◆ District 1

• 1625 N. French Dr., Hobbs, NM 88240

District III

811 S. First St., Artesia, NM 88210

District III

1000 Rio Brazos Road, Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

## State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

100				28	ınta Fe	e, NM 8/3	05							
			Rele	ease Notific	cation	n and Co	rrective A	ctio	n	· · · · ·				
						<b>OPERA</b>	ГOR		☐ Initia	l Report	$\boxtimes$	Final Repor		
Name of Co	mpany A	RP Production	on Comp	any, LLC		Contact Randy L. Madison								
		., Raton, NN	1 87740			Telephone No. Office 575-445-6706 Cell 575-420-1120								
Facility Nar	ne VPR B	-26				Facility Typ	e Gas Well							
Surface Ow	ner Verme	jo Park Ran	ch	Mineral C	)wner A	APR Product	tion Company,	LLC	API No.	30-007-2	0082			
				LOCA	ATIO	N OF REI	LEASE							
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East	/West Line	County				
G	25	30N	18E	2413'	l No	orth	1324	E	ast	Colfax				
Latitude N 36.806211 Longitud						ngitude	W 104.976291			-				
					<del></del>		_							
Type of Dela	aca Produc	ed Water		NAI	UKŁ	OF RELI	Release 8.5 Bar	role	Volumo P	ecovered (				
Type of Release Produced Water Source of Release Loose Hammer union on 2" line							lour of Occurrence			Hour of Dis		,		
						Unknown			9/5/14 @					
Was Immedia	ate Notice C		Ves [	No 🛛 Not Re	equired	If YES, To Cory Smith								
By Whom? R	andy Madi				equired		lour 9/5/14 @12	30						
By Whom? Randy Madison Was a Watercourse Reached?							olume Impacting		itercourse.					
			Yes 🗵	No										
If a Watercou	irse was Im	pacted, Descr	ibe Fully.*	k					OIL CO	ons. Div	DIST	. 3		
									0	CT <b>2 9</b> 2	2014			
		em and Reme e on a 2" prod		n Taken.* er line. The union	ı was tig	htened.								
	be monitor			ken.* Soil Characterizat	ion has l	been complete	ed. Nothing rema	arkable	to report. N	o remediati	on nee	ded.		
regulations all public health should their cor the environ	Il operators or the envir operations h nment. In a	are required to ronment. The lave failed to a	o report ar acceptand adequately OCD accep	e is true and comp nd/or file certain r ce of a C-141 repo investigate and r otance of a C-141	elease nort by the emediat	otifications and e NMOCD me contaminati	nd perform correct arked as "Final R on that pose a three the operator of	ctive ac Report" reat to respon	ctions for rele does not reli- ground water sibility for co	ases which eve the ope , surface wa ompliance v	may enter of the contract of t	ndanger f liability man health		
Signature:			Les	7:5		Approved by	OIL CON  Environmental S			DIVISIO				
Title: EHS S	·					Approval Dat	te: WH14		Expiration I	Date:				
		_					11,4	]	DAPHAROII I					
E-mail Address: rmadison@atlasenergy.com						Conditions of	f Approval:			Attached				

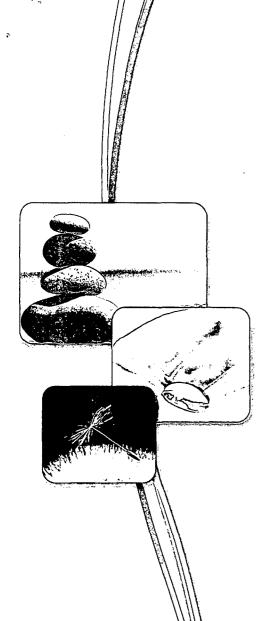
Phone: 575-445-6706

\* Attach Additional Sheets If Necessary

Date 10/23/14

#NCS 1430837302





# TestAmerico

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc. TestAmerica Denver 4955 Yarrow Street Arvada, CO 80002 Tel: (303)736-0100

TestAmerica Job ID: 280-60687-1

Client Project/Site: Soil Hydrocarbon Characterization

For: Atlas Energy 309 Silver Street Raton, New Mexico 87740

Attn: Mr. Randy Madison

Dita R. Bindel

Authorized for release by: 10/15/2014 10:32:02 AM

DiLea Bindel, Project Manager I (303)736-0173 dilea.bindel@testamericainc.com

..... LINKS .....

