

May 23, 2013

Clay Wilson

MESQUITE SWD INC.

P. O. Box 1479

Carlsbad, NM 88221

RE: PADUÇA #1 #2

Enclosed are the results of analyses for samples received by the laboratory on 05/08/13 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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/qa/lab-accred-certif.html">www.tceq.texas.gov/field/qa/lab-accred-certif.html</a>.

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. Keine

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



# Analytical Results For:

MESQUITE SWD INC.

P. O. Box 1479 Carlsbad NM, 88221 Project: PADUCA #1 #2

Project Number: NONE GIVEN Project Manager: Clay Wilson

Reported: 23-May-13 11:11

Fax To: (575) 885-9859

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PADUCA #1	H301102-01	Water	05-May-13 00:00	08-May-13 13:30
PADUCA #2	H301102-02	Water	03-May-13 00:00	08-May-13 13:30

\*=Accredited Analyte Cardinal Laboratories

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 nephygence and any other clause whatsoever shall be deemed waived unless made in writing and received by Cardinal within titrity (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 resoons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratomes.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

MESQUITE SWD INC.

Project: PADUCA #1 #2

Reported: 23-May-13 11:11

P. O. Box 1479 Carlsbad NM, 88221

Project Number: NONE GIVEN Project Manager: Clay Wilson

Fax To: (575) 885-9859

# PADUCA#1 H301102-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	ıl Laborat	ories					
Inorganic Compounds									
Alkalinity, Bicarbonate	229	5.00	mg/L	1	3040406	DW	09-May-13	310.1	
Alkalinity, Carbonate	ND	0.00	mg/L	1	3040406	DW	09-May-13	310.1	
Chloride*	114000	4.00	mg/L	1	3050202	DW	09-May-13	4500-C1-B	
Conductivity*	274000	1.00	uS/cm	1	3050906	DW	09-May-13	120.1	
pH*	5.89	0.100	pH Units	1	3050905	DW	09-May-13	150.1	
Sulfate*	942	125	mg/L	12.5	3051409	AP	14-May-13	375.4	
TDS*	192000	5.00	mg/L	1	3050205	AP	13-May-13	160.1	
Alkalinity, Total*	188	4.00	mg/L	1	3040406	DW	09-May-13	310,1	
		Green Anal	ytical Lab	oratories					
Total Recoverable Metals by ICP (6010B)									
Calcium	11700	100	mg/L	100	B305162	JGS	22-May-13	EPA6010 B	
Iron	63.7	5.00	mg/L	100	B305162	JGS	22-May-13	EPA6010 B	
Magnesium	1920	100	mg/L	100	B305162	JGS	22-May-13	EPA6010 B	
Potassium	1680	100	mg/L	100	B305162	JGS	22-May-13	EPA6010 B	
Sodium	62600	100	mg/L	100	B305162	JGS	22-May-13	EPA6010 B	

Cardinal Laboratories \*=Accredited Analyte

PLEASE NOTE: Uability and Damages. Cardinal's Stability 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. any other cause whatsoever shall be deemed warred unless made in writing and received by Candinal within thiny (30) days after completion of the applicable service. In no event shall Cardinal be lable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, its aubsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is beset 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.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### Analytical Results For:

MESQUITE SWD INC.

Project: PADUCA #1 #2

Reported: 23-May-13 11:11

P. O. Box 1479 Carlsbad NM, 88221 Project Number: NONE GIVEN
Project Manager: Clay Wilson

Fax To: (575) 885-9859

# PADUCA #2 H301102-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	il Laborat	ories					
Inorganic Compounds									
Alkalinity, Bicarbonate	127	5.00	mg/L	1	3040406	DW	09-May-13	310.1	
Alkalinity, Carbonate	ND	0.00	mg/L	1	3040406	DW	09-May-13	310.1	
Chloride*	118000	4.00	mg/L	1	3050202	DW	09-May-13	4500-C1-B	
Conductivity*	276000	1.00	uS/cm	1	3050906	DW	09-May-13	120.1	
pli*	5.98	0.100	pH Units	1	3050905	DW	09-May-13	150.1	
Sulfate*	858	125	mg/L	12.5	3051409	AP	14-May-13	375.4	
TDS*	187000	5.00	mg/L	1	3050205	AP	13-May-13	160.1	
Alkalinity, Totat*	104	4.00	mg/L	1	3040406	DW	09-May-13	310.1	
		Green Analy	ytical Labo	oratories					
Total Recoverable Metals by ICP (6010B)									
Calcium	11300	100	mg/L	100	B305162	JGS	22-May-13	EPA6010 B	
Iron	48.8	5.00	mg/L	100	B305162	JGS	22-May-13	EPA6010 B	
Magnesium	1850	100	mg/L	100	B305162	JGS	22-May-13	EPA6010 B	
Potassium	1640	100	mg/L	100	B305162	JGS	22-May-13	EPA6010 B	
Sodium	61000	100	mg/L	100	B305162	JGS	22-May-13	EPA6010 B	

