

July 13, 2011

Subject:

Mr. Mike Bratcher **NMOCD District 2** 1301 West Grand Avenue Artesia, NM 88210



AMARILLO 92I North Bivins Amarillo. Texas 79107 Phone 806.467.0607

Fax 806.467.0622

ARTESIA

408 West Texas Ave. Artesia, New Mexico 88210 Phone 575.746.8768 Fax 575.746.8905

AUSTIN

9II West Anderson Lane Suite 202 Austin, Texas 78757 Phone 5I2.989.3428 Fax 5I2.989.3487

HOBBS

318 East Taylor Street Hobbs, New Mexico 88240 Phone 575.393.4261 Fax 575.393.4658

MIDLAND

290I State Hwy 349 Midland, Texas 79706 Phone 432 522.2133 Fax 432.522.2180

SAN ANTONIO

II Commercial Place Schertz, Texas 78154 Phone 210.265.8025 Fax 210.568.2191

TULSA 525 South Main Street Suite 535 Tulsa, Oklahoma 74103 Phone 918.742.0871 Fax 918.382.0232 Artesia Unit No. 58 - Closed Work Over Pit API # 30-015-01791

Remediation and Closure Report
Quantum Resources Management, LLC

Dear Mr. Bratcher,

Quantum Resources Management, LLC has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the referenced Artesia Unit No. 58 closed work over pit. The incident description, soil assessment, remediation activities and closure request are submitted herein.

#### **Incident Date**

February 2, 2005

#### **Background Information**

The Artesia Unit No. 58 is located approximately seventeen (17) miles southeast of Artesia, New Mexico. The legal location for the site is Section 3, Township 18 South and Range 28 East in Eddy County, New Mexico. More Specifically the latitude and longitude for the release are 32.77243 North and -104.17166 West.

This site lies on undulating plains and low hills consisting of wind worked sandy deposits. Drainage courses in this area are normally dry. The local surface and shallow geology consists of Quaternary Age sedimentary deposits comprised of alluvium and eolian sands under lain by sand stone and hard caliches. The New Mexico State Engineer web site indicates the nearest ground water data to be in S34-T17S-R28E. The ground water in Section 34 is reported to be at an average depth of 53' below ground surface (bgs). The referenced groundwater data is presented in Appendix I.

The ranking for this site is 10 based on the as following:

ENVIRONMENTAL CONSULTING

ENGINEERING
DRILLING
CONSTRUCTION
SPILL MANAGEMENT
GENERAL CONTRACTING

Depth to ground water 50'-100'
Wellhead Protection Area >1000'
Distance to surface water body >1000'

Toll Free: 866.742.0742 www.talonlpe.com

#### **Incident Description**

On February 2, 2005 a Pit Closure C-144 Form was submitted to the NMOCD. The application was denied on February 7, 2005 due to lack of information. On March 24, 2005 a letter of violation (LOV) was issued for an open pit with impacted walls. The work over pit was subsequently closed.

#### Remedial Actions Taken

On February 22, 2011 Talon personnel mobilized to the site to begin soil sampling and site assessment activities. Grab soil samples were collected utilizing a hand auger from within the closed work over pit (S-1).

On March 15, 2011 Talon personnel met on site with NMOCD Environmental Specialist, Mike Bratcher. Mr. Bratcher requested further vertical delineation for chlorides to 250 mg/kg. Mr. Bratcher also informed Talon that the chloride impacted soil would not be required to be removed from the closed work over pit.

On April 29, 2011 Talon personnel returned to the site with a backhoe. Additional soil samples were collected from the closed pit to a depth of 10-feet bgs.

Talon mobilized personnel again to the site for soil sampling at greater depths utilizing a split spoon auger rig. Grab soil samples were collected from the depths of 10-feet bgs of the excavated area to a depth of 45-feet bgs on two separate occasions (B-1)

All soil samples were collected by Talon personnel wearing clean nitrile gloves. The samples were placed in laboratory provided glassware, iced and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were tested for Total Chlorides via Method SM4500Cl-B.