Review your project results through

Have a Question?



Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

## **Table of Contents**

Cover Page	1
Table of Contents	2
Case Narrative	3
Definitions	4
Detection Summary	5
Method Summary	6
Sample Summary	7
Client Sample Results	
QC Sample Results	11
QC Association	
Chronicle	17
Receipt Checklists	18
Chain of Custody	19

#### **Case Narrative**

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

Job ID: 280-60687-1

Laboratory: TestAmerica Denver

Narrative

#### **CASE NARRATIVE**

Client: Atlas Energy

Project: Soil Hydrocarbon Characterization Report Number: 280-60687-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

#### RECEIPT

The samples were received on 10/02/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 5.9 C.

#### **GASOLINE RANGE ORGANICS (GRO) - METHOD 8015C**

Gasoline Range Organics (GRO)-C6-C10 was detected in method blank MB 280-247591/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Surrogate a,a,a-Trifluorotoluene was recovered above the QC control limits in sample D-67.1-6 (280-60687-3. This anomaly is due to obvious matrix interferences; therefore, corrective action is deemed unnecessary. Sample data should be considered biased high.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with prep batch 280-247618. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **VOLATILE ORGANIC COMPOUNDS (GC) - METHOD 8021B**

Benzene was detected in method blank MB 280-247593/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **DIESEL RANGE ORGANICS - METHOD 8015C**

Matrix spikes were not requested and therefore, were not reported. The acceptable LCS analyte recoveries provide evidence that the laboratory is performing the method within acceptable guidelines.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **GENERAL CHEMISTRY**

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## **Definitions/Glossary**

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

Qualifiers	
GC VOA	
Qualifier	Qualifier Description
В	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
General Chen	nistry
Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
a	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## **Detection Summary**

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

Client Sample ID: A-575.1-6						Lab Sample ID: 280-60687					
– Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D N	/lethod	Prep Type		
Gasoline Range Organics (GRO)	1.1	В	0.95	0.26	mg/Kg	1	_ 8	015C	Total/NA		
-C6-C10											
Diesel Range Organics [C10-C28]	6.2		3.9	0.66	mg/Kg	1	8	015C	Total/NA		
Chloride	8.5	J	29	1.9	mg/Kg	1	9	056	Soluble		

Client Sample ID: B-26.1-6				Lab Sample ID: 280-60687-2				
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
Gasoline Range Organics (GRO)	1.7	В	1.0	0.27	mg/Kg	1	8015C	Total/NA
-C6-C10 m-Xylene & p-Xylene	12	J	49	5.9	ug/Kg	1	8021B	Total/NA
Diesel Range Organics [C10-C28]	28		3.9	0.66	mg/Kg	1	8015C	Total/NA
Chloride	700		29	1.9	mg/Kg	1	9056	Soluble

Client Sample ID: D-67.1-6				Lab Sample ID: 280-60687-3					
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	a	Method	Ргер Туре
Gasoline Range Organics (GRO)	4.9	В	0.98	0.26	mg/Kg		_	8015C	Total/NA
-C6-C10									
Diesel Range Organics [C10-C28]	13		3.9	0.66	mg/Kg	1		8015C	Total/NA
Chloride	38		28	1.9	mg/Kg	1		9056	Soluble

## **Method Summary**

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

Method	Method Description	Protocol	Laboratory
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL DEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL DEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL DEN
9056	Chloride	SW846	TAL DEN

#### Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TestAmerica Denver

## **Sample Summary**

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

Lab Sample ID ·	Client Sample ID	Matrix	Collected Received
280-60687-1	A-575.1-6	Solid	10/01/14 09:55 10/02/14 09:20
280-60687-2	B-26.1-6	Solid	10/01/14 09:56 10/02/14 09:20
280-60687-3	D-67.1-6	Solid	10/01/14 09:57 10/02/14 09:20



## **Client Sample Results**

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

Analyzed

10/13/14 16:51

Analyzed

10/13/14 16:51

Dil Fac

10/01/14 09:57

Prepared

10/01/14 09:57

Method: 8015C - Nonhalogenate	d Organics using GC/FID	)-I⊮lodified (Gasoline Range Organics)

Result Qualifier

4.9 B

**%Recovery Qualifier** 

135 X

Client Sample ID: A-575.1-6 Date Collected: 10/01/14 09:55							Lab S	sample ID: 280- Matri	60687-1 x: Solid
Date Received: 10/02/14 09:20 Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	1.1	В	0.95	0.26	mg/Kg		10/01/14 09:55	10/13/14 15:46	1
Surrogate %	Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	104		77 - 123				10/01/14 09:55	10/13/14 15:46	1
Client Sample ID: B-26.1-6 Date Collected: 10/01/14 09:56 Date Received: 10/02/14 09:20							Lab S	sample ID: 280- Matri	60687-2 x: Solid
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	1.7	В	1.0	0.27	mg/Kg		10/01/14 09:56	10/13/14 16:19	1
Surrogate %	Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		77 - 123				10/01/14 09:56	10/13/14 16:19	1
Client Sample ID: D-67.1-6							Lab S	sample ID: 280-	60687-3
Date Collected: 10/01/14 09:57								•	x: Solid
Date Received: 10/02/14 09:20									

RL

0.98

Limits

77 - 123

MDL Unit

0.26 mg/Kg

_				
Method: 80	21B - Volatile	Organic Com	pounds (GC)	

Gasoline Range Organics (GRO)

Client Sample ID: B-26.1-6

-C6-C10 Surrogate

a,a,a-Trifluorotoluene

Client Sample ID: A-575.1-6  Date Collected: 10/01/14 09:55							Lab Sample ID: 280-60687-1 Matrix: Solid			
Date Received: 10/02/14 09:20 Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		50	7.0	ug/Kg		10/13/14 11:43	10/13/14 17:36	1	
Ethylbenzene	ND		50	7.5	ug/Kg		10/13/14 11:43	10/13/14 17:36	1	
Toluene	ND		50	8.8	ug/Kg		10/13/14 11:43	10/13/14 17:36	1	
m-Xylene & p-Xylene	ND		50	6.1	ug/Kg		10/13/14 11:43	10/13/14 17:36	1	
o-Xylene	ND		50	3.3	ug/Kg		10/13/14 11:43	10/13/14 17:36	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene	94		82 - 115				10/13/14 11:43	10/13/14 17:36	1	

Date Collected: 10/01/14 09:56 Date Received: 10/02/14 09:20								Matri	x: Solid
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		49	6.8	ug/Kg		10/13/14 11:43	10/13/14 19:04	
Ethylbenzene	ND		49	7.3	ug/Kg		10/13/14 11:43	10/13/14 19:04	1
Toluene	ND		49	8.6	ug/Kg		10/13/14 11:43	10/13/14 19:04	1
m-Xylene & p-Xylene	12	J	49	5.9	ug/Kg		10/13/14 11:43	10/13/14 19:04	1
o-Xylene	ND		49	3.2	ug/Kg		10/13/14 11:43	10/13/14 19:04	1

