# Appendix C Laboratory Analytical Reports



December 09, 2013

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 12/04/13 10:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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

Jodi Henson

Sample Received By:



#### Analytical Results For:

Basin Environmental Service JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 12/04/2013 Sampling Date: 12/03/2013

Reported: 12/09/2013 Sampling Type: Soil
Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact

Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

#### Sample ID: SP #2 SURFACE (H302935-01)

Chloride, SM4500CI-B	/kg	Analyze	d By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4200	16.0	12/09/2013	ND	416	104	400	3.77	

#### Sample ID: SP #7 SURFACE (H302935-02)

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	12/09/2013	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: ck					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<100	100	12/04/2013	ND	193	96.6	200	3.60	
DRO >C10-C28	7020	100	12/04/2013	ND	190	95.0	200	6.49	
EXT DRO >C28-C35	1440	100	12/04/2013	ND					
Surrogate: 1-Chlorooctane	110	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	220	% 63.6-15	4						

#### Sample ID: SP #9 @ 6' (H302935-03)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	9330	16.0	12/09/2013	ND	432	108	400	3.64	

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

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 12/04/2013 Sampling Date: 12/03/2013

Reported: 12/09/2013 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SP #12 @ 2' (H302935-04)

Chioride, SM4500CI-B	mg/	кд	Anaiyze	а ву: АР					
Analyte	Analyte Result Reporting Limit			Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12600	16.0	12/09/2013	ND	432	108	400	3.64	

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.

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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### RDINAL LABORATORIES

#### **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

101 East Marland, Hobbs, NM 88240

Company Name:	Basin Environmental	I Service Technolo	gies,	LLC	;				£	3/1	L TO				-	1	ANA	LYSI	S RE	QUES	ST.			:
Project Manager:	: Joel Lowry							P.C	). #:			-			-									<u> </u>
Address: P.O.	. Box 301							Col	mpany	:	ворсо,	LP												ĺ
City: Lovington	ń	State: NM	Zip:	88	260			Att	n:	-	Tony Savoie				1									
Phone #: (575	5)396-2378	Fax #: (575)396	3-142	29	,			Add	dress:		522 W. Men	mod								ļ				1
Project #:		Project Owner:	***************************************		***************************************		***************************************	City	y:		Carlsbad				_		:					. :		1
Project Name:	ND8 SWD PW Spill								ite: Ni	M :	Zip: 88	220		2M)	71B)									
Project Location:	: Eddy County								one #:		432 556 87	'30	Chloride	TPH (8015M)	BTEX (8021B)					'	1.0			
Sampler Name:				***************************************			***************************************	Fax	<b>c#</b> :			,	당	H	ĕ									1
FOR LAB USE ONLY						MAT	RIX		PRESE	R۷	SAMPLING			=	<u> </u>									1
Lab I.D.	Sample I.	<b>.D.</b>	(G)RAB OR (C)OMP.	≠ CONTAINERS	GROUNDWATER WASTEWATER	Tios	OIL SLUDGE	OTHER:	ACID/BASE: CE / COOL	OTHER:	DATE	TIME												
	SP #2 Surface		G	1		Х	<u> </u>				12/3/2013	1250	х											
	SP #7 Surface		G	1		х					12/3/2013	1255	х	х										:
	SP #9 @ 6'		G	1		x					12/3/2013	1300	х	:										
	SP #12 @ 2'		G	1		х					12/3/2013	1305	х											
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analyses. All claims including	and Damages. Cardinal's liability an g those for negligence and any other cau rdinal be liable for incidental or conseque	use whatsoever shall be deem	ed waive	ed unle	ss made	in writing	and recei	ived by (	Cardinal with	in 30	days after completion of	the applicable	alu Dy Lin	e chent io	ruie									
affiliates or successors arisin Relinquished By	ng out of or related to the performance of	f services hereunder by Cardin	nal, rega	ardless	of whether ed By	er such cl	laim is bas	sed upor	n any of the	above	e stated reasons or other	Phone Res Fax Resul REMARKS	t:	□ Ye		No No		Phone Fax #:	#:					

te: Received By: Relinquished By: Date: Time: Please email results to Tony Savoie, Jody Walters and PM@basinenv.com Delivered By: (Circle One) Sample Condition CHECKED BY: Cool Intact
Yes Yes
No No Sampler - UPS - Bus - Other: FORM-006

Revision 1.0



December 17, 2013

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 12/10/13 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

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Celey D. Keene

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Sincerely,

Celey D. Keene

Lab Director/Quality Manager



Basin Environmental Service JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 12/10/2013 Sampling Date: 12/09/2013

Reported: 12/17/2013 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: GUN BARREL 12" BGS (H302974-01)

Chloride, SM4500CI-B	/kg	Analyze	d By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1730	16.0	12/16/2013	ND	432	108	400	3.77	

#### Sample ID: GUN BARREL 3' BGS (H302974-02)

Chloride, SM4500CI-B	Chloride, SM4500CI-B mg/kg								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	12/16/2013	ND	432	108	400	3.77	

#### Sample ID: GUN BARREL 5' BGS (H302974-03)

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	12/11/2013	ND	1.95	97.3	2.00	2.59	
Toluene*	<0.050	0.050	12/11/2013	ND	1.93	96.3	2.00	2.40	
Ethylbenzene*	<0.050	0.050	12/11/2013	ND	1.88	93.9	2.00	2.90	
Total Xylenes*	<0.150	0.150	12/11/2013	ND	5.47	91.1	6.00	3.41	
Total BTEX	< 0.300	0.300	12/11/2013	ND					

Surrogate: 4-Bromojiuorobenzene (F1D	90.3	70 09.4-12	O						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	12/16/2013	ND	400	100	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

#### Cardinal Laboratories \*=Accredited Analyte

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Basin Environmental Service

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 12/10/2013 Sampling Date: 12/09/2013

Reported: 12/17/2013 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: GUN BARREL 5' BGS (H302974-03)

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	12/11/2013	ND	184	92.1	200	0.824	
DRO >C10-C28	<10.0	10.0	12/11/2013	ND	183	91.5	200	4.56	
EXT DRO >C28-C35	<10.0	10.0	12/11/2013	ND					
Surrogate: 1-Chlorooctane	104	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	105	% 63.6-15	4						

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#### **Notes and Definitions**

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

#### **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: Basin Environmenta			LLC	-					1	3/L	L TO						NAL	YSIS	REC	QUEST				
Project Manager: Joel Lowry							P	.O. #:	.,.,.	1919191	<u> </u>	-1-1-1-1-1-1-1-1-1-1												
Address: P.O. Box 301						· · · · ·		ompa	nv.		BOPC	O IP	1					.:						
	State: NM	Zin:	8	3260	)			ttn:	iiy.		Tony Savo													
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Phone #: (575)396-2378	Fax #: (575)396		9					ddres	s:		522 W. M		:					1	:					
Project #:	Project Owner:						C	ity:			Carlsbad				<u>@</u>					1			·	
Project Name: ND8							s	tate:	N	<b>и</b> :	Zip:	88220	용	15IV	121	:								
Project Location: Eddy Co., NM					: :		Р	hone	#:		(432)556	8730	Chloride	8)	(8)									
Sampler Name: Joel Lowry						:	F	ax #:					្រ	TPH (8015M)	BTEX (8021B)	-								
FOR LAB USE ONLY					M	ATRIX	<u> </u>	PR	ESEF	₹٧.	SAMPLII	NG		-	m						:			
Lab I.D. Sample	l. <b>D.</b>	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER		SLUDGE	ACID/BASE:	ICE / COOL	OTHER:	DATË	TIME												
Gun Barrel	12" bgs	G	1			Х			X		12/9/13	1200	Х											
2 Gun Barre	3' bgs	G	1			x			х		12/9/13	1205	X											
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affiliates or successors arising out of or related to the performance of services hereunder by Car	dinal, regardless of whether such claim is based upon any of the above stated reasons of or		
Relinquished By: Date:	Received By:	Phone Result: ☐ Yes ☐ No Add'I Phone #:	
17/1/12		Fax Result: ☐ Yes ☐ No Add'l Fax #:	
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Time:		Please email results to bjarguijo@basinenv.com,	
Time.		TASavoie@BassPet.com & SJWalters@BassPet.com	
	OVER DV	17 Cavolo@Bassi Glicom a Govvalicio@Bassi Glicom	
Delivered By: (Circle One)	Sample Condition CHECKED BY:		
	Cool Intact (Lititals)		
Sampler - UPS - Bus - Other:	Yes Tyes		
FORM-006			
FORWFOOD			

Revision 1.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476





January 06, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 12/23/13 8:20.