#### **Analytical Results**

Analytical results detailed on the attached laboratory reports are summarized below:

#### February 28, 2011

Sample	Depth (ft)	Total BTEX	<u>TPH</u>	<u>Chlorides</u>
S-1	0-ft	<50 mg/kg	<10 mg/kg	4880 mg/kg
S-1	1'	<50	<10	992

June 4, 2011

Sampl	e, Depth	Chlorides	<u>Sampl</u>	e, Depth	Chlorides
S-1	2'	1180 mg/kg	S-1	10'	1140 mg/kg
S-1	4'	1020	S-1	12'	1300
S-1	6'	1460	S-1	14'	1140
S-1	8'	1460	S-1	16'	1100
S-1,	10'	1340	S-1	18'	1170
			S-1	20'	1220

June 16, 2011

Samp	le, Depth	Chlorides
B-1	25'	944 mg/kg
B-1	30'	352
B-1	35'	304
B-1,	45'	192

For this site's ranking, New Mexico Oil Conservation District action level criterion for BTEX is 50 mg/kg, Benzene is 10 mg/kg and TPH is 1,000 mg/kg. The chloride remediation standard is considered to be 1,000 mg/kg.

#### **Conclusions and Recommendations**

- Groundwater in the project vicinity is greater than 50-feet below land surface per the New Mexico State Engineer Database.
- Based on the depth to groundwater and the contamination levels detected in the soil; it is unlikely that the impacts identified from this closed work over pit will pose a threat to groundwater.
- Vertical chloride delineation was obtained at a depth of 25-feet bgs, with chloride levels detected less than 1000 mg/kg. Chloride levels in the soil were determined to be less than 250 mg/kg (192 mg/kg) at a depth of 45-feet bgs.

- The NMOCD will not require the chloride impacted soil be removed from the closed work over pit, per Mr. Bratcher.
- Therefore on behalf of Quantum Resources Management, LLC, we respectfully request that no further actions be required and that closure of the LOV, Compliance No. MLB0508352766 with respect to this closed work over pit be granted.

Should you have any questions or if further information is required, please do not hesitate to contact us at 575.746.8768.

Respectfully submitted,

TALON/LPE

Mike Stubblefield

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Project Manager

David J. Adkins District Manager

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# APPENDIX I GROUNDWATER DATA



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

Depth Depth Water QQQ Y Distance Well Water Column

578979 L 07643 DOM 4 2 34 17S 28E 3628574\*

> Average Depth to Water: 53 feet

> > Minimum Depth: 53 feet

Maximum Depth: 53 feet

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 577608 Northing (Y): 3626945 Radius: 5000

# APPENDIX II LABORATORY RESULTS



February 28, 2011

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ARTESIA UNIT #58

Enclosed are the results of analyses for samples received by the laboratory on 02/24/11 10:40.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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 (V2, V3)

Accreditation applies to public drinking water matrices.

Celeg 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



TALON LPE MIKE STUBBLEFIELD 408 W. TEXAS AVE. ARTESIA NM, 88210

Fax To:

(575) 745-8905

Received:

02/24/2011

Sampling Date:

02/22/2011

Reported:

02/28/2011

Sampling Type:

Soil

Project Name:

ARTESIA UNIT #58

Sampling Condition:

Cool & Intact

Project Number: Project Location: 701407.001.02 SEC.3-T18S - R28E Sample Received By:

Jodi Henson

### Sample ID: S - 1 0' (H100374-01)

BTEX 8021B	mg/	'kg	Analyze	d By: CMS					-20
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2011	ND	2.05	102	2.00	17.1	
Toluene*	<0.050	0.050	02/25/2011	ND	2.15	108	2.00	20.3	
Ethylbenzene*	<0.050	0.050	02/25/2011	ND	2.22	111	2.00	20.8	
Total Xylenes*	<0.150	0.150	02/25/2011	ND	6.49	108	6.00	20.1	
Surrogate: 4-Bromofluorobenzene (PIL	99.6	% 70-130							
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4880	16.0	02/25/2011	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/25/2011	ND	197	98.7	200	0.951	
DRO >C10-C28	<10.0	10.0	02/25/2011	ND	195	97.7	200	1.47	
Surrogate: 1-Chlorooctane	103	% 70-130	1						
Surrogate: 1-Chlorooctadecane	98.4	% 70-130	•						

#### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE. Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in controct 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 waked unless made in writing and received by Cardinal within thirty (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 profits incurred by client, its subsidiances, 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.

