333

0

87

61-109

0

ORO (C28-C40)

300.9

5.0

333

0

90.4

61-119

0

Surr: 4-Terphenyl-d14

1.869

0

3.33

0

56.1

39-133

0

MS		Sample ID: 1612170-01A MS				Units: mg/Kg		Analysis Date: 12/8/2016 09:30 AM		
Client ID: RDX 28-9-1		Run ID: GC8_161208A				SeqNo: 4192817		Prep Date: 12/7/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

1585

4.9

323.5

1170

128

48-110

0

S

ORO (C28-C40)

680.3

4.9

323.5

406.7

84.6

39-140

0

Surr: 4-Terphenyl-d14

1.799

0

3.235

0

55.6

39-133

0

MSD		Sample ID: 1612170-01A MSD				Units: mg/Kg		Analysis Date: 12/8/2016 09:59 AM		
Client ID: RDX 28-9-1		Run ID: GC8_161208A				SeqNo: 4192818		Prep Date: 12/7/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)

1332

4.8

317.2

1170

50.9

48-110

1585

17.4

30

ORO (C28-C40)

621

4.8

317.2

406.7

67.5

39-140

680.3

9.11

30

Surr: 4-Terphenyl-d14

2.019

0

3.172

0

63.6

39-133

1.799

11.6

30

The following samples were analyzed in this batch:

1612170-01A

1612170-02A

Client: WPX Energy
 Work Order: 1612170
 Project: RDX 28-9

QC BATCH REPORT

Batch ID: 95404 Instrument ID GC9 Method: PUBL-SW-140

MBLK		Sample ID: MBLK-95404-95404				Units: µg/Kg-dry		Analysis Date: 12/5/2016 12:17 PM		
Client ID:		Run ID: GC9_161205A				SeqNo: 4185191		Prep Date: 12/5/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10) ND 2,500

MBLK		Sample ID: MBLK-95404-95404				Units: µg/Kg-dry		Analysis Date: 12/5/2016 04:51 PM		
Client ID:		Run ID: GC9_161205B				SeqNo: 4186199		Prep Date: 12/5/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10) ND 2,500 0 0 0 0
 Surr: Toluene-d8 4614 0 5000 0 92.3 50-150 0

LCS		Sample ID: LCS-95404-95404				Units: µg/Kg-dry		Analysis Date: 12/5/2016 11:51 AM		
Client ID:		Run ID: GC9_161205A				SeqNo: 4185190		Prep Date: 12/5/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10) 10120 2,500 10000 0 101 80-120 0

LCS		Sample ID: LCS-95404-95404				Units: µg/Kg-dry		Analysis Date: 12/5/2016 02:53 PM		
Client ID:		Run ID: GC9_161205B				SeqNo: 4186198		Prep Date: 12/5/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10) 486600 2,500 500000 0 97.3 70-130 0
 Surr: Toluene-d8 5740 0 5000 0 115 50-150 0

LCSD		Sample ID: LCSD-95404-95404				Units: µg/Kg-dry		Analysis Date: 12/5/2016 01:10 PM		
Client ID:		Run ID: GC9_161205A				SeqNo: 4185193		Prep Date: 12/5/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10) 9759 2,500 10000 0 97.6 80-120 10120 3.6 20

MS		Sample ID: 1612075-06A MS				Units: µg/Kg-dry		Analysis Date: 12/5/2016 07:46 PM		
Client ID:		Run ID: GC9_161205B				SeqNo: 4187839		Prep Date: 12/5/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10) 788100 3,700 734600 0 107 70-130 0
 Surr: Toluene-d8 7836 0 7346 0 107 50-150 0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy
Work Order: 1612170
Project: RDX 28-9

QC BATCH REPORT

Batch ID: **95404** Instrument ID **GC9** Method: **PUBL-SW-140**

MSD		Sample ID: 1612075-06A MSD				Units: µg/Kg-dry		Analysis Date: 12/5/2016 08:11 PM		
Client ID:		Run ID: GC9_161205B				SeqNo: 4187840		Prep Date: 12/5/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	772700	3,700	734600	0	105	70-130	788100	1.98	30	
<i>Surr: Toluene-d8</i>	<i>8121</i>	<i>0</i>	<i>7346</i>	<i>0</i>	<i>111</i>	<i>50-150</i>	<i>7836</i>	<i>3.56</i>	<i>30</i>	

The following samples were analyzed in this batch:

1612170-01A 1612170-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy
 Work Order: 1612170
 Project: RDX 28-9

