PRELIMINARY RESULTS

ConocoPhillips Corrective action Plan for the

SEMU 034 1RP-4218

On March 21st 2016 a flow line leak occurred on the SEMU 34 resulting I the release of 15 bbls. of produced water with 1 bbl recovered. When doing our initial site assessment, it was discovered that that the leak occurred on top of an old historic spill. We scheduled a meeting at the site with Jamie Keyes of the NMOCD and Shelly Tucker of the BLM on March 28th 2016. After sampling it was determined chlorides could be cleaned up easily but the old historic spill resulting in high DRO and GRO readings at deeper levels would need to be addressed at the request of the BLM. The initial leak area is approx. 1500 sq. feet the additional area being requested for cleanup by the BLM is 23,368 sq. feet of area. ConocoPhillips will excavate the entire area to a depth of 4' and backfill with clean topsoil. The contaminated material will be transported to a State approved disposal and clean top soil will be sampled before backfill use to insure it is clean. The depth to groundwater in this area is 59'. I have attached maps and sample results from the lab for you to look at. If you have any questions, please feel free to contact me by email or my phone number is 575-631-9092. We will begin work on the spill area of this project as soon as I receive approval to do so. Below I have listed the GPS coordinates and a legal description of the area. Thanks, Justin Wright

GPS: 32.557904-103.189613

UL-K, Section-19

T-20-S, R-38-E

Lea County, NM



April 04, 2016

KYLE NORMAN

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: SEMU PERMIAN #34 HISTORICAL

Enclosed are the results of analyses for samples received by the laboratory on 03/29/16 14:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accred certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Haloacetic Acids (HAA-5)
Method EPA 524.2 Total Trihalomethanes (TTHM)
Method EPA 524.4 Regulated VOCs (V1, V2, V3)

Celey D. Keine

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



Basin Environmental Service KYLE NORMAN P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 03/29/2016 Sampling Date: 03/28/2016

Reported: 04/04/2016 Sampling Type: Soil

Project Name: SEMU PERMIAN #34 HISTORICAL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NONE GIVEN

Sample ID: PT. 1 @ 2' (H600659-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2016	ND	2.11	106	2.00	4.65	
Toluene*	<0.050	0.050	03/30/2016	ND	2.00	99.8	2.00	6.38	
Ethylbenzene*	< 0.050	0.050	03/30/2016	ND	1.75	87.7	2.00	6.84	
Total Xylenes*	<0.150	0.150	03/30/2016	ND	5.39	89.8	6.00	6.36	
Total BTEX	<0.300	0.300	03/30/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.3	% 73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/30/2016	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/31/2016	ND	173	86.7	200	2.18	
DRO >C10-C28	64.9	10.0	03/31/2016	ND	157	78.7	200	2.90	
Surrogate: 1-Chlorooctane	87.1	% 35-147	,						
Surrogate: 1-Chlorooctadecane	91.8	% 28-171							

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Basin Environmental Service **KYLE NORMAN** P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 03/29/2016 Sampling Date: 03/28/2016

Reported: 04/04/2016 Sampling Type: Soil

Project Name: SEMU PERMIAN #34 HISTORICAL Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: NONE GIVEN

Sample ID: PT. 1 @ 4' (H600659-02)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2016	ND	2.11	106	2.00	4.65	
Toluene*	<0.050	0.050	03/30/2016	ND	2.00	99.8	2.00	6.38	
Ethylbenzene*	<0.050	0.050	03/30/2016	ND	1.75	87.7	2.00	6.84	
Total Xylenes*	<0.150	0.150	03/30/2016	ND	5.39	89.8	6.00	6.36	
Total BTEX	<0.300	0.300	03/30/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 9	% 73.6-14	0						
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/30/2016	ND	400	100	400	7.69	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/31/2016	ND	173	86.7	200	2.18	
DRO >C10-C28	516	10.0	03/31/2016	ND	157	78.7	200	2.90	
Surrogate: 1-Chlorooctane	86.5	% 35-147	,						
Surrogate: 1-Chlorooctadecane	111 9	% 28-171							