Celeg D. Keene



TALON LPE MIKE STUBBLEFIELD 408 W. TEXAS AVE. ARTESIA NM, 88210 Fax To: (575) 745-8905

Received:

02/24/2011

Sampling Date:

02/22/2011

Reported:

Soil

02/28/2011

Sampling Type:

Project Name:

ARTESIA UNIT #58

Sampling Condition:

Cool & Intact

Project Number:

701407.001.02

Sample Received By:

Jodi Henson

Project Location:

SEC.3-T18S - R28E

#### Sample ID: S - 1 1' (H100374-02)

BTEX 8021B	mg/	kg	Analyze	d By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2011	ND	2.05	102	2.00	17.1	
Toluene*	<0.050	0.050	02/25/2011	ND	2.15	108	2.00	20.3	
Ethylbenzene*	<0.050	0.050	02/25/2011	ND	2.22	111	2.00	20.8	
Total Xylenes*	<0.150	0.150	02/25/2011	ND	6.49	108	6.00	20.1	
Surrogate: 4-Bromofluorobenzene (PIL	101 9	% 70-130	1						.,
Chloride, SM4500Cl-B	mg/	'kg	Analyze	Analyzed By: HM			•		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	02/25/2011	ND	416	104	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/25/2011	ND	197	98.7	200	0.951	
DRO >C10-C28	<10.0	10.0	02/25/2011	ND	195	97.7	200	1.47	
Surrogate: 1-Chlorooctane	113	% 70-130	)						-
Surrogate: 1-Chlorooctadecane	110	% 70-130	)						

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Celeg & Kreene



#### **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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Celey D. Keena

# ARDINAL LABORATORIES

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476

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

#26



May 13, 2011

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ARTESIA UNIT #58

Enclosed are the results of analyses for samples received by the laboratory on 05/11/11 14:03.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021 Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260 Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005 Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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 (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



TALON LPE MIKE STUBBLEFIELD 408 W. TEXAS AVE. ARTESIA NM, 88210 Fax To: (575) 745-8905

Received: Reported: 05/11/2011

05/13/2011 ARTESIA UNIT #58

Project Name: Project Number:

701402.001.02

Project Location:

SEC.3-T18S - R28E

Sampling Date:

Sampling Type:

04/29/2011 Soil

Sampling Condition:

\*\* (See Notes)

Sample Received By:

Jodi Henson

#### Sample ID: S - 1 2' (H100953-01)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1180	16.0	05/11/2011	ND	432	108	400	3.64	
Sample ID: S - 1 4' (H10	00953-02)								
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM		·			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1020	16.0	05/11/2011	ND	432	108	400	3.64	
Sample ID: S - 1 6' (H10	00953-03)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					~
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1460	16.0	05/11/2011	ND	432	108	400	3.64	
Sample ID: S - 1 8' (H10	00953-04)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	ed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1460	16.0	05/11/2011	, ND	432	108	400	3.64	

#### Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 2 of 5



TALON LPE MIKE STUBBLEFIELD 408 W. TEXAS AVE. ARTESIA NM, 88210 Fax To: (575) 745-8905

Received: 05/11/2011 Reported: 05/13/2011

Project Name: ARTESIA UNIT #58 Project Number: 701402.001.02

Project Location: SEC.3-T18S - R28E Sampling Date:

Sampling Type:

Sampling Condition: Sample Received By: \*\* (See Notes)

Jodi Henson

04/29/2011

#### Sample ID: S - 1 10' (H100953-05)

Chloride, SM45UUCI-B	mg/	кд ,	Anaiyze	а ву: нм					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1340	16.0	05/11/2011	ND	432	108	400	3.64	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keine



#### **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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Celeg D. Keene



