

AP – 119

Q3 GWMR

09 / 05 / 2014



August 14, 2014

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: LOVINGTON YARD (AP1-119)

Enclosed are the results of analyses for samples received by the laboratory on 08/07/14 11:15.

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.

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 style with a large, flowing "C" at the beginning.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	08/07/2014	Sampling Date:	08/07/2014
Reported:	08/14/2014	Sampling Type:	Water
Project Name:	LOVINGTON YARD (AP1-119)	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: MW-1 (H402430-01)

Volatile 8260		mg/L		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Carbon tetrachloride*	0.063	0.002	08/08/2014	ND	0.019	95.4	0.0200	4.21	
Benzene*	<0.002	0.002	08/08/2014	ND	0.018	89.6	0.0200	2.26	
Toluene*	<0.002	0.002	08/08/2014	ND	0.019	95.2	0.0200	4.17	
Ethylbenzene*	<0.002	0.002	08/08/2014	ND	0.018	92.4	0.0200	3.98	
m+p - Xylene*	<0.005	0.005	08/08/2014	ND	0.043	108	0.0400	3.90	
o-Xylene*	<0.002	0.002	08/08/2014	ND	0.021	104	0.0200	3.53	
Total Xylenes*	<0.008	0.008	08/08/2014	ND	0.064	107	0.0600	3.78	

Surrogate: Dibromofluoromethane	96.3 %	87.3-113
Surrogate: Toluene-d8	112 %	89.6-110
Surrogate: 4-Bromofluorobenzene	101 %	82.3-119

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract 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 waived 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, or loss of profits incurred by client, its subsidiaries, 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	08/07/2014	Sampling Date:	08/06/2014
Reported:	08/14/2014	Sampling Type:	Water
Project Name:	LOVINGTON YARD (AP1-119)	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: MW-2 (H402430-02)

Volatile 8260			Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Carbon tetrachloride*	0.185	0.002	08/08/2014	ND	0.019	95.4	0.0200	4.21	
Benzene*	<0.002	0.002	08/08/2014	ND	0.018	89.6	0.0200	2.26	
Toluene*	<0.002	0.002	08/08/2014	ND	0.019	95.2	0.0200	4.17	
Ethylbenzene*	<0.002	0.002	08/08/2014	ND	0.018	92.4	0.0200	3.98	
m+p - Xylene*	<0.005	0.005	08/08/2014	ND	0.043	108	0.0400	3.90	
o-Xylene*	<0.002	0.002	08/08/2014	ND	0.021	104	0.0200	3.53	
Total Xylenes*	<0.008	0.008	08/08/2014	ND	0.064	107	0.0600	3.78	
<hr/>									
<i>Surrogate: Dibromofluoromethane</i>	<i>91.7 %</i>	<i>87.3-113</i>							
<i>Surrogate: Toluene-d8</i>	<i>108 %</i>	<i>89.6-110</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>96.8 %</i>	<i>82.3-119</i>							

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract 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 waived 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, or loss of profits incurred by client, its subsidiaries, 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	08/07/2014	Sampling Date:	08/06/2014
Reported:	08/14/2014	Sampling Type:	Water
Project Name:	LOVINGTON YARD (AP1-119)	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: MW-3 (H402430-03)

Volatile 8260		mg/L		Analyzed By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Carbon tetrachloride*	0.005	0.0005	08/11/2014	ND	0.019	95.4	0.0200	4.21	
Benzene*	<0.0005	0.0005	08/11/2014	ND	0.018	89.6	0.0200	2.26	
Toluene*	<0.0005	0.0005	08/11/2014	ND	0.019	95.2	0.0200	4.17	
Ethylbenzene*	<0.0005	0.0005	08/11/2014	ND	0.018	92.4	0.0200	3.98	
m+p - Xylene*	<0.001	0.001	08/11/2014	ND	0.043	108	0.0400	3.90	
o-Xylene*	<0.0005	0.0005	08/11/2014	ND	0.021	104	0.0200	3.53	
Total Xylenes*	<0.002	0.002	08/11/2014	ND	0.064	107	0.0600	3.78	
<hr/>									
<i>Surrogate: Dibromofluoromethane</i>	<i>95.2 %</i>	<i>87.3-113</i>							
<i>Surrogate: Toluene-d8</i>	<i>106 %</i>	<i>89.6-110</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>97.2 %</i>	<i>82.3-119</i>							

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract 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 waived 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, or loss of profits incurred by client, its subsidiaries, 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.



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.
BS2	Blank spike recovery below laboratory acceptance criteria. Results for analyte potentially biased low.
BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
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



Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories

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

ANALYSIS REQUEST (Circle or Specify Method No.)

Company Name: Basin Environmental Service Technologies, LLC Phone #: (575)396-2378

Address: P.O. Box 301 Lovington, NM 88260 Fax #: (575)396-1429

Contact Person: Email: dm@basinenv.com

Invoice to: Basin Environmental Service Technologies, LLC

Project #: Pro-Kern Project Name: Lovington Yard AP-119

Project Location: Lea Co., NM
(include state) Sampler Signature: *Paul Perry*

LAB ID (LAB USE ONLY)	SAMPLE ID	(G)RAB or (C)OMP	# CONTAINERS	MATRIX				PRESERVATIVE METHOD				DATE	TIME	
				WATER	SOIL	AIR	SLUDGE	HCL	HNO ₃	H ₂ SO ₄	NaOH			ICE
1402430														
	1	MMW-1	G	3	X					X			8/7/14	6:00
	2	MMW-2	G	3	X					X			8/7/14	9:10
	3	MMW-3	G	3	X					X			8/7/14	9:25

THP	Carbon Tetra Chloride	BTEX
	X	X
	X	X
	X	X

Relinquished by: *Paul Perry* Company: *Basin* Date: *8-7-14* Time: *9:55am*
 Relinquished by: *Paul Perry* Company: *Basin* Date: *8-7-14* Time: *11:15*
 Relinquished by: *Paul Perry* Company: *Basin* Date: *8-7-14* Time: *11:15*

Received by: *Walter Henderson* Company: *Henderson* Date: *8-7-14* Time: *11:15*
 Received by: *Walter Henderson* Company: *Henderson* Date: *8-7-14* Time: *11:15*

LAB USE ONLY

Intact Y / N

Headspace Y / N / NA

Log-In Review

Carrier #

REMARKS:

Dry Weight Basis Required

TRRP Report Required

Check if Special Reporting Limits Are Needed

Turn Around Time if different from standard

Hold