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Basin Environmental Service KYLE NORMAN P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 03/29/2016 Sampling Date: 03/28/2016

Reported: 04/04/2016 Sampling Type: Soil

Project Name: SEMU PERMIAN #34 HISTORICAL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NONE GIVEN

Sample ID: PT. 2 @ 2' (H600659-03)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	< 0.050	0.050	03/30/2016	ND	2.11	106	2.00	4.65	
Toluene*	<0.050	0.050	03/30/2016	ND	2.00	99.8	2.00	6.38	
Ethylbenzene*	<0.050	0.050	03/30/2016	ND	1.75	87.7	2.00	6.84	
Total Xylenes*	<0.150	0.150	03/30/2016	ND	5.39	89.8	6.00	6.36	
Total BTEX	<0.300	0.300	03/30/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.79	% 73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/30/2016	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<100	100	03/30/2016	ND	173	86.7	200	2.18	
DRO >C10-C28	<100	100	03/30/2016	ND	157	78.7	200	2.90	
Surrogate: 1-Chlorooctane	77.1 9	% 35-147	,						
Surrogate: 1-Chlorooctadecane	97.9 9	% 28-171							

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Basin Environmental Service **KYLE NORMAN** P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 03/29/2016 Sampling Date: 03/28/2016

Reported: 04/04/2016 Sampling Type: Soil

Project Name: SEMU PERMIAN #34 HISTORICAL Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: NONE GIVEN

Sample ID: PT. 2 @ 4' (H600659-04)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2016	ND	2.11	106	2.00	4.65	
Toluene*	<0.050	0.050	03/30/2016	ND	2.00	99.8	2.00	6.38	
Ethylbenzene*	<0.050	0.050	03/30/2016	ND	1.75	87.7	2.00	6.84	
Total Xylenes*	<0.150	0.150	03/30/2016	ND	5.39	89.8	6.00	6.36	
Total BTEX	<0.300	0.300	03/30/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.5	% 73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/30/2016	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/30/2016	ND	173	86.7	200	2.18	
DRO >C10-C28	<10.0	10.0	03/30/2016	ND	157	78.7	200	2.90	
Surrogate: 1-Chlorooctane	84.6	% 35-147	,						
Surrogate: 1-Chlorooctadecane	973	% 28-171							

Surrogate: 1-Chlorooctadecane 97.3 % 28-171

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Basin Environmental Service KYLE NORMAN P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 03/29/2016 Sampling Date: 03/28/2016

Reported: 04/04/2016 Sampling Type: Soil

Project Name: SEMU PERMIAN #34 HISTORICAL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NONE GIVEN

Sample ID: PT. 3 @ 2' (H600659-05)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/31/2016	ND	2.00	100	2.00	16.6	
Toluene*	< 0.050	0.050	03/31/2016	ND	1.91	95.6	2.00	17.2	
Ethylbenzene*	0.082	0.050	03/31/2016	ND	1.69	84.5	2.00	17.2	
Total Xylenes*	<0.150	0.150	03/31/2016	ND	5.18	86.4	6.00	16.0	
Total BTEX	<0.300	0.300	03/31/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.0	% 73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/30/2016	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/31/2016	ND	173	86.7	200	2.18	
DRO >C10-C28	395	10.0	03/31/2016	ND	157	78.7	200	2.90	
Surrogate: 1-Chlorooctane	89.7	% 35-147	,						
Surrogate: 1-Chlorooctadecane	108 9	% 28-17 <i>1</i>							

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Basin Environmental Service KYLE NORMAN P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 03/29/2016 Sampling Date: 03/28/2016

Reported: 04/04/2016 Sampling Type: Soil

Project Name: SEMU PERMIAN #34 HISTORICAL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NONE GIVEN

Sample ID: PT. 3 @ 4' (H600659-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	03/31/2016	ND	2.00	100	2.00	16.6	
Toluene*	1.06	0.500	03/31/2016	ND	1.91	95.6	2.00	17.2	
Ethylbenzene*	5.97	0.500	03/31/2016	ND	1.69	84.5	2.00	17.2	
Total Xylenes*	9.31	1.50	03/31/2016	ND	5.18	86.4	6.00	16.0	
Total BTEX	16.3	3.00	03/31/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	110 %	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/30/2016	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	691	200	03/30/2016	ND	173	86.7	200	2.18	
DRO >C10-C28	6770	200	03/30/2016	ND	157	78.7	200	2.90	
Surrogate: 1-Chlorooctane	117 %	% 35-147	7						
Surrogate: 1-Chlorooctadecane	245 %	% 28-171							

Cardinal Laboratories *=Accredited Analyte

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Notes and Definitions

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or

matrix interference's.

QR-03 The RPD value for the sample duplicate or MS/MSD was outside if QC acceptance limits due to matrix interference. QC batch

accepted based on LCS and/or LCSD recovery and/or RPD values.

QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC

batch were accepted based on percent recoveries and completeness of QC data.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

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ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603

(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Project Manager: Kyle Norman	6					110	n l	P.O. #	*	D	I	BILL TO		7		11	11	ANA	ANALYSIS		161	ا≊ا	REQUEST	$\{]$	1	1
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H600659	(G)RA	_		SOIL	OIL	SLUD	OTHE	ACID/I	ICE / C	OTHE	OTHE	DATE	TIME					C								
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Pt. 2@2'	2	4	-	<					<	,		3/28/16	01:15	1	4	<					+			+		
4 Pt. 2@4'	G	_		4					<			3/28/16	02:00	<	4	<				1	+			+		
5 Pt.3@2"	9	_		<					<			3/28/16	02:30	1	1	<				1	+	-1		+		
Pt. 3 @ 4'	9	-	+	4	+				4		-	3/28/16	03:00	4	4	4			П	П	+					
LEASE NOTE: Linkiby and Daminos Cardoon School																										
naives. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in willing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be slable for incidental or consequental damages, including without firstation, business interruptions, loss of use, or loss of profits incurred by cleint, its subsidiaries. Iffiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.	other cause whatsoever shall be deemed waived unless consequental damages, including without firritation, busing annoe of services hereunder by Cardinal, regardless of w	waived un limitation regardles	nless r busin s of wh	nade i ess in rether	n writh terrup	ing and dons,	d rece loss o	ved b	y Car or los	dinal s of t	within within he at	e in wifting and received by Cardinal within 30 days after o interruptions, loss of use, or loss of profits incurred by clas- er such claim is based upon any of the above stated reaso	or by the client for the er completion of the a client, its subsidiaries asons or otherwise.	applicat	Уe											
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#54

[†] Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



April 04, 2016

KYLE NORMAN

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: SEMU PERMIAN #34

Enclosed are the results of analyses for samples received by the laboratory on 03/29/16 14:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accred certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Haloacetic Acids (HAA-5)
Method EPA 524.2 Total Trihalomethanes (TTHM)
Method EPA 524.4 Regulated VOCs (V1, V2, V3)

Celey D. Keine

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



Basin Environmental Service KYLE NORMAN P.O. Box 301 Lovington NM, 88260 Fax To: (575) 396-1429

 Received:
 03/29/2016
 Sampling Date:
 03/23/2016

 Reported:
 04/04/2016
 Sampling Type:
 Soil

Project Name: SEMU PERMIAN #34 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

NOT GIVEN

Sample ID: PT. 1 @ 4' (H600660-01)

Project Location:

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/31/2016	ND	2.00	100	2.00	16.6	
Toluene*	<0.050	0.050	03/31/2016	ND	1.91	95.6	2.00	17.2	
Ethylbenzene*	<0.050	0.050	03/31/2016	ND	1.69	84.5	2.00	17.2	
Total Xylenes*	<0.150	0.150	03/31/2016	ND	5.18	86.4	6.00	16.0	
Total BTEX	<0.300	0.300	03/31/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.0	% 73.6-14	0						
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/30/2016	ND	400	100	400	7.69	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/30/2016	ND	173	86.7	200	2.18	
DRO >C10-C28	<10.0	10.0	03/30/2016	ND	157	78.7	200	2.90	
Surrogate: 1-Chlorooctane	86.5	% 35-147	,						
Surrogate: 1-Chlorooctadecane	95.5	% 28-171							

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PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Basin Environmental Service KYLE NORMAN P.O. Box 301 Lovington NM, 88260

(575) 396-1429

Received: 03/29/2016 Sampling Date: 03/23/2016

Reported: 04/04/2016 Sampling Type: Soil

Fax To:

Project Name: SEMU PERMIAN #34 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: PT. 1 @ 6' (H600660-02)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	03/31/2016	ND	2.00	100	2.00	16.6	
Toluene*	0.305	0.200	03/31/2016	ND	1.91	95.6	2.00	17.2	
Ethylbenzene*	1.86	0.200	03/31/2016	ND	1.69	84.5	2.00	17.2	
Total Xylenes*	5.91	0.600	03/31/2016	ND	5.18	86.4	6.00	16.0	
Total BTEX	8.08	1.20	03/31/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	126	% 73.6-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/30/2016	ND	400	100	400	7.69	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	353	100	03/30/2016	ND	173	86.7	200	2.18	
DRO >C10-C28	2850	100	03/30/2016	ND	157	78.7	200	2.90	
Surrogate: 1-Chlorooctane	116	% 35-147	,						
Surrogate: 1-Chlorooctadecane	117	% 28-171							

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Basin Environmental Service **KYLE NORMAN** P.O. Box 301 Lovington NM, 88260 Fax To: (575) 396-1429

Received: 03/29/2016 Sampling Date: 03/23/2016

Reported: 04/04/2016 Sampling Type: Soil

Project Name: SEMU PERMIAN #34 Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: **NOT GIVEN**

Sample ID: PT. 2 @ 3' (H600660-03)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/31/2016	ND	2.00	100	2.00	16.6	
Toluene*	<0.050	0.050	03/31/2016	ND	1.91	95.6	2.00	17.2	
Ethylbenzene*	<0.050	0.050	03/31/2016	ND	1.69	84.5	2.00	17.2	
Total Xylenes*	<0.150	0.150	03/31/2016	ND	5.18	86.4	6.00	16.0	
Total BTEX	<0.300	0.300	03/31/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/30/2016	ND	400	100	400	7.69	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/30/2016	ND	173	86.7	200	2.18	
DRO >C10-C28	<10.0	10.0	03/30/2016	ND	157	78.7	200	2.90	
Surrogate: 1-Chlorooctane	81.4	% 35-147	7						
Surrogate: 1-Chlorooctadecane	92.2	% 28-171							

Surrogate: 1-Chlorooctadecane 92.2 % 28-171

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Basin Environmental Service KYLE NORMAN P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 03/29/2016 Sampling Date: 03/28/2016

Reported: 04/04/2016 Sampling Type: Soil

Project Name: SEMU PERMIAN #34 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: PT. 3 @ 5' (H600660-04)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/31/2016	ND	2.00	100	2.00	16.6	
Toluene*	<0.050	0.050	03/31/2016	ND	1.91	95.6	2.00	17.2	
Ethylbenzene*	<0.050	0.050	03/31/2016	ND	1.69	84.5	2.00	17.2	
Total Xylenes*	<0.150	0.150	03/31/2016	ND	5.18	86.4	6.00	16.0	
Total BTEX	<0.300	0.300	03/31/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	03/30/2016	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/30/2016	ND	173	86.7	200	2.18	
DRO >C10-C28	<10.0	10.0	03/30/2016	ND	157	78.7	200	2.90	
Surrogate: 1-Chlorooctane	86.3	% 35-147	,						
Surrogate: 1-Chlorooctadecane	98.1	% 28-171							

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Basin Environmental Service KYLE NORMAN P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 03/29/2016 Sampling Date: 03/28/2016

Reported: 04/04/2016 Sampling Type: Soil

Project Name: SEMU PERMIAN #34 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: PT. 3 @ 8' (H600660-05)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/31/2016	ND	2.00	100	2.00	16.6	
Toluene*	<0.050	0.050	03/31/2016	ND	1.91	95.6	2.00	17.2	
Ethylbenzene*	<0.050	0.050	03/31/2016	ND	1.69	84.5	2.00	17.2	
Total Xylenes*	<0.150	0.150	03/31/2016	ND	5.18	86.4	6.00	16.0	
Total BTEX	<0.300	0.300	03/31/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/30/2016	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/30/2016	ND	173	86.7	200	2.18	
DRO >C10-C28	<10.0	10.0	03/30/2016	ND	157	78.7	200	2.90	
Surrogate: 1-Chlorooctane	86.0	% 35-147	,						
Surrogate: 1-Chlorooctadecane	93.1	% 28-171							

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Basin Environmental Service **KYLE NORMAN** P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 03/29/2016 Sampling Date: 03/28/2016

Reported: 04/04/2016 Sampling Type: Soil

Project Name: SEMU PERMIAN #34 Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: **NOT GIVEN**

Sample ID: PT. 4 @ 5' (H600660-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/31/2016	ND	2.00	100	2.00	16.6	
Toluene*	< 0.050	0.050	03/31/2016	ND	1.91	95.6	2.00	17.2	
Ethylbenzene*	< 0.050	0.050	03/31/2016	ND	1.69	84.5	2.00	17.2	
Total Xylenes*	< 0.150	0.150	03/31/2016	ND	5.18	86.4	6.00	16.0	
Total BTEX	<0.300	0.300	03/31/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 %	6 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	03/30/2016	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/31/2016	ND	191	95.4	200	6.17	QR-03
DRO >C10-C28	<10.0	10.0	03/31/2016	ND	173	86.7	200	7.67	QR-03
Surrogate: 1-Chlorooctane	91.3 9	% 35-147	,						
Surrogate: 1-Chlorooctadecane	110 %	6 28-171							

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Notes and Definitions

QR-03 The RPD value for the sample duplicate or MS/MSD was outside if QC acceptance limits due to matrix interference. QC batch

accepted based on LCS and/or LCSD recovery and/or RPD values.

QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC

batch were accepted based on percent recoveries and completeness of QC data.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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Celeg D. Kreene

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603 (505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Relinquished By:	Mahad	Relinquished By:	PLEASE NOTE: Liability a analyses. All claims includi service. In no event shall C			7	6	5	ት	N	N		Lab I.D.	FOR LAB USE ONLY	Sampler Name: Kyle Norman	roject Location	Project Name:	Project #:	hone #:	City:	Address:	roject Manager:	Company Name:
γ:		Relinquished By: Date:	PLEASE NOTE: Liatery and Unimages. Caronias statesy and units account neuron of the applicable analyses. All claims including bross for negligence and any other causes whatever shall be deemed varied intess made in writing and received by Cardinal within 30 days after completion of the applicable analyses. All claims including bross for negligence and any other causes whatever shall be deemed varied initiation, business interruptions, loss of use, or loss of profits incurred by claim, its substitutions. It is applicable analyses of the completion of the control of control of the control of the above standard resource of charitons the insurance by Cardinal programment of the above standard resource of otherwise.				Pt. 4 @ 5'	Pt. 3 @ 8'	Pt. 3 @ 5'	Pt. 2 @ 3'	Pt. 1@6"	Pt. 1 @ 4'	Sample I.D.		Kyle Norman	Project Location: SEMU Permian #34						'Kyle Norman	Conoco Phillips
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Sample Condition
Cool Intact
Pres Pres
No No

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:



April 08, 2016

KYLE NORMAN

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: SEMU PERMIAN #34

Enclosed are the results of analyses for samples received by the laboratory on 04/06/16 9:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accred certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Haloacetic Acids (HAA-5)
Method EPA 524.2 Total Trihalomethanes (TTHM)
Method EPA 524.4 Regulated VOCs (V1, V2, V3)

Celey D. Keine

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

03/28/2016



Analytical Results For:

Basin Environmental Service KYLE NORMAN P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Sampling Date:

Received: 04/06/2016

Reported:04/08/2016Sampling Type:SoilProject Name:SEMU PERMIAN #34Sampling Condition:Cool & IntactProject Number:NONE GIVENSample Received By:Jodi Henson

Project Location: NOT GIVEN

Sample ID: PT. 1 @ 10' (H600728-01)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	04/07/2016	ND	1.98	98.8	2.00	2.71	
Toluene*	1.69	0.500	04/07/2016	ND	1.88	94.0	2.00	3.17	
Ethylbenzene*	1.94	0.500	04/07/2016	ND	1.67	83.4	2.00	4.10	
Total Xylenes*	4.96	1.50	04/07/2016	ND	5.17	86.1	6.00	4.65	
Total BTEX	8.58	3.00	04/07/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	109	% 73.6-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	04/07/2016	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	290	200	04/07/2016	ND	178	89.0	200	1.81	
DRO >C10-C28	4970	200	04/07/2016	ND	170	85.0	200	4.37	
Surrogate: 1-Chlorooctane	85.6	% 35-147	7						
Surrogate: 1-Chlorooctadecane	156	% 28-171							

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Notes and Definitions

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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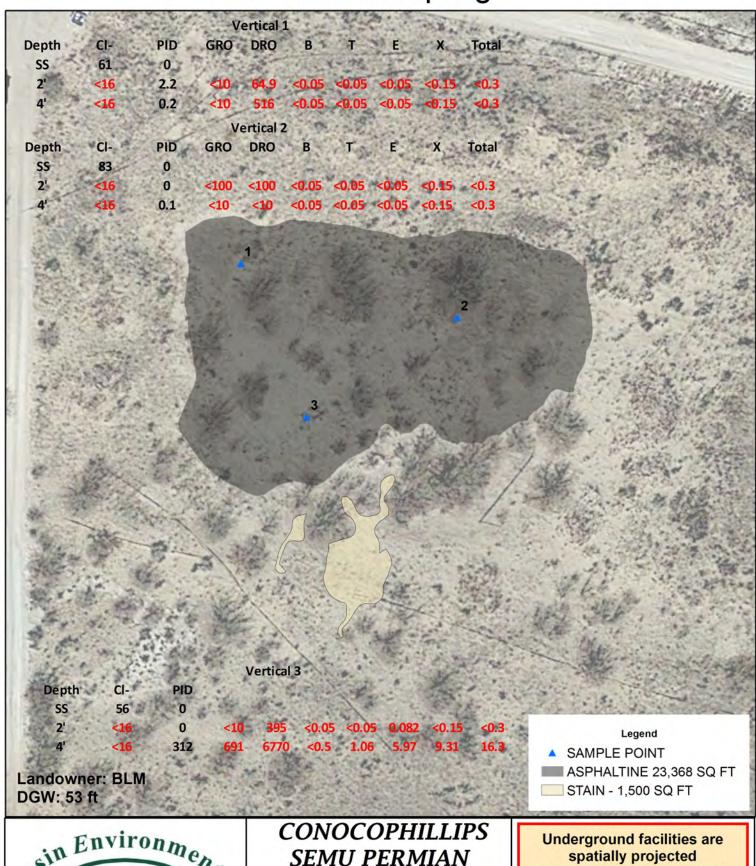
Celeg D. Freene