TestAmerica Denver

Lab Sample ID: 280-60687-2

## **Client Sample Results**

Client: Atlas Energy

Chloride

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

14

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	91		82 - 115				10/13/14 11:43	10/13/14 19:04	
Client Sample ID: D-67.1-6							Lab S	Sample ID: 280-	-60687-:
Date Collected: 10/01/14 09:57								=	ix: Solic
Date Received: 10/02/14 09:20									
Analyte	Result	Qualifier	RL	MDL	Unit	а	Prepared	Analyzed	Dil Fa
Benzene	ND		50	7.0	ug/Kg		10/13/14 11:43	10/13/14 19:34	
Ethylbenzene	ND		50	7.5	ug/Kg		10/13/14 11:43	10/13/14 19:34	
Toluene	ND		50	8.8	ug/Kg		10/13/14 11:43	10/13/14 19:34	•
m-Xylene & p-Xylene	ND		50	6.1	ug/Kg		10/13/14 11:43	10/13/14 19:34	
o-Xylene	ND		50	3.3	ug/Kg		10/13/14 11:43	10/13/14 19:34	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	90		82 - 115				10/13/14 11:43	10/13/14 19:34	
Method: 8015C - Nonhalogen	ated Organ	ics using	GC/FID -Mod	lified (E	Diesel Ra	ange (	Organics)		
Client Sample ID: A-575.1-6						_	Lab S	Sample ID: 280-	-60687 <i>-</i>
Date Collected: 10/01/14 09:55								· .	ix: Solic
Date Received: 10/02/14 09:20									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6.2		3.9	0.66	mg/Kg		10/06/14 18:30	10/09/14 13:27	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl (Surr)	68		49 - 115				10/06/14 18:30	10/09/14 13:27	1
Client Sample ID: B-26.1-6							Lab S	sample ID: 280-	-60687-2
Date Collected: 10/01/14 09:56									ix: Solid
Date Received: 10/02/14 09:20									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	28		3.9	0.66	mg/Kg		10/06/14 18:30	10/09/14 13:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fàc
o-Terphenyl (Surr)	63		49 - 115				10/06/14 18:30	10/09/14 13:03	
Client Sample ID: D-67.1-6							Lab S	sample ID: 280-	60687-3
Date Collected: 10/01/14 09:57								Matri	x: Solid
Date Received: 10/02/14 09:20									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13		3.9	0,66	mg/Kg		10/06/14 18:30	10/09/14 12:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl (Surr)	56		49 - 115				10/06/14 18:30	10/09/14 12:39	1
General Chemistry - Soluble									
- Client Sample ID: A-575.1-6							Lab S	Sample ID: 280-	-60687-
Date Collected: 10/01/14 09:55								=	ix: Solic
Date Received: 10/02/14 09:20									

10/08/14 18:59

8.5 J

1.9 mg/Kg

## **Client Sample Results**

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

General	Chemistry	/ - So	luble
---------	-----------	--------	-------

Client Sample ID: B-26.1-6 Lab Sample ID: 280-60687-2 Date Collected: 10/01/14 09:56

Matrix: Solid

Date Received: 10/02/14 09:20

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Chloride 29 1.9 mg/Kg 10/08/14 19:16 700

Client Sample ID: D-67.1-6 Lab Sample ID: 280-60687-3

Date Collected: 10/01/14 09:57 Matrix: Solid

Date Received: 10/02/14 09:20 Result Qualifier RL MDL Unit Prepared

Analyte Analyzed 28 10/08/14 19:34 Chloride 38 1.9 mg/Kg

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

Client Sample ID: Method Blank

## Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 280-247591/1-A

Matrix: Solid

Analysis Batch: 247618

MB MB

Result Qualifier 0.547 .1

RL 1.2

MDL Unit 0.33 mg/Kg D

Prepared 10/13/14 11:39

Analyzed 10/13/14 14:09

Prep Type: Total/NA

Prep Batch: 247591

Dil Fac

Gasoline Range Organics (GRO) -C6-C10

Analyte

MB MB

Surrogate %Recovery Qualifier a,a,a-Trifluorotoluene 95

Limits 77 - 123

Prepared 10/13/14 11:39

Analyzed 10/13/14 14:09 Dil Fac

Lab Sample ID: LCS 280-247591/2-A

Matrix: Solid

Analysis Batch: 247618

Spike Added 5.50

77 - 123

Spike

Added

LCS LCS Result Qualifier 6.37

Unit mg/Kg

D %Rec 116

Prep Type: Total/NA Prep Batch: 247591

%Rec.

