

## Bratcher, Mike, EMNRD

---

**From:** Michael Stubblefield [mstubblefield@talonlpe.com]  
**Sent:** Friday, September 23, 2011 9:07 AM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** gnewton@pvtnetworks.net  
**Subject:** FW: ARTESIA UNIT NO 32  
**Attachments:** H102002 TALON.pdf; diagram for Artesia Unit No. 32.pdf

Mike,

Talon/LPE is sending you the analytical results for the soil samples collected on 9/14/2011 from the excavated area at the Quantum Resources Management Artesia Unit No. 32 release. Please review the analytical results, I will be over to your office to discuss further steps to taken for the remediation at the Artesia Unit No. 32 release site.

Mike Stubblefield  
Talon/LPE Project Manager

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**From:** Celey Keene [<mailto:celey.keene@cardinallabsnm.com>]  
**Sent:** Thursday, September 22, 2011 2:14 PM  
**To:** Michael Stubblefield  
**Cc:** David Adkins  
**Subject:** ARTESIA UNIT NO 32

THANK YOU,

**Celey Keene**  
**Lab Director**  
**Cardinal Laboratories**  
101 East Marland  
Hobbs, NM 88240  
T: (575) 393-2326  
F: (575) 393-2476  
e-mail: [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)



Drawn By: TJS

Scale: 1" = 150'

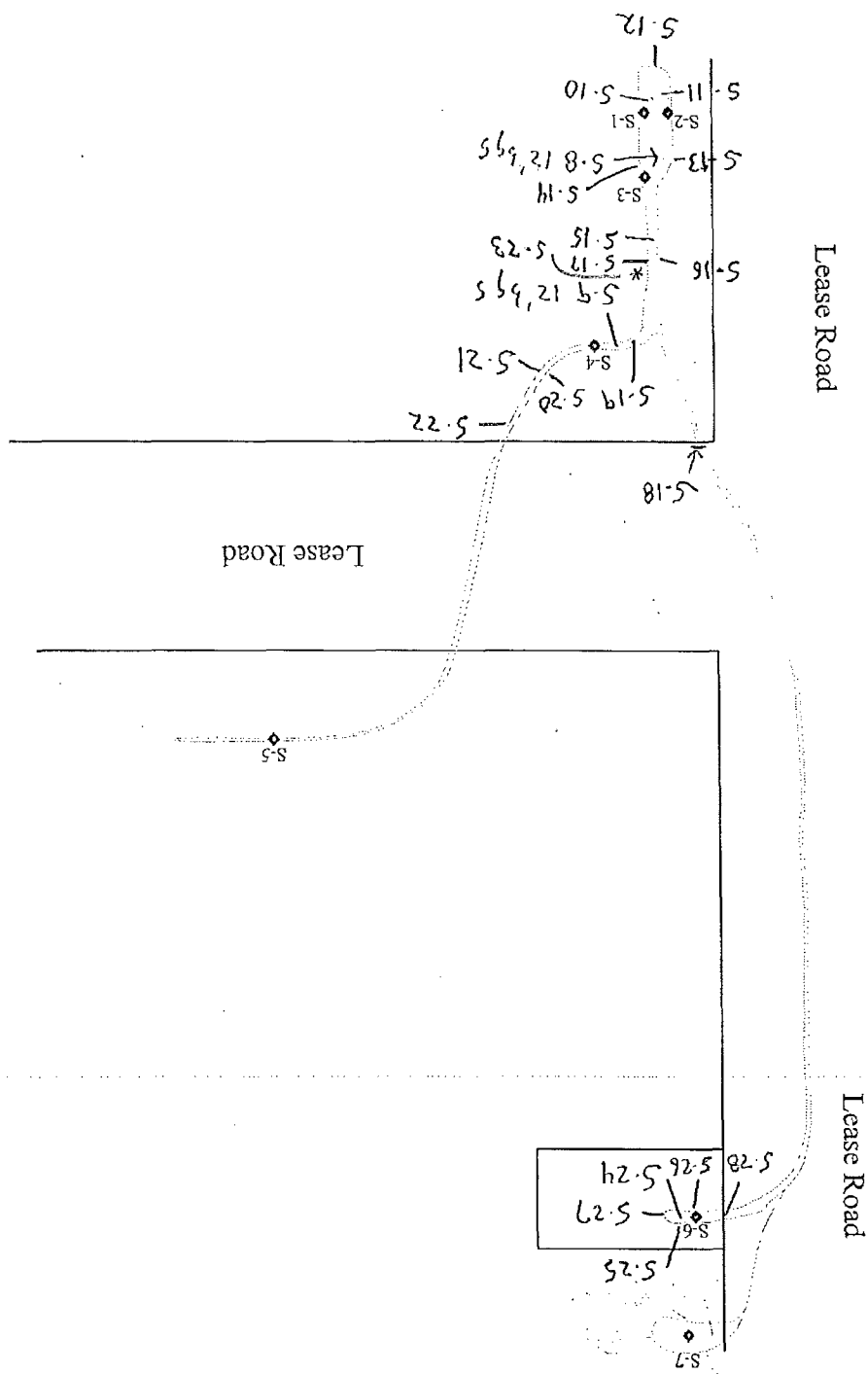
Date: 06/30/2011

Artesia Unit No. 32  
Quantum Resources Management, LLC  
Eddy County, New Mexico  
Attachment I - Site Plan w/Sample Locations

Scale in Feet  
0 75 150



Legend  
- Sample Location  
- Impacted Area





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

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September 22, 2011

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ARTESIA UNIT #32

Enclosed are the results of analyses for samples received by the laboratory on 09/20/11 15:12.

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 Hydrocarbons

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

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 (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. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 09/20/2011  
 Reported: 09/22/2011  
 Project Name: ARTESIA UNIT #32  
 Project Number: 701407.009.01  
 Project Location: SEC. 36-T17S.R28E

 Sampling Date: 09/14/2011  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Jodi Henson

**Sample ID: S-8 12' BGS (H102002-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	09/21/2011	ND	416	104	400	3.77	

**Sample ID: S-9 12' BGS (H102002-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	09/21/2011	ND	416	104	400	3.77		

**Sample ID: S-10 BTTM EXC 5' BGS (H102002-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7360	16.0	09/21/2011	ND	416	104	400	3.77	

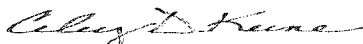
**Sample ID: S-11 BTTM EXC 3' BGS (H102002-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/21/2011	ND	416	104	400	3.77		

Cardinal Laboratories

\*=Accredited Analyte

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Celestine D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 09/20/2011  
Reported: 09/22/2011  
Project Name: ARTESIA UNIT #32  
Project Number: 701407.009.01  
Project Location: SEC. 36-T17S.R28E

Sampling Date: 09/14/2011  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Jodi Henson

**Sample ID: S-12 SOUTHSIDE WALL (H102002-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	09/21/2011	ND	416	104	400	3.77	

**Sample ID: S-13 WESTSIDE WALL (H102002-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	09/21/2011	ND	416	104	400	3.77		

**Sample ID: S-14 EASTSIDE WALL (H102002-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	09/21/2011	ND	416	104	400	3.77		

**Sample ID: S-15 BTM EXC 3' BGS (H102002-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1600	16.0	09/21/2011	ND	416	104	400	3.77	

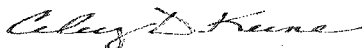
**Sample ID: S-16 WESTSIDE WALL (H102002-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	09/21/2011	ND	416	104	400	7.41		

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 09/20/2011  
Reported: 09/22/2011  
Project Name: ARTESIA UNIT #32  
Project Number: 701407.009.01  
Project Location: SEC. 36-T17S.R28E

Sampling Date: 09/14/2011  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Jodi Henson

**Sample ID: S-17 EASTSIDE WALL (H102002-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3400	16.0	09/21/2011	ND	416	104	400	7.41		

**Sample ID: S-18 NORTHSIDE WALL (H102002-11)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2600	16.0	09/21/2011	ND	416	104	400	7.41		

**Sample ID: S-19 BTM EXC 4' BGS (H102002-12)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3240	16.0	09/21/2011	ND	416	104	400	7.41		

**Sample ID: S-20 NORTHSIDE WALL (H102002-13)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1460	16.0	09/21/2011	ND	416	104	400	7.41		

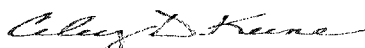
**Sample ID: S-21 SOUTHSIDE WALL (H102002-14)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1230	16.0	09/21/2011	ND	416	104	400	7.41	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 09/20/2011  
 Reported: 09/22/2011  
 Project Name: ARTESIA UNIT #32  
 Project Number: 701407.009.01  
 Project Location: SEC. 36-T17S.R28E

 Sampling Date: 09/14/2011  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Jodi Henson

**Sample ID: S-22 EASTSIDE WALL (H102002-15)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	09/21/2011	ND	416	104	400	7.41	

**Sample ID: S-23 EAST OF FLOWLINE (H102002-16)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	432	16.0	09/21/2011	ND	416	104	400	7.41		

**Sample ID: S-24 BTM EXC 3' BGS (H102002-17)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3520	16.0	09/21/2011	ND	416	104	400	7.41	

**Sample ID: S-25 NORTHSIDE WALL (H102002-18)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1120	16.0	09/21/2011	ND	416	104	400	7.41		