Cardinal Laboratories \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's evolusive remedy for any daim 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 causes whatsoever shall be deemed welved unless made in writing and received by clant him (30) days after completion of the applicable service. In no event shall Cardinal be Bable for Incidental companying to the completion of the applicable service. In no event shall Cardinal be Bable for Incidental companying to the completion of the applicable service. In no event shall Cardinal be Bable for Incidental companying to the applicable service and the completion of the applicable service. In no event shall cardinal be Bable for Incidental companying to the applicable service and the completion of the applicable service. In no event shall cardinal be Bable for Incidental companying the applicable service. In no event shall cardinal ca

Celey D. Keine

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-8 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: Uability and Damages. Cardinal's liability and client's exclusive remedy for any claim ansing, 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 corresquential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, effiliates 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.

Celeg D. Keine



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

(5/5) 393-2326 FAX (5/5) 393-24/			Andrew April Company September 1911		
Company Name: MEJOUITE SUDD				ANALYSIS	REQUEST
Project Manager: CLAU 4 WILSO		P.O. #:			
Address: P.O. Box 1479	· .	Company: MESQU	ItE SUPPLIE		
City: CARLSBAO State: NW	Hzip: 188221	Attn/ LAU WIL	SON		
Phone #: 575-706 1840 Fax #: 575	- 885-9859	Address: P.D. Box	1479 000		
	SAME	City: CARLShi		1 1 1	
Project Name: PARILER #1 #2		State: N MZip: 8	722/		
Project Location: LEA County		Phone #: 575-7	261840		
Sampler Name: Chec	<u> </u>	Fax #575 - 200			
FOR LAB USE ONLY	MATRIX	PRESERV. SAMPL			
	g .		<b>□</b>   <b>3</b>		
	(C)OMP ERS ATER ER				
Lab I.D. Sample I.D.	OR (	:	á  [ē.		
	AB (A NT) AB (C) NT (C)	R 6 8 R	Cations		
	(G)RAB OR (C # CONTAINER GROUNDWAT WASTEWATEI SOIL OIL	ACID/BA OTHER: OTHER:	TIME O Y		
DA-1 PARULA HI	611	5/5/13			
DA-1 PADULA HI 2 PADULA HZ	41	5/3/13	VV		
<u> </u>					
<u></u>		<u> </u>			
PLEASE NOTE: Liability and Damagea. Cardinal's liability and client's exclusive remedy for a	ov chim arising whether based in postro	of or fart, shall be limited to the emount of	of his the client for the	<u></u>	
enalyses. All claims including those for negligence and any other cause whatsoever shall be of service. In no event shall Cardinal be liable for incidental or consequental damages, including	leemed waived unless made in writing ar	nd received by Cardinal within 36 days at	er completion of the applicable.		·
affiliates or successors arising out of or related to the performance of services hereunder by C		is based upon any of the above stated of		No Add'i Phone i	· · · · · · · · · · · · · · · · · · ·
Relinquished By:		ld a	Fax Result: ☐ Yes ☐		
Jacobulson 11 30	Mull y	menson	REMARKS:		٠
Relinquished By: Date:	Received By:	,	NEW		Hotmail Coz
Time:	-		CLAYL WIL	יש אפכן	Hotmail. Con
Delivered By: (Circle One)	Sample Condi	tion   CHECKED BY:	] - / .	*.	
1	Cool Intact				•
† Cardinal cannot accept verbal changes. Please		7)	·		<u> </u>
4		150			•

# Goetze, Phillip, EMNRD

From: Kay Havenor < khavenor@georesources.com>

**Sent:** Wednesday, May 29, 2013 10:45 AM

To: Goetze, Phillip, EMNRD

Subject: Question

Attachments: Cardinal analyses for hearing MESQUITE.pdf

Phillip,

In the OCD hearing 5/2/2013 Mesquite SWD was asked to supply the examiner (<u>Richard Ezeanyim</u>) chemical analysis of disposal water being injected into Mesquite's Paduca SWD #1 located just west of the proposed #3. I supplied the analyses to Lawyer Jim Bruce to deliver to the examiner. I have been unable to communicate w/Mr. Bruce and am concerned as to their delivery. Would it be possible to verify their delivery? Just in case I have attached PDFs of the analyses. Thank you in advance for your assistance.

Kay Havenor

Kay C. Havenor, Ph.D., PG. CPG GeoScience Technologies 904 Moore Ave Roswell, NM 88201-1144 (575) 626-4518