



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

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October 12, 2017

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: VEGA 9

Enclosed are the results of analyses for samples received by the laboratory on 10/10/17 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 10/10/2017  
Reported: 10/12/2017  
Project Name: VEGA 9  
Project Number: 701162.086.01  
Project Location: LOCO HILLS

Sampling Date: 10/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: A - 2' (H702729-01)**

BTEX 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	10/11/2017	ND	1.97	98.4	2.00	0.444	
Toluene*	<0.050	0.050	10/11/2017	ND	1.78	89.1	2.00	0.693	
Ethylbenzene*	<0.050	0.050	10/11/2017	ND	1.83	91.5	2.00	0.604	
Total Xylenes*	<0.150	0.150	10/11/2017	ND	5.63	93.8	6.00	0.116	
Total BTEX	<0.300	0.300	10/11/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	10/11/2017	ND	432	108	400	3.64		

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	10/11/2017	ND	189	94.5	200	0.0667	
DRO >C10-C28	<10.0	10.0	10/11/2017	ND	200	100	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	10/11/2017	ND					

Surrogate: 1-Chlorooctane 78.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 83.4 % 34.7-157

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 10/10/2017  
Reported: 10/12/2017  
Project Name: VEGA 9  
Project Number: 701162.086.01  
Project Location: LOCO HILLS

Sampling Date: 10/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: B - 2' (H702729-02)**

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	10/11/2017	ND	1.97	98.4	2.00	0.444	
Toluene*	<0.050	0.050	10/11/2017	ND	1.78	89.1	2.00	0.693	
Ethylbenzene*	<0.050	0.050	10/11/2017	ND	1.83	91.5	2.00	0.604	
Total Xylenes*	<0.150	0.150	10/11/2017	ND	5.63	93.8	6.00	0.116	
Total BTX	<0.300	0.300	10/11/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/11/2017	ND	432	108	400	3.64	

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	10/11/2017	ND	189	94.5	200	0.0667	
DRO >C10-C28	<10.0	10.0	10/11/2017	ND	200	100	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	10/11/2017	ND					

Surrogate: 1-Chlorooctane 79.6 % 28.3-164

Surrogate: 1-Chlorooctadecane 82.2 % 34.7-157

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 10/10/2017  
Reported: 10/12/2017  
Project Name: VEGA 9  
Project Number: 701162.086.01  
Project Location: LOCO HILLS

Sampling Date: 10/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: C - 2' (H702729-03)**

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	10/11/2017	ND	1.97	98.4	2.00	0.444	
Toluene*	<0.050	0.050	10/11/2017	ND	1.78	89.1	2.00	0.693	
Ethylbenzene*	<0.050	0.050	10/11/2017	ND	1.83	91.5	2.00	0.604	
Total Xylenes*	<0.150	0.150	10/11/2017	ND	5.63	93.8	6.00	0.116	
Total BTX	<0.300	0.300	10/11/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/11/2017	ND	432	108	400	3.64		

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	10/11/2017	ND	189	94.5	200	0.0667	
DRO >C10-C28	<10.0	10.0	10/11/2017	ND	200	100	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	10/11/2017	ND					

Surrogate: 1-Chlorooctane 82.6 % 28.3-164

Surrogate: 1-Chlorooctadecane 83.5 % 34.7-157

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 10/10/2017  
 Reported: 10/12/2017  
 Project Name: VEGA 9  
 Project Number: 701162.086.01  
 Project Location: LOCO HILLS

 Sampling Date: 10/10/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: D - 5' (H702729-04)**

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	10/11/2017	ND	1.97	98.4	2.00	0.444	
Toluene*	<0.050	0.050	10/11/2017	ND	1.78	89.1	2.00	0.693	
Ethylbenzene*	<0.050	0.050	10/11/2017	ND	1.83	91.5	2.00	0.604	
Total Xylenes*	<0.150	0.150	10/11/2017	ND	5.63	93.8	6.00	0.116	
Total BTX	<0.300	0.300	10/11/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/11/2017	ND	432	108	400	3.64	

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	10/11/2017	ND	189	94.5	200	0.0667	
DRO >C10-C28	<10.0	10.0	10/11/2017	ND	200	100	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	10/11/2017	ND					

Surrogate: 1-Chlorooctane 82.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 79.8 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 10/10/2017  
Reported: 10/12/2017  
Project Name: VEGA 9  
Project Number: 701162.086.01  
Project Location: LOCO HILLS

Sampling Date: 10/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: E - 2' (H702729-05)**

BTEX 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	10/11/2017	ND	1.97	98.4	2.00	0.444	
Toluene*	<0.050	0.050	10/11/2017	ND	1.78	89.1	2.00	0.693	
Ethylbenzene*	<0.050	0.050	10/11/2017	ND	1.83	91.5	2.00	0.604	
Total Xylenes*	<0.150	0.150	10/11/2017	ND	5.63	93.8	6.00	0.116	
Total BTEX	<0.300	0.300	10/11/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/11/2017	ND	432	108	400	0.00	

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	10/11/2017	ND	189	94.5	200	0.0667	
DRO >C10-C28	<10.0	10.0	10/11/2017	ND	200	100	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	10/11/2017	ND					

Surrogate: 1-Chlorooctane 83.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 79.1 % 34.7-157

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 10/10/2017  
Reported: 10/12/2017  
Project Name: VEGA 9  
Project Number: 701162.086.01  
Project Location: LOCO HILLS

Sampling Date: 10/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: F - 2' (H702729-06)**

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	10/11/2017	ND	1.97	98.4	2.00	0.444	
Toluene*	<0.050	0.050	10/11/2017	ND	1.78	89.1	2.00	0.693	
Ethylbenzene*	<0.050	0.050	10/11/2017	ND	1.83	91.5	2.00	0.604	
Total Xylenes*	<0.150	0.150	10/11/2017	ND	5.63	93.8	6.00	0.116	
Total BTX	<0.300	0.300	10/11/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/11/2017	ND	432	108	400	0.00	

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	10/11/2017	ND	189	94.5	200	0.0667	
DRO >C10-C28	<10.0	10.0	10/11/2017	ND	200	100	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	10/11/2017	ND					

Surrogate: 1-Chlorooctane 75.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 78.5 % 34.7-157

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 10/10/2017  
Reported: 10/12/2017  
Project Name: VEGA 9  
Project Number: 701162.086.01  
Project Location: LOCO HILLS

Sampling Date: 10/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: G - 10' (H702729-07)**

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	10/11/2017	ND	1.97	98.4	2.00	0.444	
Toluene*	<0.050	0.050	10/11/2017	ND	1.78	89.1	2.00	0.693	
Ethylbenzene*	<0.050	0.050	10/11/2017	ND	1.83	91.5	2.00	0.604	
Total Xylenes*	<0.150	0.150	10/11/2017	ND	5.63	93.8	6.00	0.116	
Total BTX	<0.300	0.300	10/11/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/11/2017	ND	432	108	400	0.00	

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	10/11/2017	ND	189	94.5	200	0.0667	
DRO >C10-C28	594	10.0	10/11/2017	ND	200	100	200	3.93	
EXT DRO >C28-C36	113	10.0	10/11/2017	ND					

Surrogate: 1-Chlorooctane 79.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 84.5 % 34.7-157

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



### Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

