

February 04, 2019

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: FAS-19-001

Enclosed are the results of analyses for samples received by the laboratory on 01/30/19 16:53.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Safety & Environmental Solutions Bob Allen 703 East Clinton Hobbs NM, 88240 Fax To: (575) 393-4388

Received:	01/30/2019	Sampling Date:	01/30/2019
Reported:	02/04/2019	Sampling Type:	Soil
Project Name:	FAS-19-001	Sampling Condition:	Cool & Intact
Project Number:	SWD #2	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: TT-1 SURFACE (H900346-01)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	30000	16.0	02/02/2019	ND	416	104	400	3.77	

Sample ID: TT-1, 1' (H900346-02)

Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1810	16.0	02/02/2019	ND	416	104	400	3.77	

Sample ID: TT-1, 2' (H900346-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	880	16.0	02/02/2019	ND	416	104	400	3.77	

Sample ID: TT-2 SURFACE (H900346-04)

Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	41200	16.0	02/02/2019	ND	416	104	400	3.77	

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*=Accredited Analyte

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Celecz D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	01/30/2019	Sampling Date:	01/30/2019
Reported:	02/04/2019	Sampling Type:	Soil
Project Name:	FAS-19-001	Sampling Condition:	Cool & Intact
Project Number:	SWD #2	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: TT-2, 1' (H900346-05)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1090	16.0	02/02/2019	ND	416	104	400	3.77	

Sample ID: TT-2A, 1' (H900346-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	02/02/2019	ND	416	104	400	0.00	

Sample ID: TT-2 A, 2' (H900346-07)

Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	02/02/2019	ND	416	104	400	0.00	

Sample ID: TT-3 SURFACE (H900346-08)

Chloride, SM4500Cl-B	mg	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	25600	16.0	02/02/2019	ND	416	104	400	0.00	

Sample ID: TT-3, 1' (H900346-09)

Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1730	16.0	02/02/2019	ND	416	104	400	0.00	

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Received:	01/30/2019	Sampling Date:	01/30/2019
Reported:	02/04/2019	Sampling Type:	Soil
Project Name:	FAS-19-001	Sampling Condition:	Cool & Intact
Project Number:	SWD #2	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: TT-4 SURFACE (H900346-10)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	02/02/2019	ND	416	104	400	0.00	

Sample ID: TT-4 , 1' (H900346-11)

Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	02/02/2019	ND	416	104	400	0.00	

Sample ID: TT-4 , 2' (H900346-12)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	02/02/2019	ND	416	104	400	0.00	

Sample ID: TT-5 SURFACE (H900346-13)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	02/02/2019	ND	416	104	400	0.00	

Sample ID: TT-5 , 1' (H900346-14)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	02/02/2019	ND	416	104	400	0.00	

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Reported:	02/04/2019	Sampling Type:	Soil
Project Name:	FAS-19-001	Sampling Condition:	Cool & Intact
Project Number:	SWD #2	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: TT-5, 3' (H900346-15)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1720	16.0	02/02/2019	ND	416	104	400	0.00	

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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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: Zip:	Project #: FAS-17-00 Project Umiter
City:	1e #: 575 397-0510
Attn:	State: NM Zip: 88240
Company: Same	703 East Clinton, PO Box 1613
P.O. #:	Safety and Environmental Solutions
BILL TO ANALYSIS REQUEST	101 East Marianu, 100003, 1010 (575) 393-2326 FAX (575) 393-2476
Lade 106 2	11-1-1- NM 88240
CHAIN-OF-CUSTODY AND ANALYSIS REQUEST	Laboratories

Page 7 of 8

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By: Image: Text State St	SLUDGE OTHER : ACID/BASE: COOL OTHER : COOL OTHER : COOL	P.O. #: Company: Same Address: Address: State: Zip: Phone #: PRESERV SAMPLING 300000	BILL TO ANALYSIS REQUEST ANALYSIS REQUEST Page 8 of 8