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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)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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 JOEL LOWRY

P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 12/23/2013 Sampling Date: 12/20/2013

Reported: 01/06/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

Sample ID: SEC. A N 10 NSW #1 (H303107-01)

Chloride, SM4500CI-B mg/kg Analyzed By: AP

Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier

Chloride <16.0 16.0 01/02/2014 ND 416 104 400 0.00

Sample ID: SEC. A N 10 ESW B (H303107-02)

Chloride, SM4500Cl-B Analyzed By: AP Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 304 16.0 01/02/2014 ND 416 104 400 0.00

Sample ID: SEC. A N 10 SSW (IN-SITU) (H303107-03)

Chloride, SM4500Cl-B Analyzed By: AP Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 12100 16.0 01/02/2014 ND 400 0.00 416 104

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Basin Environmental Service

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 12/23/2013 Sampling Date: 12/20/2013

Reported: 01/06/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. A N 10 WEST FLOOR @ 2' (H303107-04)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14500	16.0	01/02/2014	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/27/2013	ND	203	102	200	1.81	
DRO >C10-C28	<10.0	10.0	12/27/2013	ND	215	107	200	7.46	
EXT DRO >C28-C35	<10.0	10.0	12/27/2013	ND					
Surrogate: 1-Chlorooctane	98.3	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	99.2	% 63.6-15	4						

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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 JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 12/23/2013 Sampling Date: 12/20/2013

Reported: 01/06/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. A N 10 EAST FLOOR @ 4' (H303107-05)

TEX 8021B	mg,	/kg	Analyzed By: MS						A-01	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/06/2014	ND	1.88	93.9	2.00	2.36		
Toluene*	<0.050	0.050	01/06/2014	ND	1.86	92.8	2.00	1.31		
Ethylbenzene*	<0.050	0.050	01/06/2014	ND	1.82	91.1	2.00	0.763		
Total Xylenes*	<0.150	0.150	01/06/2014	ND	5.40	90.0	6.00	0.486		
Total BTEX	<0.300	0.300	01/06/2014	ND						
Surrogate: 4-Bromofluorobenzene (PID	104	% 89.4-12	6							
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4160	16.0	01/02/2014	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	<10.0	10.0	12/27/2013	ND	203	102	200	1.81		
DRO >C10-C28	<10.0	10.0	12/27/2013	ND	215	107	200	7.46		
EXT DRO >C28-C35	<10.0	10.0	12/27/2013	ND						
Surrogate: 1-Chlorooctane	102	% 65.2-14	0							
Surrogate: 1-Chlorooctadecane	97.8	% 63.6-15	4							

Cardinal Laboratories \*=Accredited Analyte

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Basin Environmental Service JOEL LOWRY

P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 12/23/2013 Sampling Date: 12/20/2013

Reported: 01/06/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. A S10 NSW (IN-SITU) (H303107-06)

Chloride, SM4500Cl-B mg/kg			Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1760	16.0	01/02/2014	ND	416	104	400	0.00	

#### Sample ID: SEC. A S 10 ESW D (H303107-07)

Chloride, SM4500Cl-B	mg/	/kg	Analyze						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	01/02/2014	ND	416	104	400	0.00	

#### Sample ID: SEC. A S 10 SSW F (H303107-08)

Chloride, SM4500Cl-B	/kg	Analyze	d By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	01/02/2014	ND	416	104	400	0.00	

#### Sample ID: SEC. A S 10 SWSW B (H303107-09)

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	01/02/2014	ND	416	104	400	0.00	

Cardinal Laboratories \*=Accredited Analyte

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12/20/2013



#### Analytical Results For:

Basin Environmental Service JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 12/23/2013 Sampling Date:

Reported: 01/06/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. A S 10 WEST FLOOR @ 2' (H303107-10)

Chloride, SM4500CI-B	mg/	mg/kg		d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8530	16.0	01/02/2014	ND	416	104	400	0.00	
TPH 8015M	mg/	kg	Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/27/2013	ND	203	102	200	1.81	
DRO >C10-C28	<10.0	10.0	12/27/2013	ND	215	107	200	7.46	
EXT DRO >C28-C35	<10.0	10.0	12/27/2013	ND					
Surrogate: 1-Chlorooctane	96.0 9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	95.69	% 63.6-15	4						

Surrogate: I-Chlorooctadecane

#### Sample ID: SEC. A S 10 EAST FLOOR @ 4' (H303107-11)

Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7040	16.0	01/02/2014	ND	400	100	400	3.92	
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	12/27/2013	ND	203	102	200	1.81	
DRO >C10-C28	<10.0	10.0	12/27/2013	ND	215	107	200	7.46	
EXT DRO >C28-C35	<10.0	10.0	12/27/2013	ND					
Surrogate: 1-Chlorooctane	98.1	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	94.5	% 63.6-15	4						

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.



#### **Notes and Definitions**

A-01 Original sample was extracted and run within hold time. Sample rerun for confirmation outside hold time.

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

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.

# ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	(575) 393-2326 FAX (575) 393-2476						Т			RII	L TO					- 1	NAL)	/SIS	REQ	UEST	0			
Company Name:	Basin Environmental Service Technology	ogies	, LL	C			-	P.O.		-						de								
Project Manager:	Joel Lowry						ď	P.O.	#.					1	1	1								
Address: P.O. Bo								Com	pany	:	BOPCO	), LP			3	2								
City: Lovington	State: NM	Zip:	88	260				Attn	:		Tony Savoie	1			3									
Phone #: (575)3	96-2378 <b>Fax #</b> : (575)39	6-142	29					Addı	ress:		522 W. Mar	land			3									
Project#:	Project Owner							City			Carlsbad				<u> </u>									
	ND8 SWD PW Spill							Stat	e: N	IM	<b>Zip:</b> 88	8220	ءِ ا	2M)	21B									
	Eddy Co., NM							Pho	ne #:		(432)556-8	3730	Chloride	(8015M)	BTEX (8021B)									
Project Location:			and the same of th					Fax					등	TPH	<u>ĕ</u>									
- T	Joel Lowry				MA	TRIX	_		PRES	ERV.	SAMPLIN	IG	1	-	m									
FOR LAB USE ONLY																								
Lab I.D. 나 503107	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	OIL	SLUDGE	OTHER:	ACID/BASE:	OTHER:	DATE	TIME												
1	Sec. A N10 NSW #1	G	1		>	(			)	(	12/20/13	900	¥	-	├	-	-	-	_			-	-	
2	Sec. A N10 ESW b	G	1		)	<			>	(	12/20/13	905	*	_	+-	-	-					_	$\dashv$	$\overline{}$
3	Sec. A N10 SSW (In-Situ)	G	1		)	K			)	(	12/20/13	920	X	11	+-	-	-						$\dashv$	
4	Sec. A N10 West Floor @ 2'	G	1		- 2	X			)	Κ .	12/20/13	910	X	X	1	-	-	$\vdash$					$\rightarrow$	
5	Sec. A N10 East Floor @ 4'	G	1		1	X			)	X	12/20/13	940	X	X		+	-	-				_	-	
	Sec. A S10 NSW (In-Situ)	G	1			X				X	12/20/13	930	X	-	+-	+-	-							-
97	Sec. A S10 ESW d	G	1			X				X	12/20/13	1000	X	-	_	+	-							$\vdash$
	Sec. A S10 SSW f	G	1			X				X	12/20/13	950	V	_	+-	+-	-	-	_	-				$\vdash$
9	Sec. A S10 SWSW b	G	1			X				X	12/20/13	1020	X	-	+-	+	+-	-	_	-				H
	Sec. A S10 West Floor @ 2'	G	1			Х				X	12/20/13	1010	X	X	+	+	+-	-	-	-			$\vdash$	t
10	36C. A 310 West 1100. C -																							

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	service. In no event shall Cardinal be liable for incidental of consequental	Add! Phone #:
	affiliates or successors arising out of or related to the performance of servi	Phone Result: Yes No Add Frione #.
I	Relinquished By:	Date:   Received By   Fax Result:   Yes   No   Add'l Fax #:
	Relinquished By:	Time: 7:00  Pate: 13:33:3  Received By: 100 di 11 11 100 11 Please email results to pm@basinenv.com,
	the day	TASavoie@BassPet.com & SJW alters@BassPet.com
	Delivered By: (Circle One)	Cool tritact (Initials)
	Sampler - UPS - Bus - Other: FORM-006	1.8 4 No No

Revision 1.0



January 03, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 12/26/13 9:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

 Received:
 12/26/2013
 Sampling Date:
 12/23/2013

 Reported:
 01/03/2014
 Sampling Type:
 Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: \*\* (See Notes)
Project Number: NONE GIVEN Sample Received By: Kathy Perez

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. B NSW #1C (H303128-01)

Chloride, SM4500CI-B mg/kg			Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	01/02/2014	ND	400	100	400	11.3	

#### Sample ID: SEC. B NSW #3D (H303128-02)

Chloride, SM4500Cl-B mg/kg			Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	01/02/2014	ND	400	100	400	11.3	

#### Sample ID: SEC. B NESW #1B (H303128-03)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	01/02/2014	ND	400	100	400	11.3	

Cardinal Laboratories \*=Accredited Analyte

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#### **Notes and Definitions**