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

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

Company Name: Talon /LPE	BILL TO	ANALYSIS REQUEST
	P.O. #:	
	Company: Twon/LPE	
	Attn:	
	Address:	
i i	City:	
l	State: Zip:	
Project Location: Scc. 3-7185-28E	Phone #:	
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PLEASE NOTE: Liability and Damages. Condinal's liability and clearls exclusive remody for any charmacting whether based in contract analyses. All claims, including those for ingligence and any other cause whatsoever shall be deemed waven unless made in viring and	received by Cardinal within 30 days after completion of the applicable	Business and recommenders of the Commenders of the Commenders of the Comments
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† Cardinal cannot accept verbal changes. Please fax written changes to 5	505-393-2476 - # 2/C	Page



June 04, 2011

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ARTESIA UNIT NO. 58

Enclosed are the results of analyses for samples received by the laboratory on 06/02/11 11:45.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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 (V2, V3)

Accreditation applies to public drinking water matrices.

Celeg & 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



TALON LPE MIKE STUBBLEFIELD 408 W. TEXAS AVE. ARTESIA NM, 88210 (575) 745-8905 Fax To:

Received: Reported: 06/02/2011

06/04/2011

Project Name: Project Number: ARTESIA UNIT NO. 58

Project Location:

NONE GIVEN M-3-T18S-R28E Sampling Date:

Sampling Type:

Soil

Sampling Condition:

\*\* (See Notes)

Sample Received By:

Jodi Henson

05/26/2011

#### Sample ID: S-1 10' (H101136-01)

Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1140	16.0	06/03/2011	ND	432	108	400	0.00	
Sample ID: S-1 12' (H10	01136-02)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1300	16.0	06/03/2011	ND	432	108	400	0.00	
Sample ID: S-1 14' (H10	01136-03)								
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	B\$	% Recovery	True Value QC	RPD	Qualifier
Chloride	1140	16.0	06/03/2011	ND	416	104	400	3.77	
Sample ID: S-1 16' (H1	01136-04)								
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM			· · · · · · · · · · · · · · · · · · ·		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	06/03/2011	ND	416	104	400	3.77	

#### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Labbity and Damages Cardinal's liability and clent's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by cleint for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved 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, for loss of profits incident by cleint, its substainants, affiliates or successors anning out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims to be successors anning 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 & Keene Celey D. Keene, Lab Director/Quality Manager



TALON LPE MIKE STUBBLEFIELD 408 W. TEXAS AVE. ARTESIA NM, 88210 Fax To: (575) 745-8905

Received: Reported: 06/02/2011

06/04/2011

Project Name: Project Number: ARTESIA UNIT NO. 58

Project Location:

Analyte

NONE GIVEN M-3-T18S-R28E Sampling Date:

Sampling Type:

104

Sampling Condition:

\*\* (See Notes) Sample Received By:

Jodi Henson

05/26/2011

Soil

Sample ID: S-1 18' (H101136-05)

Chloride, SM4500Cl-B

mg/kg

1170

Analyzed By: HM

Result Reporting Limit

16.0

Analyzed 06/03/2011 Method Blank ND

416

BS

% Recovery True Value QC

400

RPD 3.77 Qualifier

Chloride

Sample ID: S-1 20' (H101136-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1220	16.0	06/03/2011	ND	416	104	400	3.77	

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Celeg & Keene



#### **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

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

## Laboratories

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

101 East Warland, Hobbs, NW 30240 (675) 303-2326 FAM (575) 393-2476 Company Mamo: Ja Royn / LPE CIKK TO ANALYSIS REQUEST Project Manager: P.O. II: State: 1/177 Zip: 18210 Alto: Phone # 575-746-8768 Fact: 575-746-8905 Address: Project Owner: AMARITELM City: Project 5: Project Mame: Stale: Zip: Project Location: Phone #: Sampler Mame: Fax #: FOR LAB USE ONLY MATRIX PRESERV SAMPLING (G)RAB OR (C)OMP GROUNDWATER MASTEWATER 1000/3 Sample LD. .. را ال والفيا SLUDGE SOIL DATE TIME 5 26-11 10:02 2 5-26-11 10340 5.26.1110:410 PLEASE NOTE: Liability and Learninger Cardenia's liability and cleants inclusive remerty for any union assurp whether based in contract or fort, shall be limited to the amount paid by the elect for flar analyses. All claims including those for negligence and any other cause wholsoover shall be deemed warved unloss made in writing and received by Catalinal william 30 days offer completion of the applicable service. In no event chalf Cardin the flable for incidental or consequencial damages, including without limitation, business interruptions, loss of use, or loss of profits becured by client, its substitutes. nance of services, hereunder by Cardhal, repardlers of whether such claim is based upon any of the above stated resums or otherwise ☐ Yes ☐ No Add't Phone II: Relinquished By: Phone Result: Fan Result: REMARKS: Relinguished By: Date. Time: Delivered By: (Circle One) GHECKED BY: Sample Condition