QC BATCH REPORT

Batch ID: 95408 Instrument ID VMS9 Method: SW8260B

MBLK Sample ID: MBLK-95408-95408				Units: µg/Kg-dry			Analysis Date: 12/5/2016 01:20 PM			
Client ID:		Run ID: VMS9_161205A		SeqNo: 4186959		Prep Date: 12/5/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30	0	0	0	0-0	0			
Ethylbenzene	ND	30	0	0	0	0-0	0			
m,p-Xylene	ND	60	0	0	0	0-0	0			
o-Xylene	ND	30	0	0	0	0-0	0			
Toluene	ND	30	0	0	0	0-0	0			
Xylenes, Total	ND	90	0	0	0	0-0	0			
Surr: 1,2-Dichloroethane-d4	1015	0	1000	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	1026	0	1000	0	103	70-130	0			
Surr: Dibromofluoromethane	1002	0	1000	0	100	70-130	0			
Surr: Toluene-d8	955	0	1000	0	95.5	70-130	0			

LCS Sample ID: LCS-95408-95408				Units: µg/Kg-dry			Analysis Date: 12/5/2016 12:07 PM			
Client ID:		Run ID: VMS9_161205A		SeqNo: 4186957		Prep Date: 12/5/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1010	30	1000	0	101	75-125	0			
Ethylbenzene	1049	30	1000	0	105	75-125	0			
m,p-Xylene	2088	60	2000	0	104	80-125	0			
o-Xylene	1060	30	1000	0	106	75-125	0			
Toluene	963.5	30	1000	0	96.4	70-125	0			
Xylenes, Total	3148	90	3000	0	105	75-125	0			
Surr: 1,2-Dichloroethane-d4	957.5	0	1000	0	95.8	70-130	0			
Surr: 4-Bromofluorobenzene	1000	0	1000	0	100	70-130	0			
Surr: Dibromofluoromethane	1014	0	1000	0	101	70-130	0			
Surr: Toluene-d8	960.5	0	1000	0	96	70-130	0			

MS Sample ID: 1612170-01A MS				Units: µg/Kg-dry			Analysis Date: 12/5/2016 09:07 PM			
Client ID: RDX 28-9-1		Run ID: VMS9_161205A		SeqNo: 4186975		Prep Date: 12/5/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1144	37	1247	0	91.7	75-125	0			
Ethylbenzene	1227	37	1247	0	98.4	75-125	0			
m,p-Xylene	2490	75	2494	107.3	95.5	80-125	0			
o-Xylene	1314	37	1247	72.34	99.6	75-125	0			
Toluene	1089	37	1247	0	87.3	70-125	0			
Xylenes, Total	3804	110	3742	182	96.8	75-125	0			
Surr: 1,2-Dichloroethane-d4	1231	0	1247	0	98.7	70-130	0			
Surr: 4-Bromofluorobenzene	1304	0	1247	0	105	70-130	0			
Surr: Dibromofluoromethane	1227	0	1247	0	98.4	70-130	0			
Surr: Toluene-d8	1216	0	1247	0	97.5	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy
 Work Order: 1612170
 Project: RDX 28-9

QC BATCH REPORT

Batch ID: 95408 Instrument ID VMS9 Method: SW8260B

MSD				Sample ID: 1612170-01A MSD			Units: µg/Kg-dry		Analysis Date: 12/5/2016 09:31 PM		
Client ID: RDX 28-9-1			Run ID: VMS9_161205A			SeqNo: 4186977		Prep Date: 12/5/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1258	37	1247	0	101	75-125	1144	9.55	30		
Ethylbenzene	1256	37	1247	0	101	75-125	1227	2.31	30		
m,p-Xylene	2521	75	2494	107.3	96.8	80-125	2490	1.24	30		
o-Xylene	1303	37	1247	72.34	98.7	75-125	1314	0.81	30		
Toluene	1116	37	1247	0	89.4	70-125	1089	2.43	30		
Xylenes, Total	3825	110	3742	182	97.4	75-125	3804	0.54	30		
Surr: 1,2-Dichloroethane-d4	1348	0	1247	0	108	70-130	1231	9.09	30		
Surr: 4-Bromofluorobenzene	1328	0	1247	0	106	70-130	1304	1.85	30		
Surr: Dibromofluoromethane	1199	0	1247	0	96.2	70-130	1227	2.26	30		
Surr: Toluene-d8	1225	0	1247	0	98.2	70-130	1216	0.715	30		

The following samples were analyzed in this batch:

1612170-01A 1612170-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy
Work Order: 1612170
Project: RDX 28-9

QC BATCH REPORT

Batch ID: **95576** Instrument ID **IC4** Method: **SW9056A**

MBLK		Sample ID: MBLK-95576-95576				Units: mg/Kg		Analysis Date: 12/7/2016 07:36 AM		
Client ID:		Run ID: IC4_161207A				SeqNo: 4191634		Prep Date: 12/6/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 10