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 8824

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476 ame: Basin Environmental Service Technologies, LLC

Company Name: Basin Environmental Service Technologies, LLC	BILL TO ANALYSIS REQUEST						1.1.1						
Project Manager: Joel Lowry	P.O. #:												
Address: P.O. Box 301	Company: BOPCO, LP			1									
City: Lovington State: NM Zip: 88260	Attn: Tony Savoie								:				
<b>Phone #:</b> (575)396-2378	Address: 522 W. Mermod												
Project #: Project Owner:	City: Carlsbad					:		'					
Project Name: ND8 SWD PW Spill	State: NM Zip: 88220	_   _	2 (N)	BTEX (8021B)	1								
Project Location: Eddy County	Phone #: 432 556 8730	- Chiroldo	<u>8</u> 8	88			1			:	1 1		- :
Sampler Name: Quel low	Fax #:	_  ਹੈ	TPH (8015M)	X						l		:	
FOR LAB USE ONLY MATRIX	PRESERV SAMPLING	-		<u> </u>									
(C)OMP.													
Tab I.D. Sample II.D. Sample I.D. Sample I						:	11.1	1					
Bamble I.D.	BASE COO			·									
(G)RAB OR (C)ON # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL	OTHER:  ACID/BASE: OTHER:  DOTHER:												
Sec B. NSW #1c G 1 x	x 12/23/2013 905	,						-					
Sec B. NWS #3d G 1 x	x 12/23/2013 910	1,											
3 Sec B. NESW #1b G 1 x	x 12/23/2013 900		(										
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PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether bas	ed in contract or tort, shall be limited to the amount p	paid by	the client fo	or the					L	<u> </u>		: .	

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 the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed walved in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: Received I	3Y	P	hone Result:	□ Yes	□ No	Add'l Phone #:	to the second		
( ) ( )	Q-26-13		F	ax Result:	□ Yes	□ No	Add'l Fax #:			
Jul Joury	Time: 8:00	PAR	R	REMARKS:					:	
Relinquished By:	Date: Received E	Sy:								
Delivered Des (Sinds One)	9:12	May 1 WC		lease email r	esults to	Tony	Savoie, Jody V	Valters and PM	@basinenv	.com
Delivered By: (Circle One)		Sample Condition CHECKED Cool Intact (Injitials		1 - 1			.*			111
Sampler - UPS - Bus - Other: FORM-006	8,48	THE Yes No No	11 1 1 1 1		÷					

Revision 1.0



January 03, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 12/27/13 8:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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 JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 12/27/2013 Sampling Date: 12/26/2013

Reported: 01/03/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. B WEST SW #1 (H303133-01)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6080	16.0	01/02/2014	ND	416	104	400	0.00	

#### Sample ID: SEC. B NW FLOOR (H303133-02)

BTEX 8021B	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/02/2014	ND	1.85	92.7	2.00	4.48	
Toluene*	<0.050	0.050	01/02/2014	ND	1.90	94.8	2.00	3.83	
Ethylbenzene*	<0.050	0.050	01/02/2014	ND	1.91	95.3	2.00	3.12	
Total Xylenes*	<0.150	0.150	01/02/2014	ND	5.55	92.6	6.00	3.00	
Total BTEX	<0.300	0.300	01/02/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID 102 % 89.4-126

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12700	16.0	01/02/2014	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	<10.0	10.0	12/27/2013	ND	189	94.6	200	5.41	
DRO >C10-C28	<10.0	10.0	12/27/2013	ND	184	91.9	200	10.3	
EXT DRO >C28-C35	<10.0	10.0	12/27/2013	ND					

Surrogate: 1-Chlorooctane 121 % 65.2-140

Cardinal Laboratories \*=Accredited Analyte

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Basin Environmental Service

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 12/27/2013 Sampling Date: 12/26/2013

Reported: 01/03/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. B NW FLOOR (H303133-02)

TPH 8015M mg/kg Analyzed By: ms

Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Surrogate: 1-Chlorooctadecane 116 % 63.6-154

#### Sample ID: SEC. B ESW (IN-SITU) (H303133-03)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6660	16.0	01/02/2014	ND	416	104	400	0.00	

Cardinal Laboratories \*=Accredited Analyte

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#### **Notes and Definitions**

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 8824

#### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name:	Basin Environmental Service Technol	ogies	s, Ll	_C					1	8/	LL TO			:			ANA	LYSIS	RE	QUES	ST .	i	
Project Manager:	Joel Lowry						P	.0.	#:	•								. : .					
Address: P.O. F	3ox 301	::				:	c	om	pany:		ворс	O, LP				:							
City: Lovington	State: NM	Zip:	88	3260			A	ttn:	<u> </u>		Tony Savo	ie											
Phone #: (575)	396-2378 <b>Fax #:</b> (575)39	6-142	29				Α	ddr	ess:		522 W. Ma	arland											
Project #:	Project Owner	:				:	c	ity:	~···		Carlsbad	İ											
Project Name:	ND 8 SWD PW Spill						s	tate	e: N	М	Zip: 8	88220	<u>ه</u>	5M)	BTEX (8021B)								
Project Location:	Eddy Co., NM						Р	hor	ne #:		(432)556-	-8730	Chloride	TPH (8015M)	(80								
Sampler Name:	Joel Lowry	::	***************************************				F	ax i	<b>#:</b>				ទី	표	Ä					1::			1. 1
FOR LAB USE ONLY					MA	RIX		P	RESE	RV.	SAMPLII	NG :	]	-	m			1::::::::::::::::::::::::::::::::::::::					
		₽.						ı															
		G)RAB OR (C)OMP	RS	TER	ž.			1						:				1			i.		
Lab I.D.	Sample I.D.	OR.	# CONTAINERS	GROUNDWATER	WASTEWATER		ш .	ن و	20 E														
		RAB	NO	Vno:	WASTE		SLUDGE OTHER	OTTEN.	ACIL/IBASE.	OTHER:	·						1		1	<b>.</b>			
H303133	Sec. B West SW #1	-	#	5		ō	<u> </u>	+		5	DATE	TIME	┼-				<u> </u>	-			-	<del>  </del>	 
	Sec. B NW Floor	G	1		X			+	X		12/26/13 12/26/13	930 935	X				1 14		-	<u> </u>			 <u> </u>
2 3	Sec. B. ESW (In-Situ)	G G	1		X			+	X		12/26/13	935	X	х	Х				├-	├	-		
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Relinquished By:	Date: Received By:	Phone Result:	☐ Yes	□No	Add'l Phone #:	 	
Galfrey	7:30 Mm / Chipe	Fax Result: REMARKS:	☐ Yes	□ No	Add'l Fax #:		
Reinquistred By:	Time: 8:25 ADDI TENDON				Dbasinenv.com, SJWalters@Ba		
Delivered By: (Circle One) Sampler - UPS - Bus - Other: FORM-006	Sample Condition CHECKED BY:  Cool Intact (Infliats)  Cool Intact (Infliats)  No No						:

Revision 1.0 † Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

454



January 10, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 01/06/14 8:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Accreditation applies to public drinking water matrices.

Celes D. Keens

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 JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/06/2014 Sampling Date: 01/03/2014

Reported:01/10/2014Sampling Type:SoilProject Name:ND 8 SWD PW SPILLSampling Condition:Cool & IntactProject Number:NONE GIVENSample Received By:Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. B SSW #1C (H400022-01)

mg	/kg	Analyze	d By: AP					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
368	16.0	01/07/2014	ND	416	104	400	3.77	
2C (H400022	-02)							
mg	/kg	Analyze	d By: AP					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	Result 368 2C (H400022- mg	Result Reporting Limit  368 16.0  2C (H400022-02)  mg/kg	Result Reporting Limit Analyzed  368 16.0 01/07/2014  2C (H400022-02)  mg/kg Analyze	Result Reporting Limit Analyzed Method Blank  368 16.0 01/07/2014 ND  2C (H400022-02)  mg/kg Analyzed By: AP	Result Reporting Limit Analyzed Method Blank BS  368 16.0 01/07/2014 ND 416  2C (H400022-02)  mg/kg Analyzed By: AP	Result Reporting Limit Analyzed Method Blank BS % Recovery  368 16.0 01/07/2014 ND 416 104  2C (H400022-02)  mg/kg Analyzed By: AP	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC  368 16.0 01/07/2014 ND 416 104 400  2C (H400022-02)  mg/kg Analyzed By: AP	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD  368 16.0 01/07/2014 ND 416 104 400 3.77  2C (H400022-02)  mg/kg Analyzed By: AP

#### Sample ID: SEC. B SSW #3B (H400022-03)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	01/07/2014	ND	416	104	400	3.77	

#### Sample ID: SEC. B S10 NSW #1 (H400022-04)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	01/07/2014	ND	416	104	400	3.77	

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Basin Environmental Service JOEL LOWRY

P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/06/2014 Sampling Date: 01/03/2014