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603 (505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Conoco Phillips	8	8111 70			l	l		
Project Manager: Kyle Norman		P.O.#		-	1	A	ANALYSIS REQUEST	EST
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Phone #:	Fax #:	Address: 419 W Cain		_		nio		
Project #:	Project Owner:	City: Hobbs		1	_	_		
Project Name:		6) N	ь		_	
Project Location: SEMU Permian #34	an #34	Phone #: VIVI ZIP: 88240		_	X	_		
Sampler Name: Kyle Norman		Fnone #:		_	_	_	DS	
FOR LAB USE ONLY		Fax #:		_	-	_		
	S ER	MATRIX PRESERV SAMPLING	Ch	TPH	Tex			
Lab I.D. Sample I.D. Hueb128	G)RAB OR (C) CONTAINER GROUNDWATE WASTEWATER					Compl		
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service. In no event shall cardinal be liable for incidental or o affiliates or successors arising out of or related to the performal Relinquished By:	1200	comment, or text, shall be limited to the amount paid by the clientifung and received by Cardinal within 30 days after compisition ruptions, loss of use, or lose of profits incurred by client, its substitutions is based upon any of the above stilled reasons or other than the claim is based upon any of the above stilled reasons or other than the claim is based upon any of the above stilled reasons or other than the claim is based upon any of the above stilled reasons or other than the claim is based upon any of the above stilled reasons or other than the claim is based upon any of the above stilled reasons or other than the claim is the claim to the claim is the claim to th	nt for the of the applicable sidiaries					
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Initial Sampling





HISTORICAL

1RP-4218

ULK SECTION 19 T-20-S R-38-E LEA COUNTY, NM

and need to be field verified.

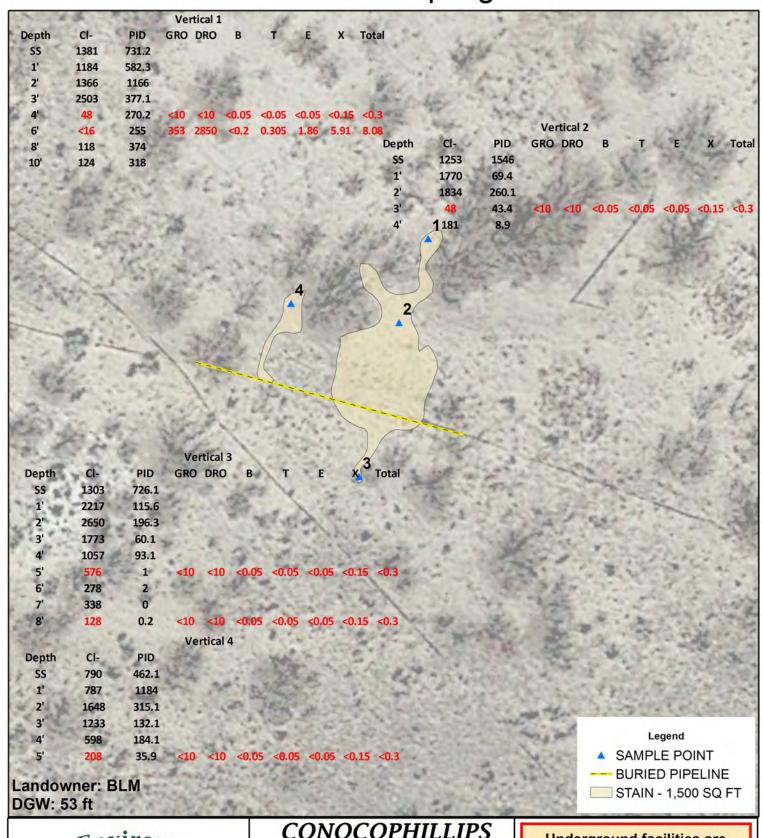
GPS: 32.557904 -103.189613

60 Feet GPS date: 3/28/16 KN Drawing date: 3/28/16

Drafted by: T. Grieco



Initial Sampling





CONOCOPHILLIPS SEMU PERMIAN #034

1RP-4218

UL K SECTION 19 T-20-S R-38-E LEA COUNTY, NM Underground facilities are spatially projected and need to be field verified.

GPS: 32.557582 -103.189651

0 25 50 N GPS date: 3/23/16 JK Drawing date: 3/24/16

Drafted by: T. Grieco