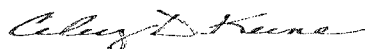
**Sample ID: S-26 SOUTHSIDE WALL (H102002-19)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	09/21/2011	ND	416	104	400	7.41		

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 09/20/2011  
Reported: 09/22/2011  
Project Name: ARTESIA UNIT #32  
Project Number: 701407.009.01  
Project Location: SEC. 36-T17S.R28E

Sampling Date: 09/14/2011  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Jodi Henson

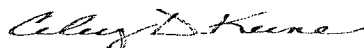
**Sample ID: S-27 EASTSIDE WALL (H102002-20)****Chloride, SM4500Cl-B****mg/kg****Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/21/2011	ND	416	104	400	7.41	

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Notes and Definitions**

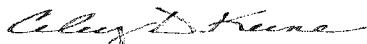
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

# Cardinal Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

1-3

Company Name: <u>Talon/LPE</u>				P.O. #:				ANALYSIS REQUEST															
Project Manager: <u>Mike Stubblefield</u>				Company: <u>Talon/LPE</u>																			
Address: <u>408 West Texas Ave</u>				Attn:																			
City: <u>Artesia</u> State: <u>N.M.</u> Zip: <u>8</u>				Address:																			
Phone #: <u>575-441-7254</u> Fax #:				City:																			
Project #: <u>701407.004.01</u> Project Owner: <u>Quantum Res.</u>				State:																			
Project Name: <u>Artesia Oils No. 32</u>				Zip:																			
Project Location: <u>Sec. 36 TNS-R28E</u>				Phone #:																			
Sampler Name: <u>Mike Stubblefield</u>				Fax #:																			
FOR LAB USE ONLY																							
Lab I.D.		Sample I.D.		GRAB OR (COMP.)		CONTAINERS		MATRIX		PRESERV.		SAMPLING		Total Chlorides									
H102002																							
1 5' 8" 12' by 5		G																					
2 5' 9" 12' by 5		G																					
3 5' 10" bottom excavation 5' by 5		G																					
4 5' 11" bottom excavation 3' by 5		G																					
5 5' 12" southside wall		G																					
6 5' 13" west side wall		G																					
7 5' 14" eastside wall		G																					
8 5' 15" bottom excavation 3' by 5		G																					
9 5' 16" westside wall		G																					
10 5' 17" eastside wall		G																					

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Relinquished By:	Date:	Received By:	Phone Result:	Yes	No	Add'l Phone #:
<u>Mike Stubblefield</u>	<u>9/20/2011</u>	<u>John Hinson</u>	Fax Result:	Yes	No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:			

Delivered By: (Circle One)	Sample Condition	CHECKED BY:
Sampler - UPS - Bus - Other	Cool Intact	(Initials)
	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<u>JH</u>



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

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

2-3

Company Name:						BILL TO								ANALYSIS REQUEST																											
Project Manager:						P.O. #:																																			
Address:						Company:																																			
City:						Attn:																																			
Phone #:						Address:																																			
Project #:						City:																																			
Project Name:						State:						Zip:																													
Project Location:						Phone #:																																			
Sampler Name:						Fax #:																																			
FOR LAB USE ONLY																																									
Lab I.D.		Sample I.D.				GRAB OR (COMP.)		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE		ICE / COOL		OTHER :		DATE		TIME											
HIDZ002																																									
11 S-19 northside wall						G																						9/14/2011		2:35P											
12 S-19 bottom excavation 7' bgs						G																						9/13/2011		3:14P											
13 S-20 northside wall						G																						9/14/2011		3:19P											
14 S-21 southside wall						G																						9/14/2011		3:21P											
15 S-22 eastside wall						G																						9/14/2011		3:36P											
16 S-23 east of flame line						G																						9/14/2011		3:40P											
17 S-24 bottom excavation 3' bgs						G																						9/14/2011		3:49P											
18 S-25 northside wall						G																						9/14/2011		3:51P											
19 S-26 southside wall						G																						9/14/2011		3:54P											
20 S-27 eastside wall						G																						9/14/2011		3:59P											

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Relinquished By:		Date:	Received By:	Phone Result:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Phone #:
<i>Mick Stappell</i>		9/20/2011	<i>Jodi Hunsen</i>	Fax Result:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Fax #:
Time:				REMARKS:				
3:12PM								
Relinquished By:		Date:	Received By:					
Time:								

**Delivered By: (Circle One)**

Sampler - UPS - Bus - Other: Other

*13C*

**Sample Condition**

Cool Intact

☒ Yes ☐ No    ☐ Yes ☐ No

**CHECKED BY:**

(Initials)

*[Signature]*

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