Client Sample ID: Lab Control Sample

Limits 85 - 153

Analyte Gasoline Range Organics (GRO) -C6-C10

LCS LCS

Qualifier

Surrogate %Recovery a,a,a-Trifluorotoluene 93

Lab Sample ID: LCSD 280-247591/3-A

Limits

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 247591

%Rec. RPD

Analyte Gasoline Range Organics (GRO)

Analysis Batch: 247618

5.50

LCSD LCSD Result Qualifier 6.51

mg/Kg

Unit

%Rec 85 - 153

Limits

RPD Limit

-C6-C10

Surrogate

Matrix: Solid

LCSD LCSD

MR MR

%Recovery Qualifier 95 a,a,a-Trifluorotoluene

Limits 77 - 123

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 280-247593/1-A

Matrix: Solid

Surrogate

a,a,a-Trifluorotoluene

Analysis Batch: 247638

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 247593

	IVID	IAID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	7.50	J	50	7.0	ug/Kg		10/13/14 11:43	10/13/14 16:08	1
Ethylbenzene	ND		50	7.5	ug/Kg		10/13/14 11:43	10/13/14 16:08	1
Toluene	ND		50	8.8	ug/Kg		10/13/14 11:43	10/13/14 16:08	1
m-Xylene & p-Xylene	ND		50	6.1	ug/Kg	•	10/13/14 11:43	10/13/14 16:08	1
o-Xylene	ND		50	3.3	ug/Kg		10/13/14 11:43	10/13/14 16:08	1
	МВ	MB							

Qualifier Limits %Recovery 98 82 - 115

Prepared 10/13/14 11:43

Analyzed 10/13/14 16:08

Dil Fac

## **QC Sample Results**

Client: Atlas Energy

a,a,a-Trifluorotoluene

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 280-247593/2-A Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA Analysis Batch: 247638 Prep Batch: 247593 Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Benzene 1000 1130 ug/Kg 113 85 - 115 Ethylbenzene 1000 1070 ug/Kg 107 85 - 115 1000 1080 Toluene ug/Kg 108 85 - 115 m-Xylene & p-Xylene 2000 2160 ug/Kg 108 85 - 115 1000 o-Xylene 1090 ug/Kg 109 85 - 115 LCS LCS Surrogate **%Recovery Qualifier** Limits a,a,a-Trifluorotoluene 101 82 - 115

Lab Sample ID: LCSD 280-24 Matrix: Solid Analysis Batch: 247638	7593/3-A					Clie	nt Sam	ple ID:	-	l Sampl ype: Tot Batch: 2	tal/NA
_			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	Đ	%Rec	Limits	RPD	Limit
Benzene			1000	1060		ug/Kg		106	85 - 115	6	15
Ethylbenzene			1000	1020		ug/Kg		102	85 _ 115	6	17
Toluene			1000	1020		ug/Kg		102	85 - 115	6	15
m-Xylene & p-Xylene			2000	2050		ug/Kg		103	85 - 115	5	15
o-Xylene			1000	1030		ug/Kg		103	85 - 115	6	15
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
a,a,a-Trifluorotoluene	96		82 - 115								

Lab Sample ID: 280-60687-1 MS	5							Cli	ent Sample II	D: A-575.1-6
Matrix: Solid									Prep Typ	e: Total/NA
Analysis Batch: 247638									Prep Ba	tch: 247593
-	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND	<u> </u>	977	1010		ug/Kg	_ ~	104	85 - 115	
Ethylbenzene	ND		977	972		ug/Kg		99	85 - 115	
Toluene	ND		977	981		ug/Kg		100	85 - 115	
m-Xylene & p-Xylene	8.7		1950	1950		ug/Kg		100	85 - 115	
o-Xylen <i>e</i>	ND		977	981		ug/Kg		100	85 _ 115	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							

