



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

July 15, 2015

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: HACKBERRY 18 FED. NO. 1

Enclosed are the results of analyses for samples received by the laboratory on 07/14/15 12:07.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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 (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. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/14/2015  
Reported: 07/15/2015  
Project Name: HACKBERRY 18 FED. NO. 1  
Project Number: 700794.025.01  
Project Location: S18-T19S-R31E

Sampling Date: 07/14/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: S-1 5' (H501785-01)**

BTX 8021B		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>1.06</b>	0.500	07/14/2015	ND	2.33	117	2.00	1.08	
<b>Toluene*</b>	<b>17.6</b>	0.500	07/14/2015	ND	2.08	104	2.00	0.678	
<b>Ethylbenzene*</b>	<b>15.9</b>	0.500	07/14/2015	ND	2.00	99.8	2.00	1.45	
<b>Total Xylenes*</b>	<b>30.6</b>	1.50	07/14/2015	ND	5.89	98.2	6.00	1.65	
<b>Total BTX</b>	<b>65.2</b>	3.00	07/14/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 140 % 85.6-137

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>437</b>	10.0	07/14/2015	ND	190	94.9	200	4.33	
<b>DRO &gt;C10-C28</b>	<b>1420</b>	10.0	07/14/2015	ND	187	93.7	200	8.55	

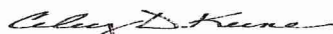
Surrogate: 1-Chlorooctane 116 % 47.2-157

Surrogate: 1-Chlorooctadecane 107 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 07/14/2015  
 Reported: 07/15/2015  
 Project Name: HACKBERRY 18 FED. NO. 1  
 Project Number: 700794.025.01  
 Project Location: S18-T19S-R31E

 Sampling Date: 07/14/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S-1 6' (H501785-02)**

BTX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/14/2015	ND	2.33	117	2.00	1.08	
Toluene*	<0.050	0.050	07/14/2015	ND	2.08	104	2.00	0.678	
Ethylbenzene*	<0.050	0.050	07/14/2015	ND	2.00	99.8	2.00	1.45	
Total Xylenes*	<0.150	0.150	07/14/2015	ND	5.89	98.2	6.00	1.65	
Total BTX	<0.300	0.300	07/14/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 85.6-137

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/14/2015	ND	190	94.9	200	4.33	
DRO >C10-C28	<10.0	10.0	07/14/2015	ND	187	93.7	200	8.55	


Surrogate: 1-Chlorooctane 87.8 % 47.2-157

Surrogate: 1-Chlorooctadecane 95.4 % 52.1-176

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

Received: 07/14/2015  
Reported: 07/15/2015  
Project Name: HACKBERRY 18 FED. NO. 1  
Project Number: 700794.025.01  
Project Location: S18-T19S-R31E

Sampling Date: 07/14/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: S-2 3' (H501785-03)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>39.0</b>	10.0	07/14/2015	ND	2.33	117	2.00	1.08	
<b>Toluene*</b>	<b>287</b>	10.0	07/14/2015	ND	2.08	104	2.00	0.678	
<b>Ethylbenzene*</b>	<b>123</b>	10.0	07/14/2015	ND	2.00	99.8	2.00	1.45	
<b>Total Xylenes*</b>	<b>200</b>	30.0	07/14/2015	ND	5.89	98.2	6.00	1.65	
<b>Total BTEX</b>	<b>649</b>	60.0	07/14/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 117 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>4160</b>	50.0	07/14/2015	ND	190	94.9	200	4.33	
<b>DRO &gt;C10-C28</b>	<b>6270</b>	50.0	07/14/2015	ND	187	93.7	200	8.55	

Surrogate: 1-Chlorooctane 144 % 47.2-157

Surrogate: 1-Chlorooctadecane 146 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/14/2015  
Reported: 07/15/2015  
Project Name: HACKBERRY 18 FED. NO. 1  
Project Number: 700794.025.01  
Project Location: S18-T19S-R31E

Sampling Date: 07/14/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: S-2 4' (H501785-04)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.297</b>	0.050	07/14/2015	ND	2.33	117	2.00	1.08	
<b>Toluene*</b>	<b>0.594</b>	0.050	07/14/2015	ND	2.08	104	2.00	0.678	
<b>Ethylbenzene*</b>	<b>0.188</b>	0.050	07/14/2015	ND	2.00	99.8	2.00	1.45	
<b>Total Xylenes*</b>	<b>0.253</b>	0.150	07/14/2015	ND	5.89	98.2	6.00	1.65	
<b>Total BTX</b>	<b>1.33</b>	0.300	07/14/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 111 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>15.5</b>	10.0	07/14/2015	ND	190	94.9	200	4.33	
<b>DRO &gt;C10-C28</b>	<b>15.6</b>	10.0	07/14/2015	ND	187	93.7	200	8.55	

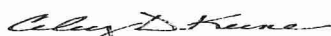
Surrogate: 1-Chlorooctane 97.0 % 47.2-157

Surrogate: 1-Chlorooctadecane 105 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received:	07/14/2015	Sampling Date:	07/14/2015
Reported:	07/15/2015	Sampling Type:	Soil
Project Name:	HACKBERRY 18 FED. NO. 1	Sampling Condition:	Cool & Intact
Project Number:	700794.025.01	Sample Received By:	Celey D. Keene
Project Location:	S18-T19S-R31E		

**Sample ID: S-2 5' (H501785-05)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.109</b>	0.050	07/14/2015	ND	2.33	117	2.00	1.08	
<b>Toluene*</b>	<b>0.182</b>	0.050	07/14/2015	ND	2.08	104	2.00	0.678	
<b>Ethylbenzene*</b>	<b>0.066</b>	0.050	07/14/2015	ND	2.00	99.8	2.00	1.45	
Total Xylenes*	<0.150	0.150	07/14/2015	ND	5.89	98.2	6.00	1.65	
<b>Total BTX</b>	<b>0.357</b>	0.300	07/14/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 114 % 85.6-137

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/14/2015	ND	190	94.9	200	4.33	
DRO >C10-C28	<10.0	10.0	07/14/2015	ND	187	93.7	200	8.55	

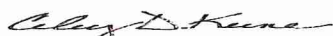
Surrogate: 1-Chlorooctane 89.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 95.1 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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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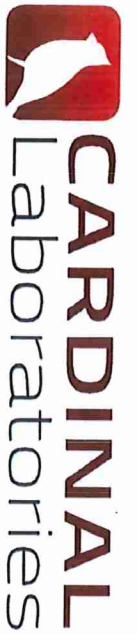
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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Talon/LPE

Project Manager: K. Willgen

Address: 408 W. Texas Ave.

City: Artesia

State: NM zip: 88210

Phone #: 575-746-8768

Fax #: 575-746-8905

Project #:

Project Owner: Devon

Project Name: Haliberry 18 Fed #1

Project Location: 518-T 195-R31E

Sampler Name: S. Hitchcock

BILL TO

P.O. #:

Company: Talon/LPE

Attn:

Address:

City:

State:

Zip:

Phone #:

Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

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