Reported: 01/10/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. B S10 NSW #2 (H400022-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1710	16.0	01/07/2014	ND	416	104	400	3.77	

#### Sample ID: SEC. B WSW #2 (H400022-06)

Chloride, SM4500CI-B	/kg	Analyze	d By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11300	16.0	01/07/2014	ND	416	104	400	3.77	

#### Sample ID: SEC. B N10 (IN-SITU) (H400022-07)

Chloride, SM4500CI-B	Analyze	d By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5440	16.0	01/07/2014	ND	416	104	400	3.77	

#### Sample ID: SEC. B S10 (IN-SITU) (H400022-08)

Chloride, SM4500CI-B	Analyze	d By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5680	16.0	01/07/2014	ND	416	104	400	3.77	

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Basin Environmental Service JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/06/2014 Sampling Date: 01/03/2014

Reported: 01/10/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. B S10 CENTER FLOOR (IN-SITU) (H400022-09)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>7330</b> 16.0		01/08/2014	ND	416	104	400	3.77	
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	01/06/2014	ND	212	106	200	3.32	
DRO >C10-C28	<10.0	10.0	01/06/2014	ND	207	103	200	2.78	
EXT DRO >C28-C35	<10.0	10.0	01/06/2014	ND					
Surrogate: 1-Chlorooctane	94.8	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	92.6	% 63.6-15	4						

#### Sample ID: SEC. B S10 WEST FLOOR (IN-SITU) (H400022-10)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result Reporting Limit <b>5920</b> 16.0		Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride			01/08/2014	ND	416	104	400	3.77	
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	01/06/2014	ND	212	106	200	3.32	
DRO >C10-C28	<10.0	10.0	01/06/2014	ND	207	103	200	2.78	
EXT DRO >C28-C35	<10.0	10.0	01/06/2014	ND					
Surrogate: 1-Chlorooctane	96.9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	91.2 % 63.6-154		4						

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Basin Environmental Service JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/06/2014 Sampling Date: 01/03/2014

Reported: 01/10/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact Project Number: Sample Received By: NONE GIVEN Jodi Henson

Project Location: EDDY COUNTY, NM

BTEX 8021B	mg/l	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/08/2014	ND	2.10	105	2.00	1.72	
Toluene*	<0.050	0.050	01/08/2014	ND	2.10	105	2.00	1.75	
Ethylbenzene*	<0.050	0.050	01/08/2014	ND	2.16	108	2.00	1.93	
Total Xylenes*	<0.150	0.150	01/08/2014	ND	6.23	104	6.00	0.713	
Total BTEX	<0.300	0.300	01/08/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 %	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/l	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chlarida	7520	16.0	01/09/2014	ND	416	104	400	2 77	

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7520	16.0	01/08/2014	ND	416	104	400	3.77	
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	01/06/2014	ND	212	106	200	3.32	
DRO >C10-C28	101	10.0	01/06/2014	ND	207	103	200	2.78	
EXT DRO >C28-C35	<10.0	10.0	01/06/2014	ND					

Surrogate: 1-Chlorooctane 96.0 % 65.2-140 Surrogate: 1-Chlorooctadecane 120 % 63.6-154

Cardinal Laboratories \*=Accredited Analyte

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#### **Notes and Definitions**

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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### RDINAL LABORATORIES

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

	(575) 393-2326 FAX (575) 393-2476						18			• • • •	i TO				_		NAL	YSIS	REQ	UEST	Г			
Company Name:	Basin Environmental Service Technolog	gies,	LLC				BILL TO								3	Ť					$\neg \top$			
Project Manager:	Joel Lowry						P.O. #:						10											
Address: P.O. E	3ox 301						С	omp	any:		BOPCO	), LP			S.						.			
City: Lovington	ity: Lovington State: NM Zip: 88260						Α	ttn:			Tony Savoie	)			3									
	396-2378 Fax #: (575)396	142	9				A	ddre	ss:		522 W. Mar	land			3									
	Project Owner:						c	ity:			Carlsbad				BTEX (8021B) 200									
Project #:	ND8 SWD PW Spill						s	tate	: NI	М	<b>Zip:</b> 8	8220	<u>.</u>	TPH (8015M)	21B									
						,		hon			(432)556-8	3730	Chloride	801	(8)									
Project Location:							-	ax#			(102)000		흥	ž	Ĭ Ä									
Sampler Name:	Joel Lowry	_	_		МΔТ	TRIX	_		RESE	RV.	SAMPLIN	IG	1	=	<u> </u>									
FOR LAB USE ONLY		١	-	Ī	1111					-	deala	1	1											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWAIEK	SOIL	TIO	SLUDGE	OTHER:		OTHER:	1/3/14 <sup>3</sup>	TIME												
1	Sec. B SSW#1c	G	1		X			1	X		1/3/13	900	X	$\vdash$	-			_						
2	Sec. B SSW#2C	G	1		X			1	Х	-	1/3/13	910	X	-	-				+	_				
3	Sec. B SSW #3b	G	1		Х			1	X		1/3/13	920	Х	-	-			1	+-		$\vdash$	$\vdash$		
Ч	Sec. B \$10 NSW #1	G	1		Х			-	Х	-	1/3/13	930	X	$\vdash$	+		$\vdash$	+	$\vdash$					
5	Sec. B. S10 NSW #2	G	1		X			1	Х		1/3/13	940	X	$\vdash$	+		-	$\vdash$	+	$\vdash$				
6	Sec. B WSW #2	G	1	1	X	(		-	X	1	1/3/13	950	×	+	+		_	+		+				
7	Sec. B N10 (In-Situ)	G	1		X	(		-	X		1/3/13	1000	X	+	+	-			+	$\vdash$	$\top$			
* 8	Sec Sec-\$10 (In-Situ)	G	1		X	<		-	X	-	1/3/13	1010	X	+	+-	-	_	+	+	_	_			
N 9	Sec. B S10 Center Floor (In-Situ)	G	1		>	<		_	X		1/3/13	1020	×	X	+-	+	+	+	+	+				
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10	Sec. B S10 West Floor (In-Situ)	1 0					-	-			1/3/13	1040	l x	l x	X		1	1		1	1	1		

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 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise

	affiliates or successors arising out of or related to the performance of servi	ices hereunder by Cardinal, regardless of whether such claim is be	Sed upon any or an	Phone Result:	☐ Yes	□ No	Add'l Phone #:	(A) STATE OF THE PARTY OF THE P
	Relinquished By:	Date: Received By:		Fax Result:	☐ Yes	□ No	Add'l Fax #:	
	0 11	Time: 7:30	My	REMARKS:				
	Relinquished By:	Date: -6-(C) Received By:	No as loon	Please em	nail results	s to pm@	basinenv.com,	
	ffra Allegge	Time: g: 10 y Call Sample Cor	ndition CHECKED BY	TASavoie(	@BassPe	et.com &	SJWalters@BassPet.com	
4	Delivered By (Circle One)	Cool Int	act (Initials)	VAL		0	D. World	
	Sampler - UPS - Bus - Other: FORM-006	3.6 No	No	* Chan	GLOW	10de	ospu Bun. 1110/14	_
	Revision 1.0	† Cardinal cannot accept	verbal changes. Please fax	written change	3 10 37 3-4	333-247		





January 15, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 01/09/14 8:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Accreditation applies to public drinking water matrices.

Celey D. Kuno

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 JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fay Tay (F7F) 200

Fax To: (575) 396-1429

Received: 01/09/2014 Sampling Date: 01/07/2014

Reported: 01/15/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

352

16.0

#### Sample ID: SEC. C ESW #1 (H400077-01)

Chloride, SM4500Cl-B	` mg	/kg	Analyze	ed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	01/13/2014	ND	416	104	400	0.00	
Sample ID: SEC. C NSW #	#1 (H400077-(	02)							
Chloride, SM4500CI-B	mg	/kg	Analyze	ed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

#### Sample ID: SEC. C NSW #2 (H400077-03)

Chloride

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	01/13/2014	ND	416	104	400	0.00	

ND

416

104

400

0.00

01/13/2014

#### Sample ID: SEC. C SSW #1 (H400077-04)

Chloride, SM4500CI-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	01/13/2014	ND	416	104	400	0.00	

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 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

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/09/2014 Sampling Date: 01/07/2014

Reported: 01/15/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. C SSW #2 (H400077-05)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	01/13/2014	ND	416	104	400	0.00	

Cardinal Laboratories \*=Accredited Analyte

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Basin Environmental Service JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/09/2014 Sampling Date: 01/07/2014

Reported: Sampling Type: Soil 01/15/2014

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

#### Sample ID: SEC. C FLOOR #1 @ 2' (H400077-06)

EDDY COUNTY, NM

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	01/14/2014	ND	1.97	98.7	2.00	5.22	
Toluene*	<0.050	0.050	01/14/2014	ND	1.91	95.6	2.00	6.25	
Ethylbenzene*	<0.050	0.050	01/14/2014	ND	1.95	97.7	2.00	5.02	
Total Xylenes*	<0.150	0.150	01/14/2014	ND	5.73	95.4	6.00	4.47	
Total BTEX	<0.300	0.300	01/14/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 89.4-12	6						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	01/13/2014	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	<10.0	10.0	01/12/2014	ND	170	84.8	200	9.62	
DRO >C10-C28	<10.0	10.0	01/12/2014	ND	170	84.8	200	13.1	
EXT DRO >C28-C35	<10.0	10.0	01/12/2014	ND					
Surrogate: 1-Chlorooctane	97.3	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	110 9	% 63.6-15	4						

Cardinal Laboratories \*=Accredited Analyte

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Basin Environmental Service JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/09/2014 Sampling Date: 01/07/2014

Reported: 01/15/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Analyzed By: MC

Project Location: EDDY COUNTY, NM

ma/ka

#### Sample ID: SEC. C FLOOR #2 @ 2' (H400077-07)

RTFY 8021R

B1EX 8021B		<sup>и</sup> кд	Апануге	а ву: мѕ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/14/2014	ND	1.97	98.7	2.00	5.22	
Toluene*	<0.050	0.050	01/14/2014	ND	1.91	95.6	2.00	6.25	
Ethylbenzene*	<0.050	0.050	01/14/2014	ND	1.95	97.7	2.00	5.02	
Total Xylenes*	<0.150	0.150	01/14/2014	ND	5.73	95.4	6.00	4.47	
Total BTEX	<0.300	0.300	01/14/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 89.4-12	6						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	01/13/2014	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	<10.0	10.0	01/12/2014	ND	170	84.8	200	9.62	
DRO >C10-C28	<10.0	10.0	01/12/2014	ND	170	84.8	200	13.1	
EXT DRO >C28-C35	<10.0	10.0	01/12/2014	ND					
Surrogate: 1-Chlorooctane	87.5	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	94.3	% 63.6-15	4						

Cardinal Laboratories \*=Accredited Analyte

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#### **Notes and Definitions**

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

(575) 393-2326 FAX (575) 393-2476

Company Name:	Basin Environmental Service Technol	ogie	s, L	LC:	. ::					BI	LL TO						ANAI	LYSIS	REC	QUES	T			
Project Manager:	Joel Lowry							P.0	O. #						٠.									
Address: P.O. E	3ox 301							Со	mp	any:	BOPO	00, LP		:										
City: Lovington	State: NM	Zip:	8	826	)		***************************************	Att	tn:		Tony Savo	oie	]						-					
Phone #: (575)	396-2378 <b>Fax #</b> : (575)39	6-14	29				***************************************	Ad	dre	ss:	522 W. M	arland	1									1 .: :		
Project#:	Project Owner	:				:		Cit		***************************************	Carlsba	d .	1	:				İ						
	ND 8 SWD PW Spill									NM		88220	1	Ξ	18				ŀ					
Project Location:	Eddy Co., NM				÷				one		(432)556		Chloride	TPH (8015M)	(8021B)								-	
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**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST** 

PLEASE NOTE: Llability 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 the client for tanalyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,

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Relinquish By:	Date: 1-9-10 Received B	y: \							
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Sampler - UPS - Bus - Other: FORM-006	5.60	I Yes Yes C		: . !!					

Revision 1.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476





January 21, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 01/13/14 11:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

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Method EPA 524.2 Total Trihalomethanes (TTHM)
Method EPA 524.4 Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/13/2014 Sampling Date: 01/10/2014

Reported: 01/21/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. C FLOOR #3 (H400102-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	01/17/2014	ND	400	100	400	3.92	

#### Sample ID: SEC. C WSW #1 (H400102-02)

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	01/17/2014	ND	400	100	400	3.92	

Cardinal Laboratories \*=Accredited Analyte

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#### **Notes and Definitions**

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 8824

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name:	Basin Environmental Service Techn		ies	, LLC	;					[3]	IL.	L TO						ANAL	YSIS	RE	QUES	ST.			
Project Manager:	Joel Lowry			*				P.O	.#:															Ì	
Address: P.O. I	3ox 301							Cor	npa	ny:		ВОРС	O, LP												
City: Lovington	State: NM	Zip	: 8	8260	)			Attr	1:			Tony Savo	ie												
Phone #: (575)	396-2378 <b>Fax #</b> : (575)3	96-1	429					Add	ires	s:		522 W. Ma	arland												
Project #:	Project Owne	r:						City	<i>r</i> :			Carlsbad			(	€									
Project Name:	ND 8 SWD PW Spill							Sta	te:	NM	Z	ip: 8	88220	မွ	(8015M)	21E									
Project Location:	Eddy Co., NM	٠						Pho	ne :	#:		(432)556-	8730	Chloride	801										
Sampler Name:	Joel Lowry							Fax						당	TPH	BTEX (8021B)									
FOR LAB USE ONLY				_	M	ATRI	X		PRE	SERV	/-	SAMPLI	NG		F	m							1		[
Lab I.D. H400102	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL OTHER:		DATE	TIME												
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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 the client for the 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 30 days after completion of the applicabl service. In no event shall Cardinal be liable for incidental or consequental 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Date: 2/11 Received By:	Phone Result:
Time: 35 ClOdi	Fax Result:
Relinquished By: Date: Received By:	
Time:	Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com
Donitored By: (entite enter	ondition CHECKED BY:
Sample Rup 306 Bus - Other:	~ .   \ \ 1/1/ <b>\</b>   1



January 23, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 01/15/14 12:17.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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 JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/15/2014 Sampling Date: 01/14/2014
Reported: 01/23/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Celey D. Keene

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. C WEST SW #2 (H400128-01)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	01/23/2014	ND	416	104	400	0.00	

#### Sample ID: SEC. C WEST SW #3 (H400128-02)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>de 64.0</b> 16.0		01/23/2014	ND	416 104		400	0.00	

#### Sample ID: SEC. C WEST SW #4 (H400128-03)

Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	01/23/2014	ND	416	104	400	0.00	

#### Sample ID: SEC. C EAST SW #2 (IN-SITU) (H400128-04)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3080	16.0	01/23/2014	ND	416	104	400	0.00	

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 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

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/15/2014 Sampling Date: 01/14/2014

Reported: 01/23/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Celey D. Keene

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. C EAST SW #3 (IN-SITU) (H400128-05)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	367	16.0	01/23/2014	ND	416	104	400	0.00	

#### Sample ID: SEC. C FLOOR #4 (H400128-06)

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	01/23/2014	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	<10.0	10.0	01/17/2014	ND	42.2	84.4	50.0	3.99	
DRO >C10-C28	<10.0	10.0	01/17/2014	ND	46.9	93.8	50.0	3.76	
EXT DRO >C28-C35	<10.0	10.0	01/17/2014	ND					
Surrogate: 1-Chlorooctane	80.6	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	84.0	% 63.6-15	4						

Cardinal Laboratories \*=Accredited Analyte

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Basin Environmental Service

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/15/2014 Sampling Date: 01/14/2014

Reported: 01/23/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Celey D. Keene

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. C FLOOR #5 (H400128-07)

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	01/23/2014	ND	416	104	400	0.00	
TPH 8015M mg/kg		/kg	Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/17/2014	ND	42.2	84.4	50.0	3.99	
DRO >C10-C28	<10.0	10.0	01/17/2014	ND	46.9	93.8	50.0	3.76	
EXT DRO >C28-C35	<10.0	10.0	01/17/2014	ND					
Surrogate: 1-Chlorooctane	70.6	% 65.2-14	10						
Surrogate: 1-Chlorooctadecane	72.3	% 63.6-15	54						

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.



#### **Notes and Definitions**

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

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.

# ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:							LL TO					ANA	LYSIS	RE	QUES	T			
Project Manager:	Joel Lowry				P.	O. #:			1										T
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Minimus all victorias	396-2378 Fax #: (575)3	*****	29		Ac	dress;	522 W. M	erland											
Project#:	Project Owne	er:		4	Ci	y:	Carisbac				<b>-</b>								
Project Name:	ND 8 SWD PW Spill		·	and the same and the	St	ate: NM	Zip:	88220	9	25	216								
Project Location:	Eddy Co., NM		OPPORTUNITION OF		Pt	one #:	(432)556	8730	Chloride	8	88								
Sampler Name:	Joel Lowry				Fa	x#:			្សី	TPH (8015M)	BTEX (8021B)								
FOR LAB USE ONLY				MATRIX		PRESERV.	SAMPLI	NG	1		0							<b>.</b>	1
Lab I.D. H400128	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL	OTHER	ACID/BASE: ICE/COOL OTHER:	DATE	TIME											
1	Sec. C West SW #2	G	1	x		X	1/14/14	1000	х										╙
2	Sec. C West SW #3	G	1	<u> </u>		Х	1/14/14	1010	x										1
3	Sec. C West SW #4	G	1	x		X	1/14/14	1020	Х		ioioi i i -								
4	Sec. C East SW #2 (In-Situ)	G	1	x	4	X	1/14/14	1030	×						ļ				1
5	Sec. C East SW #3 (In-Situ)	G	1	X		X	1/14/14	1040	×										
اط	Sec. C Floor #4	G	1	X	شحواني	X	1/14/14	1050	×	×					<u> </u>		1		4
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PLEASE NOTE: Liability and Darhages, Cardinar's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount baid by the client for the enables. All claims including those for negligence and any other reases whated unless made in writing and yearly of by clays after completion of the applicable.

Service. In no even shall Cardinal be liable for inclopent or consequential demages, including without trinitation, business lateral part of class of profits incurred by client, as subsidiaries.

Sillialize or auccessors a silling out for relative to the performance of services ferminds by Cardinal regardeds of whether such giant is based spon any of the above stated measons or otherwise.

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Sampler - UPS - Bus - Other: 2 / 1 Wyes Wyes (M)	
FURM-OUB C.G I NO I NO	

Revision 1.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476



January 24, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 01/21/14 11:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/21/2014 Sampling Date: 01/20/2014

Reported: 01/24/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. C. ESW #4 (H400184-01)

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	01/23/2014	ND	416	104	400	0.00	

#### Sample ID: SEC. C. FLOOR #6 (H400184-02)

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	01/23/2014	ND	416	104	400	0.00	

Cardinal Laboratories \*=Accredited Analyte

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#### **Notes and Definitions**

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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### RDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

#### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Revised (575) 393-2326 FAX (575) 393-2476

Company Name:	Basin Environmental Service Technol	ogie	s, L	LC							BI	LL	TO					 ANAL	YSIS	REC	QUES	Т		 _
Project Manager:	Joel Lowry							P	2.0. ‡	<b>#</b> :														
Address: P.O. E	3ox 301							c	omp	oan	y:		BOPC	O, LP										- 1
City: Lovington	State: NM	Zip	: 8	826	0			A	ttn:			Tor	ny Savoi	е				-						
Phone #: (575)3	396-2378 <b>Fax #</b> : (575)39	6-14	129					A	ddre	ess	:	52	2 W. Ma	rland										
Project #:	Project Owner	:						c	ity:			С	Carlsbad											
Project Name:	ND 8 SWD PW Spill							s	tate	:	NM	Zip:	: 8	88220	<u>e</u>	5M)	BTEX (8021B)							
Project Location:	Eddy Co., NM							P	hon	e #	:	(4	132)556-	8730	Chloride	тРН (8015М)	(80)							
Sampler Name:	Joel Lowry							F	ax#	:					등	PH	Ĭ							
FOR LAB USE ONLY		Γ	Γ			MAT	RIX		Р	RES	ERV.	. S	AMPLIN	NG		-	m							
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	Nos	OIL	SLUDGE	OTHER:		OTHER:	D	ATE	TIME										
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PLEASE NOTE: Liability and	Damages. Cardinal's liability and client's exclusive remedy f	or any	/ claim	n arisir	ng wh	ether I	pased	in con	tract o	r ton	t, shall t	be limit	ted to the	amount paid b	y the clie	nt for the								

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 30 days after completion of the applicable

service. In no event shall Cardinal be liable for incidental or consequental 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	services hereunder by Cardinal, regardless	of whether such claim is based upon any of the above stated rea	i reasons or otherwise.	
Relinquished By:	Date: /// Rece	ived By:	Phone Result:	
Relinquished By:	Time: Rece	wived By:	Fax Result:	
	Time:	$\mathcal{O}_{\mathbb{R}^{n}}$	Please email results to pm@basinenv.com, TASavoie@BassPet.com & SJWalters@BassPet.com	
Delivered By: (Circle One)		Sample Condition CHECKED  Cool Intact (Initials)		
Sampler - UPS - Bus - Other: FORM-006	-3.80	Yes Yes		

# ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

#### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(575) 393-2326 FAX (575) 393-2476 BILL TO ANALYSIS REQUEST Company Name: Basin Environmental Service Technologies, LLC P.O. #: Project Manager: Joel Lowry Address: P.O. Box 301 Company: BOPCO, LP State: NM Zip: 88260 Lovington Attn: Tony Savoie (575)396-2378 Fax #: (575)396-1429 Phone #: Address: 522 W. Marland Project Owner: Project #: City: Carlsbad BTEX (8021B) TPH (8015M) ND 8 SWD PW Spill Project Name: State: NM Zip: 88220 Chloride Project Location: Eddy Co., NM Phone #: (432)556-8730 Sampler Name: Joel Lowry Fax #: PRESERV MATRIX SAMPLING FOR LAB USE ONLY SROUNDWATER Sample I.D. Lab I.D. OTHER: ACID/BASE: ICE / COOL SLUDGE HHDD1913 DATE TIME Sec. C. WSW #4 G Χ X 1/20/14 1240 Sec. C. Floor #5 G Х X 1/20/14 1230

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affiliates or successors arising out of or related to the performance of ser	rvices hereunder by Cardinal, regardless of whether such claim is based upon any of the	above stated reasons or otherwise.			
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Sampler - UPS - Bus - Other:	- 3 Yes Yes	11/4/			
FORM-006	□ No □ No	6/1			

Revision 1.0



January 31, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 01/24/14 12:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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 JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/24/2014 Sampling Date: 01/22/2014

Reported: 01/31/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. C ESW #5 (H400237-01)

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	01/29/2014	ND	416	104	400	0.00	

#### Sample ID: SEC. C FLOOR #7 (H400237-02)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>128</b> 16		01/29/2014	ND	416 104		400	0.00	

#### Sample ID: SEC. C FLOOR #8 (H400237-03)

Chloride, SM4500Cl-B	` mg	/kg	Analyze	d By: AP					
Analyte	Result Reporting Limit  160 16.0		Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	01/29/2014	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	<10.0	10.0	01/27/2014	ND	203	101	200	1.95	
DRO >C10-C28	<10.0	10.0	01/27/2014	ND	195	97.4	200	1.09	
EXT DRO >C28-C35	<10.0	10.0	01/27/2014	ND					
Surrogate: 1-Chlorooctane	104	104 % 65.2-140							
Surrogate: 1-Chlorooctadecane	102	% 63.6-15	4						

#### 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 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

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/24/2014 Sampling Date: 01/23/2014

Reported: 01/31/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. C WSW #5 (H400237-04)

Chioride, SM4500CI-B	mg/	кд	Anaiyze	а ву: АР					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/29/2014	ND	416	104	400	0.00	

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.



#### **Notes and Definitions**

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

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.



#### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name	ect Manager: Ben Arguiso								B	LL TO		Z Z			_	ANA	LYSI	S RE	QUE	ST		
Project Manage	est Manager: Ben Arguijo						P.0	0. #:														
Address: 310	o Plains Hwy						Со	mpa	ıny:	BOPCO												
city: Louina	yton State: IVM	Zip	: 8	382	160		Att	tn: 🛚	ron	y Savo	ie											
Phone #:	Fax #:		<u> </u>	· 			-			rz w o	7											
	8 SWD PW Project Owne	r: B	OF	10	1		-			lsbad												
Project Name:	upe swo pw spill						Sta	ate:	m	<b>∖Zip:</b> &&	220	1									1	
Project Location	n: Eddy, Co						Ph	one	#: 4	32554	E730	4										 !
Sampler Name:							Fa	x #:				]										
FOR LAB USE ONLY					MAT	RIX	1	PRE	SER\	SAMPL	ING	1										
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analyses. All claims includi service. In no event shall C affiliates or successors aris	PLEASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remedy for any claim arising whether based it analyses. All claims including those for negligence and any other cause whatsoever shall be deemed walved unless made in vservice. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business inter affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether st					writing an erruptions	id rece loss o	eived by of use, a	Cardina or loss of	l within 30 days aft profits incurred by	er completion of t client, its subsidia easons or otherwi	he applica aries se.					•		•			
Relinquished B	y: 「計24)14	Re	Feiv	ed E	•	[ ]		_			Phone Re Fax Resul		□ Ye		No No		Phone Fax #:					 
Relinquished R	Relinquished By:  Time:  Time:				A	W	W	01		REMARK					7							
Sampler - UPS	Time:  Sample C  Cool In  Place   Sample C  Cool In  No    Cardinal cannot accept verbal changes. Please fax written change			Intact	t (hylials) Yes No									·								



February 03, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 01/28/14 14:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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 JOEL LOWRY P.O. Box 301

Lovington NM, 88260 Fax To: (575) 396-1429

Received: 01/28/2014 Sampling Date: 01/27/2014

Reported: 02/03/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. C ESW #6 (H400268-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	rte Result Reporting Lin		nit Analyzed Method Blank			% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	01/31/2014 ND		400	100	400	3.92	

#### Sample ID: SEC. C ESW #7 (H400268-02)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	01/31/2014	ND	400	100	400	3.92	