82 - 115

93

Lab Sample ID: 280-60687-1 MS	SD.							Cli	ent Sample		
Matrix: Solid Analysis Batch: 247638	Sample	Sample	Spike	MSD	MSD				•	ype: Tot Batch: 2	
Analyte	•	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		993	1020		ug/Kg		103	85 - 115	1	15
Ethylbenzene	ND		993	983		ug/Kg		99	85 - 115	1	17
Toluene	ND		993	987		ug/Kg		99	85 - 115	1	15
m-Xylene & p-Xylene	8.7		1990	1970		ug/Kg		99	85 - 115	1	15
o-Xylene	ND		993	993		ug/Kg		100	85 _ 115	1	15

TestAmerica Denver

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 280-60687-1 MSD

Matrix: Solid

Analysis Batch: 247638

Client Sample ID: A-575.1-6

Prep Type: Total/NA

Prep Batch: 247593

MSD MSD

Surrogate %Recovery Qualifier Limits

a,a,a-Trifluorotoluene 92 82 - 115

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 280-246421/1-A

Matrix: Solid

Analysis Batch: 246910

Diesel Range Organics [C10-C28]

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 246421

мв мв

Analyte

Result Qualifier ND

RL 3.7

MDL Unit 0.62 mg/Kg

Prepared 10/06/14 18:30

Analyzed 10/09/14 10:37 Dil Fac

MΒ MB

Surrogate

Qualifier %Recovery 75

Limits 49 - 115

Prepared 10/06/14 18:30

Analyzed 10/09/14 10:37 Dil Fac

Lab Sample ID: LCS 280-246421/2-A

Matrix: Solid

o-Terphenyl (Surr)

Analysis Batch: 246910

Spike Added

64.1

LCS LCS Result Qualifier

59.4

Unit

mg/Kg

%Rec

Prep Type: Total/NA Prep. Batch: 246421

%Rec.

Limits 53 - 115

Client Sample ID: Lab Control Sample

Diesel Range Organics [C10-C28]

Analyte

LCS LCS

Surrogate

o-Terphenyl (Surr)

**%Recovery Qualifier** 74

Limits 49 - 115

Method: 9056 - Chloride

Lab Sample ID: MRL 280-246865/3

Matrix: Solid

Analyte

Chloride

Analyte

Chloride

Chloride

Analysis Batch: 246865

Spike Added 2.50 MRL MRL

Unit

%Rec.

%Rec

Prep Type: Total/NA

Lab Sample ID: MB 280-246967/3-A

Matrix: Solid

Analysis Batch: 246865

Result

Qualifier 2.49

mg/L

Limits 50 - 150

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank Prep Type: Soluble

MB MB

Result Qualifier

ND

RL 30

MDL Unit 2.0 mg/Kg Prepared

D

Analyzed 10/08/14 18:41

Dil Fac

Lab Sample ID: LCS 280-246967/1-A

Matrix: Solid

Analysis Batch: 246865

Spike LCS LCS

Unit

%Rec

%Rec.

Client Sample ID: Lab Control Sample

Analyte

Added 1000

Result Qualifier 969

mg/Kg

97

Limits

90 - 110

TestAmerica Denver

Prep Type: Soluble

10/15/2014

## **QC Sample Results**

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

flethod: 9056 - Chloride (Continu	ed)										
- Lab Sample ID: LCSD 280-246967/2-A						Clie	nt Sam	ple ID: I	Lab Contro	ol Sampl	e Dup
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 246865									•	• •	
•			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			1000	967		mg/Kg		97	90 - 110	0	10
Lab Sample ID: 280-60687-3 MS								C	lient Samp	le ID: D-	67.1-6
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 246865											
Sa	mple	Sample	Spike	MS	MS				%Rec.		
Analyte R	esult	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	38		240	261		mg/Kg		93	80 - 120		
Lab Sample ID: 280-60687-3 MSD								C	lient Samp	le ID: D-	67.1-6
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 246865									•	• •	
Sa	mple	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte R	esult	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	38		240	260		mg/Kg		93	80 - 120	0	20
Lab Sample ID: 280-60687-3 DU								CI	lient Samp	le ID: D-	67.1-6
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 246865				•					•	-	
Sa	mple	Sample		DU	DU						RPD
Analyte R	esult	Qualifier		Result	Qualifier	Unit	D			RPD	Limit
Chloride	38			37.7		mg/Kg				0.1	10

