

## Bratcher, Mike, EMNRD

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**From:** Bratcher, Mike, EMNRD  
**Sent:** Tuesday, April 19, 2011 10:32 AM  
**To:** 'Michael Stubblefield'  
**Cc:** 'gnewton@pvtnetworks.net'  
**Subject:** RE: STATE 647 AC 711 WATERFLOOD STATION RELEASE

Mike,

The North sidewall and the excavation bottom samples are still high for delineation purposes. I agree that the East sidewall has been investigated and excavated to the maximum extent as is practicable due to the product lines that run through there. I can approve backfill at this time, however it will be noted at time of closure that contaminants were not fully defined.

If you have any questions or concerns, please contact me.

### **MIKE BRATCHER**

NMOCD District 2  
1301 W. Grand Ave.  
Artesia, NM 88210  
575-748-1283 Ext.108  
575-626-0857  
[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)

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**From:** Michael Stubblefield [<mailto:mstubblefield@talonlpe.com>]  
**Sent:** Friday, April 15, 2011 11:49 AM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** 'gnewton@pvtnetworks.net'  
**Subject:** FW: STATE 647 AC 711 WATERFLOOD STATION RELEASE

Dear Mr. Mike Bratcher,

Talon/LPE is submitting the analytical results for the soil samples collected from the excavated area located at the State 647 711 Water flood Station release. This is the excavated area we visited on 4/8/2011. The soil sample labeled S-5 east side wall is bordered by the gas gathering line owned by Marathon Oil Co. The chlorides reported for all other soil samples are reasonable for the area. Quantum Resources Management, LLC request permission to start the backfilling of the excavated area.

Sincerely,

Mike Stubblefield  
Talon/LPE Project Manager

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**From:** Celey Keene [<mailto:celey.keene@cardinallabsnm.com>]  
**Sent:** Thursday, April 14, 2011 10:49 AM  
**To:** Michael Stubblefield  
**Cc:** David Adkins  
**Subject:** STATE 647 AC 711 WATERFLOOD STATION RELEASE

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)**

## Bratcher, Mike, EMNRD

---

**From:** Michael Stubblefield [mstubblefield@talonlpe.com]  
**Sent:** Friday, April 15, 2011 11:49 AM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** 'gnewton@pvtnetworks.net'  
**Subject:** FW: STATE 647 AC 711 WATERFLOOD STATION RELEASE  
**Attachments:** H100719 TALON.pdf

Dear Mr. Mike Bratcher,

Talon/LPE is submitting the analytical results for the soil samples collected from the excavated area located at the State 647 711 Water flood Station release. This is the excavated area we visited on 4/8/2011. The soil sample labeled S-5 east side wall is bordered by the gas gathering line owned by Marathon Oil Co. The chlorides reported for all other soil samples are reasonable for the area. Quantum Resources Management, LLC request permission to start the backfilling of the excavated area.

Sincerely,

Mike Stubblefield  
Talon/LPE Project Manager

---

**From:** Celey Keene [mailto:[celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)]  
**Sent:** Thursday, April 14, 2011 10:49 AM  
**To:** Michael Stubblefield  
**Cc:** David Adkins  
**Subject:** STATE 647 AC 711 WATERFLOOD STATION RELEASE

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)

April 14, 2011

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: STATE 647 AC 711 WATERFLOOD STATION RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 04/11/11 8:53.

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:	04/11/2011	Sampling Date:	04/06/2011
Reported:	04/14/2011	Sampling Type:	Soil
Project Name:	STATE 647 AC 711 WATERFLOOD STATI	Sampling Condition:	Cool & Intact
Project Number:	701407.007.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 27 - T18S - R28E		

**Sample ID: S - 1 BOTTOM EXC AREA (H100719-01)**

BTEX 8260B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/12/2011	ND	1.82	91.1	2.00	1.20		
Toluene*	<0.050	0.050	04/12/2011	ND	1.90	95.1	2.00	1.70		
Ethylbenzene*	<0.050	0.050	04/12/2011	ND	1.85	92.3	2.00	1.89		
Total Xylenes*	<0.150	0.150	04/12/2011	ND	5.72	95.4	6.00	1.96		

*Surrogate: Dibromofluoromethane* 75.2 % 80-120

*Surrogate: Toluene-d8* 95.7 % 80-120

*Surrogate: 4-Bromofluorobenzene* 78.9 % 80-120

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>880</b>	16.0	04/11/2011	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/12/2011	ND	223	111	200	3.99		
DRO >C10-C28	<10.0	10.0	04/12/2011	ND	227	113	200	8.14		

*Surrogate: 1-Chlorooctane* 113 % 70-130

*Surrogate: 1-Chlorooctadecane* 124 % 70-130

Cardinal Laboratories

\*=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:	04/11/2011	Sampling Date:	04/06/2011
Reported:	04/14/2011	Sampling Type:	Soil
Project Name:	STATE 647 AC 711 WATERFLOOD STATI	Sampling Condition:	Cool & Intact
Project Number:	701407.007.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 27 - T18S - R28E		

**Sample ID: S - 2 S SIDE WALL EXC (H100719-02)**

BTX 8260B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/12/2011	ND	1.82	91.1	2.00	1.20		
Toluene*	<0.050	0.050	04/12/2011	ND	1.90	95.1	2.00	1.70		
Ethylbenzene*	<0.050	0.050	04/12/2011	ND	1.85	92.3	2.00	1.89		
Total Xylenes*	<0.150	0.150	04/12/2011	ND	5.72	95.4	6.00	1.96		

*Surrogate: Dibromofluoromethane* 74.0 % 80-120

*Surrogate: Toluene-d8* 93.1 % 80-120

*Surrogate: 4-Bromofluorobenzene* 97.0 % 80-120

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>288</b>	16.0	04/11/2011	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/12/2011	ND	223	111	200	3.99		
DRO >C10-C28	<10.0	10.0	04/12/2011	ND	227	113	200	8.14		

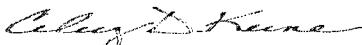
*Surrogate: 1-Chlorooctane* 125 % 70-130

*Surrogate: 1-Chlorooctadecane* 141 % 70-130

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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:	04/11/2011	Sampling Date:	04/06/2011
Reported:	04/14/2011	Sampling Type:	Soil
Project Name:	STATE 647 AC 711 WATERFLOOD STATI	Sampling Condition:	Cool & Intact
Project Number:	701407.007.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 27 - T18S - R28E		

**Sample ID: S - 3 N SIDE WALL EXC (H100719-03)**

BTEX 8260B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/13/2011	ND	1.82	91.1	2.00	1.20		
Toluene*	<0.050	0.050	04/13/2011	ND	1.90	95.1	2.00	1.70		
Ethylbenzene*	<0.050	0.050	04/13/2011	ND	1.85	92.3	2.00	1.89		
Total Xylenes*	<0.150	0.150	04/13/2011	ND	5.72	95.4	6.00	1.96		

Surrogate: Dibromofluoromethane 76.5 % 80-120

Surrogate: Toluene-d8 93.2 % 80-120

Surrogate: 4-Bromofluorobenzene 83.6 % 80-120

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>1770</b>	16.0	04/11/2011	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/12/2011	ND	223	111	200	3.99		
DRO >C10-C28	<10.0	10.0	04/12/2011	ND	227	113	200	8.14		

Surrogate: 1-Chlorooctane 105 % 70-130

Surrogate: 1-Chlorooctadecane 110 % 70-130

Cardinal Laboratories

\*=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:	04/11/2011	Sampling Date:	04/06/2011
Reported:	04/14/2011	Sampling Type:	Soil
Project Name:	STATE 647 AC 711 WATERFLOOD STATI	Sampling Condition:	Cool & Intact
Project Number:	701407.007.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 27 - T18S - R28E		

**Sample ID: S - 4 W SIDE WALL EXC (H100719-04)**

BTEX 8260B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/12/2011	ND	1.82	91.1	2.00	1.20		
Toluene*	<0.050	0.050	04/12/2011	ND	1.90	95.1	2.00	1.70		
Ethylbenzene*	<0.050	0.050	04/12/2011	ND	1.85	92.3	2.00	1.89		
Total Xylenes*	<0.150	0.150	04/12/2011	ND	5.72	95.4	6.00	1.96		

*Surrogate: Dibromofluoromethane* 74.7 % 80-120

*Surrogate: Toluene-d8* 94.2 % 80-120

*Surrogate: 4-Bromofluorobenzene* 89.7 % 80-120

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>432</b>	16.0	04/11/2011	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/12/2011	ND	223	111	200	3.99		
DRO >C10-C28	<10.0	10.0	04/12/2011	ND	227	113	200	8.14		

*Surrogate: 1-Chlorooctane* 131 % 70-130

*Surrogate: 1-Chlorooctadecane* 131 % 70-130

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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:	04/11/2011	Sampling Date:	04/06/2011
Reported:	04/14/2011	Sampling Type:	Soil
Project Name:	STATE 647 AC 711 WATERFLOOD STATI	Sampling Condition:	Cool & Intact
Project Number:	701407.007.01	Sample Received By:	Jodi Henson
Project Location:	SEC. 27 - T18S - R28E		

**Sample ID: S - 5 E SIDE WALL EXC (H100719-05)**

BTEX 8260B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/12/2011	ND	1.82	91.1	2.00	1.20		
Toluene*	<0.050	0.050	04/12/2011	ND	1.90	95.1	2.00	1.70		
Ethylbenzene*	<0.050	0.050	04/12/2011	ND	1.85	92.3	2.00	1.89		
Total Xylenes*	<0.150	0.150	04/12/2011	ND	5.72	95.4	6.00	1.96		

*Surrogate: Dibromofluoromethane* 73.4 % 80-120

*Surrogate: Toluene-d8* 93.3 % 80-120

*Surrogate: 4-Bromofluorobenzene* 80.6 % 80-120

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>2960</b>	16.0	04/11/2011	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/12/2011	ND	223	111	200	3.99		
<b>DRO &gt;C10-C28</b>	<b>55.8</b>	10.0	04/12/2011	ND	227	113	200	8.14		

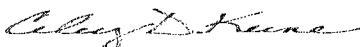
*Surrogate: 1-Chlorooctane* 115 % 70-130

*Surrogate: 1-Chlorooctadecane* 113 % 70-130

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



## Bratcher, Mike, EMNRD

---

**From:** Michael Stubblefield [mstubblefield@talonlpe.com]  
**Sent:** Tuesday, March 22, 2011 5:01 PM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** 'gnewton@pvtnetworks.net'  
**Subject:** Quantum Resources Management, LLC State 647 AC 711 Water Flood Station release.

Dear Mr. Mike Bratcher,

Talon/LPE will start the excavation of the impacted area located at the State 647 AC 711 Water Flood Station on 3/23/2011.

If I can be of further assistance please contact me at 575-441-7254.

Sincerely,

Mike Stubblefield  
Talon/LPE Project Manager