#### Sample ID: SEC. C ESW #8 (H400268-03)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	02/03/2014	ND	416	104	400	0.00	

#### Sample ID: SEC. C FLOOR #8 (H400268-04)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	02/03/2014	ND	416	104	400	0.00	

Cardinal Laboratories \*=Accredited Analyte

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#### **Notes and Definitions**

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, 882

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

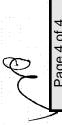
Company Name:	Basin Environmental Service Technol	Technologies, LLC					BI	LL TO				-		ANAL	YSIS	REC	QUES	T		. ::	
Project Manager:	Joel Lowry		:		P.	0. #.			4					1 11	: .						
Address: P.O. E	3ox 301				Co	mpan	y:	воро	O, LP							: :			· .		
City: Lovington	State: NM	Zip: 8	8260		At	tn:		Tony Savo	ie										-  -		
Phone #: (575)3	396-2378 <b>Fax #:</b> (575)39	6-1429			Ac	ldress	:	522 W. Ma	arland								4.				
Project #:	Project Owner	•	-		Ci	ty:		Carlsbad			:							H			
Project Name:	ND 8 SWD PW Spill				St	ate:	NM	Zip: 8	38220	0	2M)	(1B)						: "			
Project Location:	Eddy Co., NM	:			Ph	one#		(432)556-	8730	Chloride	ТРН (8015M)	BTEX (8021B)									
Sampler Name:	Joel Lowry	:		Fax MATRIX						당	PH (	Ä									
FOR LAB USE ONLY				MATRIX	Y	PRES	ERV.	SAMPLII	NG		_	æ						: "		1.	
		C)OMP.	TER																		· i
Lab I.D. H400268	Sample I.D.	(G)RAB OR (C)OMP # CONTAINERS	GROUNDWATER WASTEWATER	SOIL	SLUDGE OTHER:	ACID/BASE:	OTHER:	DATE	TIME												
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PLEASE NOTE: Liability and Damages. Cardina'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 the client for the 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 30 days after completion of the applicable service. In one overst shall Cardinal be liabile for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries.

Relinquished By: Date: , Receiv	red By:	Phone Result:	Yes □ No	Add'l Phone #:		1 .
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1 4 5	Cool Intact (Initials)					
Sampler - UPS - Bus - Other: FORM-006	No No			· :		

Revision 1.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476





February 07, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 01/30/14 12:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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 JOEL LOWRY P.O. Box 301

Lovington NM, 88260 Fax To: (575) 396-1429

 Received:
 01/30/2014
 Sampling Date:
 01/29/2014

 Reported:
 02/07/2014
 Sampling Type:
 Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. D SSW #1 (H400304-01)

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	02/07/2014	ND	416	104	400	0.00	

#### Sample ID: SEC. D SSW #2 (H400304-02)

Chloride SM4500Cl-R

Cilionic	ie, 31·1+300Cl-D	ilig/	Ng .	Allalyze	u by. Ar					
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chlori	ide	608	16.0	02/07/2014	ND	416	104	400	0.00	

Analyzed Ry: AP

#### Sample ID: SEC. D SSW #3 (H400304-03)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	02/07/2014	ND	416	104	400	0.00	

#### Sample ID: SEC. D SSW #4 (H400304-04)

Chloride, SM4500CI-B	mg,	mg/kg Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	02/07/2014	ND	416	104	400	0.00	

Cardinal Laboratories \*=Accredited Analyte

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Basin Environmental Service

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/30/2014 Sampling Date: 01/29/2014

Reported: 02/07/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. D WSW #1 (H400304-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	02/07/2014	ND	416	104	400	0.00	

Cardinal Laboratories \*=Accredited Analyte

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Basin Environmental Service JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/30/2014 Sampling Date: 01/29/2014

Reported: 02/07/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. D FLOOR #10 (H400304-06)

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	02/05/2014	ND	2.54	127	2.00	0.915	
Toluene*	<0.050	0.050	02/05/2014	ND	2.49	125	2.00	0.516	
Ethylbenzene*	<0.050	0.050	02/05/2014	ND	2.49	124	2.00	0.462	
Total Xylenes*	<0.150	0.150	02/05/2014	ND	7.18	120	6.00	0.427	
Total BTEX	<0.300	0.300	02/05/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 89.4-12	6						
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	02/07/2014	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	<10.0	10.0	02/01/2014	ND	214	107	200	2.00	
DRO >C10-C28	<10.0	10.0	02/01/2014	ND	214	107	200	2.09	
EXT DRO >C28-C35	<10.0	10.0	02/01/2014	ND					
Surrogate: 1-Chlorooctane	96.4	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	101 9	% 63.6-15	4						

Cardinal Laboratories \*=Accredited Analyte

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Basin Environmental Service

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 01/30/2014 Sampling Date: 01/29/2014

Reported: 02/07/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. D SOUTH WELL (IN-SITU) (H400304-07)

Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2240	16.0	02/07/2014	ND	416	104	400	0.00	

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.



#### **Notes and Definitions**

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

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.

# ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

### **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name:	Basin Environmental Service Technolo	gies	LLC						BI	LL TO			. ::			ANA	LYSIS	RE	QUES	ξT		- ::	
Project Manager:	Joel Lowry						P.C	).#:															
Address: P.O. B	ox 301						Со	mpan	ıy:	воро	O, LP			1 1 1						1::			
City: Lovington	State: NM	Zip:	88	260			Att	n:		Tony Savo	ie									1 1			
Phone #: (575)3	96-2378 <b>Fax #:</b> (575)396	-142	9				Add	iress		522 W. Ma	arland												
Project #:	Project Owner:	::					Cit	/:		Carlsbac													
Project Name: N	ND8 SWD PW Spill								NM		88220		Ξ	<u>(a</u>							:		
Project Location:	Eddy Co., NM	•		<u></u>			1-	one #		(432)556		Chloride	TPH (8015M)	BTEX (8021B)		::							
	Joel Lowry						Fax		•	(432)330	-0730	녉	B) :	X									
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2	Sec. D SSW #2	G	1		X				x	1/29/14	1010	. x											
3	Sec. D SSW #3	G	1		Х				Х	1/29/14	1020	×											
4	Sec. D SSW #4	G	1		Х				x	1/29/14	1030	×		11.1									
5	Sec. D WSW #1	G	1		X				X	1/29/14	1050	×				. * *							
6	Sec. D Floor #10	G	1		Х				X	1/29/14	1100	х	х	x					<b>↓</b>	::			<u> </u>
7	Sec. D South Well (In-Situ)	G	1		X				X	1/29/14	1110	х		<u> </u>						<u>                                     </u>	<u> </u>		
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affiliates or successors arising out of or related to the performance of se	ervices hereunder by Cardinal, regardless of wh	ether such claim is based upon any	of the above stated reasons or other	erwise.		<u> </u>			
Relinguished By:	Date: A Receive	i By:	The second second	Phone Result:	☐ Yes	□ No	Add'l Phone #:		 
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Revision 1.0	0.22	□ No □ No	IXU		·				 



February 13, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: ND 8 SWD PW SPILL

Enclosed are the results of analyses for samples received by the laboratory on 02/05/14 9:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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 JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 02/05/2014 Sampling Date: 02/04/2014

Reported: 02/13/2014 Sampling Type: Soil Project Name: ND 8 SWD PW SPILL Sampling Condition: Coo

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. D NSW #1 (H400357-01)

Chloride, SM4500CI-B	•	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	02/10/2014	ND	400	100	400	3.92	
Sample ID: SEC. D NSW	#2 (H400357-	02)							
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1060	16.0	02/10/2014	ND	400	100	400	3.92	

#### Sample ID: SEC. D NSW #3 (H400357-03)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	02/10/2014	ND	400	100	400	3.92	

#### Sample ID: SEC. D NSW #4 (H400357-04)

Chloride, SM4500CI-B	/kg	Analyze	d By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	02/10/2014	ND	400	100	400	3.92	

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Basin Environmental Service JOEL LOWRY

P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: 02/05/2014 Sampling Date: 02/04/2014

Reported: Sampling Type: Soil 02/13/2014

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. D WSW #2 (H400357-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	688	16.0	02/10/2014	ND	400	100	400	3.92	

#### Sample ID: SEC. D ESW #1 (H400357-06)

Chloride, SM4500Cl-B	loride, SM4500Cl-B mg/kg								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	02/10/2014	ND	400	100	400	3.92	

#### Sample ID: SEC. D FLOOR #11 (H400357-07)

Chloride, SM4500Cl-B	mg,	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	02/10/2014	ND	400	100	400	3.92	
TPH 8015M	mg,	'kg	Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/06/2014	ND	205	102	200	8.13	
DRO >C10-C28	<10.0	10.0	02/06/2014	ND	197	98.5	200	11.2	
EXT DRO >C28-C35	<10.0	10.0	02/06/2014	ND					
Surrogate: 1-Chlorooctane	99.7	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	99.0	% 63.6-15	4						

#### Cardinal Laboratories \*=Accredited Analyte

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Basin Environmental Service

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 02/05/2014 Sampling Date: 02/04/2014

Reported: 02/13/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. D FLOOR #12 (H400357-08)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1180	16.0	02/10/2014	ND	400	100	400	3.92	

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Basin Environmental Service JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 02/05/2014 Sampling Date: 02/04/2014

Reported: 02/13/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. D FLOOR #13 (H400357-09)

BTEX 8021B	mg,	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/12/2014	ND	2.38	119	2.00	5.12	
Toluene*	<0.050	0.050	02/12/2014	ND	2.36	118	2.00	4.91	
Ethylbenzene*	<0.050	0.050	02/12/2014	ND	2.35	118	2.00	4.78	
Total Xylenes*	<0.150	0.150	02/12/2014	ND	6.91	115	6.00	4.13	
Total BTEX	<0.300	0.300	02/12/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	120	% 89.4-12	6						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	02/10/2014	ND	400	100	400	3.92	
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	02/07/2014	ND	205	102	200	8.13	
DRO >C10-C28	<10.0	10.0	02/07/2014	ND	197	98.5	200	11.2	
EXT DRO >C28-C35	<10.0	10.0	02/07/2014	ND					
Surrogate: 1-Chlorooctane	101	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	111 9	% 63.6-15	4						

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Basin Environmental Service JOEL LOWRY

P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 02/05/2014 Sampling Date: 02/04/2014

Reported: 02/13/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. D FLOOR #14 (H400357-10)

Chloride, SM4500Cl-B	Analyze	d By: AP							
Analyte	Result Reporting Limit		Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	02/10/2014	ND	400	100	400	3.92	

#### Sample ID: SEC. D FLOOR #15 (H400357-11)

Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/10/2014	ND	400	100	400	3.92	
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	02/07/2014	ND	205	102	200	8.13	
DRO >C10-C28	<10.0	10.0	02/07/2014	ND	197	98.5	200	11.2	
EXT DRO >C28-C35	<10.0	10.0	02/07/2014	ND					
Surrogate: 1-Chlorooctane	102 9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	105 9	% 63.6-15	4						

#### Sample ID: SEC. D SSW #5 (H400357-12)

Chloride, SM4500Cl-B	ide, SM4500Cl-B mg/kg								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	02/10/2014	ND	400	100	400	3.92	

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Basin Environmental Service

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 02/05/2014 Sampling Date: 02/04/2014

Reported: 02/13/2014 Sampling Type: Soil

Project Name: ND 8 SWD PW SPILL Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

#### Sample ID: SEC. D CONDUIT (IN-SITU) (H400357-13)

Chioride, SM4500CI-B	mg,	/ kg	Anaiyze	а ву: АР					
Analyte	te Result Reporting Limit		Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	02/10/2014	ND	400	100	400	3.92	

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#### **Notes and Definitions**

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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# ARDINAL LABORATORIES

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

	(575) 393-2326 FAX (575) 393-247							T			DII	L TO						ΔΝΔΙ	VSIS	RE	QUES	т			
Company Name:	Basin Environmental Service Technol	ogies,	LL(	,				H			OIL	L IU		-				AITAL	1010	T	T				$\neg$
Project Manager:	Joel Lowry							P.0	0. #	:															
Address: P.O. B	ox 301							Co	mp	any:		BOPC	O, LP	1											
City: Lovington	State: NM	Zip:	88	3260	0			Att	tn:			Tony Savoi	ie												
Phone #: (575)3	96-2378 <b>Fax #:</b> (575)39	6-142	9					Ad	ldre	ss:		522 W. Ma	arland												
Project #:	Project Owner	:						Cit	ty:			Carlsbad													
Project Name:	ND8 SWD PW Spill							St	ate:	N	M	Zip: 8	88220	e	5M)	21B									
Project Location:	Eddy Co., NM							Ph	none	e #:		(432)556-	8730	Chloride	TPH (8015M)	BTEX (8021B)									
Sampler Name:	Joel Lowry							Fa	ax #	:				5	PH	Ĭ E									
FOR LAB USE ONLY		T	Г		N	ATF	RIX		PI	RESE	RV.	SAMPLI	NG		-	m									
Lab I.D. H400357	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL.	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME												
1	Sec. D NSW #1	G	1			Х				Х		2/4/19	920	х			_		-	_	-	1		_	_
2	Sec. D NSW #2	G	1			Х				Х		2/4/18	930	х				_	-		_	-	_	_	-
2 3 4	Sec. D NSW #3	G	1			Х				Х		2/4/18	940	х			_	_		_	-	-	_	_	-
4	Sec. D NSW #4	G	1			Х	1			Х		2/4/18	950	х			_	_	_			_	_	_	
5	Sec. D WSW #2	G	1			Х				Х		1/4/19	1000	х				_	_			-	_	_	-
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67	Sec. D ESW #1	G	1			Х				X		2/4/19	1020	х	_	_	_	_	_	-		_	_	_	-
78	Sec. D Floor #11	G	1			Х	-			Х		2/4/13	1030	х	х	_	_	-	-	-		-	_	-	+
88	Sec. D Floor #12	G	1			Х		1		Х		1/4/19	1040	х	_	-	_	-	_	+	-	-	-	-	-
9 10	Sec. D Floor #13	G	1			Х				X		2/4/19	1050	х	х	X	_	-	_	-	-	-	-	-	+-
10 H	Sec. D Floor #14	G	1			Х				X		<b>1</b> /4/1 <b>%</b>	1100	х		-	-	+	+	+	+	-	-	-	+-
11+2	Sec. D Floor #15	G	1		and the same	Χ				X		2/4/13	1110	×	×										

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 the client for the 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 30 days after completion of the applicable

service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,

Service. In the event shall curdinal be indeed to install		nal renardless of whether such claim is based upon any of the above stated reasons or other	naine
affiliates or successors arising out of or related to the performance	e of services hereunder by Cardin	init, regarded or minimum.	Phone Result:
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Quel low	Etmle: 45	Way Henson	REMARKS: LIFT added 2/12/14
Relinquished By:	Date:	Received By:	DICT
Reiniquisited by.		0	
	Time:		Please email results to pm@basinenv.com,
	Time.		TASavoie@BassPet.com & SJWalters@BassPet.com
		Sample Condition CHECKED BY:	.0
Delivered By: (Circle One)		4 4	as sol hen
FORM-006		Cool Intact (Inft)als)	us pa var
Sampler - UPS - Bus - Other:		7 7 103 12 103	
Revision 1.0	2	No No No	

# ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

#### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Basin Environmental Service Technologies, LLC							٦	BILL TO						ANALYSIS REQUEST											
Project Manager: Joel Lowry								P.O. #:				П													
Address: P.O. Box 301								Company: BOPCO, LP																	
City: Lovington State: NM Zip: 88260								Attn: Tony Savoie																	
Phone #: (575)396-2378								Address: 522 W. Marland																	
Project #: Project Owner:								City: Carlsbad																	
Project Name: ND8 SWD PW Spill								State: NM Zip: 88220					Σ	18)											
Project Location: Eddy Co., NM								Phone #: (432)556-8730				Chloride	801	(802											
Sampler Name: Joel Lowry							Fax #:				Chi	TPH (8015M)	BTEX (8021B)												
FOR LAB USE ONLY			MATRIX						PRESERV.			SAMPLING		1	F	E	m								
Lab I.D. H400357	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	OTHER:	DATE	TIME									-			
12 13	Sec. D SSW #5	G	1			Х					X	1/4/19	1120	х											
13 14	Sec. D Conduit (In-Situ)	G	1	-		Χ			-		X	2/4/19	1130	х	_					_		_			_
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	Damages. Cardinal's liability and client's exclusive remedy																								

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 the client for the 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 30 days after completion of the applicable service. In one event shall Cardinal be failable for incidental or consequental damages, including whose line further than 10 miles and 10 miles and 10 miles are consequental 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 se	rvices hereunder by Cardinal, r	egardless of whether such claim is based upon any of the above stated reason	s or otherwise.				
Relinquished By:	Date / 11/	Received By:	Phone Result:	☐ Yes	□ No	Add'l Phone #:	
$\bigcap$ / 1	015114	1011	Fax Result:	☐ Yes	□ No	Add'I Fax #:	
Jul Journ	19:45	Mai Henson	REMARKS:				
Relinquished By:	Date:	Received By:					
		3	Diagon	مال بممد انم	to	Nhaoinanu ann	
	Time:					)basinenv.com, SJWalters@BassPet.com	
Delivered By (Circle One)		Sample Condition CHECKED BY		w Dassi 6	L.COIII &	33 Walter S@Dassir et. com	
Delivered By: (Circle One)		Cool Intact (Initials)					
FORM-006 Sampler - UPS - Bus - Other:		S DYes Pyes	-				
Revision 1.0		No No No					