LCS		Sample ID: LCS-95576-95576				Units: mg/Kg		Analysis Date: 12/7/2016 07:56 AM		
Client ID:		Run ID: IC4_161207A				SeqNo: 4191635		Prep Date: 12/6/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 95.61 10 100 0 95.6 80-120 0

MS		Sample ID: 1612173-01A MS				Units: mg/Kg		Analysis Date: 12/7/2016 05:48 PM		
Client ID:		Run ID: IC4_161207A				SeqNo: 4191662		Prep Date: 12/6/2016		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 317.2 49 97.09 241.8 77.7 75-125 0

MSD		Sample ID: 1612173-01A MSD				Units: mg/Kg		Analysis Date: 12/7/2016 06:08 PM		
Client ID:		Run ID: IC4_161207A				SeqNo: 4191663		Prep Date: 12/6/2016		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 318.4 50 99.21 241.8 77.2 75-125 317.2 0.382 20

The following samples were analyzed in this batch:

1612170-01A 1612170-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy
Work Order: 1612170
Project: RDX 28-9

QC BATCH REPORT

Batch ID: **R201930** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R201930				Units: % of sample		Analysis Date: 12/5/2016 05:50 PM		
Client ID:		Run ID: MOIST_161205F				SeqNo: 4187467		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS		Sample ID: LCS-R201930				Units: % of sample		Analysis Date: 12/5/2016 05:50 PM		
Client ID:		Run ID: MOIST_161205F				SeqNo: 4187466		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP		Sample ID: 1612177-05A DUP				Units: % of sample		Analysis Date: 12/5/2016 05:50 PM		
Client ID:		Run ID: MOIST_161205F				SeqNo: 4187463		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 5.24 0.050 0 0 0 5.22 0.382 20

DUP		Sample ID: 1612178-02B DUP				Units: % of sample		Analysis Date: 12/5/2016 05:50 PM		
Client ID:		Run ID: MOIST_161205F				SeqNo: 4187465		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 4.71 0.050 0 0 0 4.62 1.93 20

The following samples were analyzed in this batch:

1612170-01A 1612170-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



ALS Laboratory Group

HOLLAND, Michigan 49424

Chain-of-Custody

Form 202r6

WORKORDER
#

1612170

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME

RDX 28-9

SAMPLER

DATE

12/1/2016

TURNAROUND

5 day

PROJECT No.

EDD FORMAT

PURCHASE ORDER

COMPANY NAME

WPX Energy

BILL TO COMPANY

WPX Energy

SEND REPORT TO

Blaney

INVOICE ATTN TO

Karolina Blaney

ADDRESS

ADDRESS

5315 Buena Vista Dr

CITY / STATE / ZIP

CITY / STATE / ZIP

Carlsbad, NM 88220

PHONE

PHONE

970 589 0743

FAX

FAX

E-MAIL

Karolina.blaney@wpxenergy.com;

E-MAIL

Karolina.blaney@wpxenergy.com;

TPH (DRO+GRO+HRO)

BTEX 8260

Chloride

Lab ID

Field ID

Matrix

Sample Date

Sample Time

Bottles

Pres.

QC

RDX 28-9-1

S

11/30/2016

12:25

1

8

x

x

x

x

RDX 28-9-2 1'

S

11/30/2016

12:30

1

8

x

x

x

x

*Time Zone (Circle): EST CST MST PST Matrix O=oil S=soil NS=non-soil solid W=water L=liquid E=extract F=filter

For metals or anions, please detail analytes below.

Comments:

4.4°C
38.2 pH

QC PACKAGE (check below)

X

LEVEL II (Standard QC)

LEVEL III (Std QC + forms)

LEVEL IV (Std QC + forms + raw data)

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

SIGNATURE

PRINTED NAME

DATE

TIME

RELINQUISHED BY

Karolina Blaney

Karolina Blaney

12/1/2016

15:00

RECEIVED BY

MBroadbent

MBroadbent

12/2/16

9:50

RELINQUISHED BY

RECEIVED BY

RELINQUISHED BY

RECEIVED BY

Sample Receipt Checklist

Client Name: **WPX - NM**

Date/Time Received: **02-Dec-16 09:30**

Work Order: **1612170**

Received by: **MBB**

Checklist completed by Meghan Broadbent
eSignature

02-Dec-16
Date

Reviewed by: Chad Whelton
eSignature

05-Dec-16
Date

Matrices: **soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Sample(s) received on ice?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>4.4/4.4</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>12/2/2016 3:21:14 PM</u>		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒
pH adjusted?	Yes ☐	No ☐	N/A ☒
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: