



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 02, 2015

JACOB KAMPLAIN

BASIN ENVIRONMENTAL - HOBBS

419 W. CAIN

HOBBS, NM 88240

RE: SANTO NINO 29 FED SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/30/15 8:40.

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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited 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.

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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

BASIN ENVIRONMENTAL - HOBBS
JACOB KAMPLAIN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 393-0293

Received:	06/30/2015	Sampling Date:	06/22/2015
Reported:	07/02/2015	Sampling Type:	Soil
Project Name:	SANTO NINO 29 FED SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 3 @ 1' (H501670-01)

BTX 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	07/01/2015	ND	2.35	117	2.00	0.0451	
Toluene*	<0.050	0.050	07/01/2015	ND	2.11	105	2.00	1.66	
Ethylbenzene*	<0.050	0.050	07/01/2015	ND	2.04	102	2.00	2.15	
Total Xylenes*	<0.150	0.150	07/01/2015	ND	6.07	101	6.00	2.23	
Total BTX	<0.300	0.300	07/01/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2760	16.0	07/01/2015	ND	416	104	400	7.41	

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	07/01/2015	ND	161	80.6	200	3.50	
DRO >C10-C28	170	10.0	07/01/2015	ND	177	88.6	200	8.99	

Surrogate: 1-Chlorooctane 98.5 % 47.2-157

Surrogate: 1-Chlorooctadecane 116 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 BASIN ENVIRONMENTAL - HOBBS
 JACOB KAMPLAIN
 419 W. CAIN
 HOBBS NM, 88240
 Fax To: (575) 393-0293

Received:	06/30/2015	Sampling Date:	06/22/2015
Reported:	07/02/2015	Sampling Type:	Soil
Project Name:	SANTO NINO 29 FED SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 4 @ 2' (H501670-02)

BTX 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	07/01/2015	ND	2.35	117	2.00	0.0451	
Toluene*	<0.050	0.050	07/01/2015	ND	2.11	105	2.00	1.66	
Ethylbenzene*	<0.050	0.050	07/01/2015	ND	2.04	102	2.00	2.15	
Total Xylenes*	<0.150	0.150	07/01/2015	ND	6.07	101	6.00	2.23	
Total BTX	<0.300	0.300	07/01/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1300	16.0	07/01/2015	ND	416	104	400	7.41	

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	07/01/2015	ND	161	80.6	200	3.50	
DRO >C10-C28	22.4	10.0	07/01/2015	ND	177	88.6	200	8.99	

Surrogate: 1-Chlorooctane 108 % 47.2-157

Surrogate: 1-Chlorooctadecane 130 % 52.1-176

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Analytical Results For:

BASIN ENVIRONMENTAL - HOBBS
JACOB KAMPLAIN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 393-0293

Received:	06/30/2015	Sampling Date:	06/22/2015
Reported:	07/02/2015	Sampling Type:	Soil
Project Name:	SANTO NINO 29 FED SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 6 @ 3' (H501670-03)

BTX 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	07/01/2015	ND	2.35	117	2.00	0.0451	
Toluene*	<0.050	0.050	07/01/2015	ND	2.11	105	2.00	1.66	
Ethylbenzene*	<0.050	0.050	07/01/2015	ND	2.04	102	2.00	2.15	
Total Xylenes*	<0.150	0.150	07/01/2015	ND	6.07	101	6.00	2.23	
Total BTX	<0.300	0.300	07/01/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	07/01/2015	ND	416	104	400	7.41	

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	07/01/2015	ND	161	80.6	200	3.50	
DRO >C10-C28	<10.0	10.0	07/01/2015	ND	177	88.6	200	8.99	

Surrogate: 1-Chlorooctane 107 % 47.2-157

Surrogate: 1-Chlorooctadecane 125 % 52.1-176

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Analytical Results For:

BASIN ENVIRONMENTAL - HOBBS
JACOB KAMPLAIN
419 W. CAIN
HOBBS NM, 88240
Fax To: (575) 393-0293

Received:	06/30/2015	Sampling Date:	06/22/2015
Reported:	07/02/2015	Sampling Type:	Soil
Project Name:	SANTO NINO 29 FED SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 7 @ 2' (H501670-04)

BTX 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	07/01/2015	ND	2.35	117	2.00	0.0451	
Toluene*	<0.050	0.050	07/01/2015	ND	2.11	105	2.00	1.66	
Ethylbenzene*	<0.050	0.050	07/01/2015	ND	2.04	102	2.00	2.15	
Total Xylenes*	<0.150	0.150	07/01/2015	ND	6.07	101	6.00	2.23	
Total BTX	<0.300	0.300	07/01/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 61-154

Chloride, SM4500CI-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2160	16.0	07/01/2015	ND	416	104	400	7.41	

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	07/01/2015	ND	161	80.6	200	3.50	
DRO >C10-C28	180	10.0	07/01/2015	ND	177	88.6	200	8.99	

Surrogate: 1-Chlorooctane 104 % 47.2-157

Surrogate: 1-Chlorooctadecane 117 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

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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Celey D. Keene, Lab Director/Quality Manager



ARDINAL LABORATORIES

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Mewbourne		P.O. #:		BILL TO		ANALYSIS REQUEST																																			
Project Manager: Jacob Kamplain		Company: Basin Env																																							
Address:		State: Zip:		Attn: Mewbourne																																					
City:		Fax #:		Address: Hobbs																																					
Phone #:		Project Owner:		City:																																					
Project #:		State: Zip:		Phone #:																																					
Project Name: Santa Clara 29 Fed Sub #1		Fax #:																																							
Project Location:																																									
Sampler Name: Kyle S		FOR LAB USE ONLY																																							
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		ICE / COOL		OTHER:		DATE		TIME		Chlorides		TPH 8015 M		BTEX		Texas TPH		Complete Cations/Anions		TDS	
H50167P		14301'		1		1		1		1		1		1		1		1		1		1		1		6-22-15		2:05		---		---		---		---		---			
21402'		31		1		1		1		1		1		1		1		1		1		1		1		2:10		---		---		---		---		---		---			
31403'		31		1		1		1		1		1		1		1		1		1		1		1		2:15		---		---		---		---		---		---			
41402'		31		1		1		1		1		1		1		1		1		1		1		1		2:20		---		---		---		---		---		---			
Relinquished By:		Date: 6/19/15		Received By:		Sample Condition		Cool		Intact		CHECKED BY:																													
Relinquished By:		Date: 6/19/15		Received By:		Sample Condition		Cool		Intact		CHECKED BY:																													
Delivered By: (Circle One)		-6.80																																							
Sampler - UPS - Bus - Other:																																									

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Phone Result: ☐ Yes ☒ No Add'l Phone #:
Fax Result: ☐ Yes ☒ No Add'l Fax #:

REMARKS:

email results:
hconder@basineny.com; knorman@basineny.com;
jkamplain@basineny; lflores@basineny;
lweinheimer@basineny; cursanic@basineny
Zach Thomas

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