Sampler - UPS - Bus - Other:

Cool Intact
Yes Yes
No No

Page 5 of 5



June 16, 2011

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ARTESIA UNIT #58

Enclosed are the results of analyses for samples received by the laboratory on 06/14/11 16:00.

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Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

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Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

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Lope S. Moreno

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,

Hope Moreno

Inorganic Technical Director



TALON LPE MIKE STUBBLEFIELD 408 W. TEXAS AVE. ARTESIA NM, 88210 Fax To: (575) 745-8905

Received: Reported: 06/14/2011

06/16/2011 ARTESIA UNIT #58

Project Number: Project Location:

Analyte

Project Name:

701407.001.02 SEC.3-T18S - R28E Sampling Date:

06/09/2011 Sampling Type: Soil

Sampling Condition:

Sample Received By:

\*\* (See Notes) Jodi Henson

Sample ID: B-1 25' (H101235-01)

Chloride, SM4500Cl-B

Chloride

Chloride

Chloride

Chloride

mg/kg

Result

944

Result

352

Result

304

Result

192

mg/kg

Reporting Limit

16.0

Reporting Limit

16.0

Reporting Limit

16.0

Analyzed 06/15/2011

Analyzed

06/15/2011

Method Blank ND

BS 448

448

% Recovery 112

True Value QC 400

RPD

0.00

Qualifier

Sample ID: B-1 30' (H101235-02)

Chloride, SM4500Cl-B

Analyte

mg/kg

Analyzed By: HM

Analyzed By: HM

Method Blank

ND

ND

BS

% Recovery

True Value QC RPD

Qualifier

Sample ID: B-1 35' (H101235-03)

Chloride, SM4500CI-B

Analyzed By: HM mg/kg

Analyte

Reporting Limit Analyzed 16.0 06/15/2011

Method Blank

BS 448 % Recovery 112

112

True Value QC 400

400

400

RPD 0.00

0.00

0.00

Qualifier

Sample ID: B-1 45' (H101235-04)

Chloride, SM4500Cl-B

Analyte

Analyzed By: HM

Analyzed 06/15/2011

Method Blank

ND

BS 448 % Recovery 112

True Value QC

RPD Qualifier

Cardinal Laboratories

\*=Accredited Analyte

any other cause whatspever shall be deemed warved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be lable including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiances, effiliates or successors ansing out of or related to the performance of the services hereunder nes, affiliates or successors ansing out of or related to the performance of the services hereunder by Cardinal, regardless of whether

Lope S. Moreno Hope Moreno, Inorganic Technical Director

Page 2 of 4



#### **Notes and Definitions**

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Cardinal Laboratories

\*=Accredited Analyte

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Hope S. Moreno

Hope Moreno, Inorganic Technical Director



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Talon / LPE					BILLTO				ANALYSIS REQUEST									
Project Manager: Mike Stubble field					P.O. #:													
Address: 408 W. Texas Avc.					Company: Melon/iPE									ĺ				
City: Arteria State: NM Zip: 88210					Atin:			9								l		
Phone #: 575-441. 3254 Fax #: 505-746.8905						Address:									j			
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Project Name: alteria Unit #59					State: Zip:			2	ļ									
Project Location: 3-7185 R-385 Sampler Namo: www.Scappud					Phone #:						İ			ĺ	1	}		
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