## **QC Association Summary**

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

## **GC VOA**

Prep	Batch:	247591
------	--------	--------

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-60687-1	A-575.1-6	Total/NA	Solid	5035	
280-60687-2	B-26.1-6	Total/NA	Solid	5035	
280-60687-3	D-67.1-6	Total/NA	Solid	5035	
LCS 280-247591/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 280-247591/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 280-247591/1-A	Method Blank	Total/NA	Solid	5035	

#### Prep Batch: 247593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-60687-1	A-575.1-6	Total/NA	Solid	5030B	
280-60687-1 MS	A-575.1-6	Total/NA	Solid	5030B	
280-60687-1 MSD	A-575.1-6	Total/NA	Solid	5030B	
280-60687-2	B-26.1-6	Total/NA	Solid	5030B	
280-60687-3	D-67.1-6	Total/NA	Solid	5030B	
LCS 280-247593/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 280-247593/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
MB 280-247593/1-A	Method Blank	Total/NA	Solid	5030B	

#### Analysis Batch: 247618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-60687-1	A-575.1-6	Total/NA	Solid	8015C	247591
280-60687-2	B-26.1-6	Total/NA	Solid	8015C	247591
280-60687-3	D-67.1-6	Total/NA	Solid	8015C	247591
LCS 280-247591/2-A	Lab Control Sample	Total/NA	Solid	8015C	247591
LCSD 280-247591/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	247591
MB 280-247591/1-A	Method Blank	Total/NA	Solid	8015C	247591

#### Analysis Batch: 247638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-60687-1	A-575.1-6	Total/NA	Solid	8021B	247593
280-60687-1 MS	A-575.1-6	Total/NA	Solid	8021B	247593
280-60687-1 MSD	A-575.1-6	Total/NA	Solid	8021B	247593
280-60687-2	B-26.1-6	Total/NA	Solid	8021B	247593
280-60687-3	D-67.1-6	Total/NA	Solid	8021B	247593
LCS 280-247593/2-A	Lab Control Sample	Total/NA	Solid	8021B	247593
LCSD 280-247593/3-A	Lab Control Sample Dup	Total/NA	Solid	8021B	247593
MB 280-247593/1-A	Method Blank	Total/NA	Solid	8021B	247593

## GC Semi VOA

#### Prep Batch: 246421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-60687-1	A-575.1-6	Total/NA	Solid	3546	
280-60687-2	B-26.1-6	Total/NA	Solid	3546	
280-60687-3	D-67.1-6	Total/NA	Solid	3546	
LCS 280-246421/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 280-246421/1-A	Method Blank	Total/NA	Solid	3546	

TestAmerica Denver

## **QC Association Summary**

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

## GC Semi VOA (Continued)

## Analysis Batch: 246910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-60687-1	A-575.1-6	Total/NA	Solid	8015C	246421
280-60687-2	B-26.1-6	Total/NA	Solid	8015C	246421
280-60687-3	D-67.1-6	Total/NA	Solid	8015C	246421
LCS 280-246421/2-A	Lab Control Sample	Total/NA	Solid	8015C	246421
MB 280-246421/1-A	Method Blank	Total/NA	Solid	8015C	246421

## **General Chemistry**

#### Analysis Batch: 246865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-60687-1	A-575.1-6	Soluble	Solid	9056	246967
280-60687-2	B-26,1-6	Soluble	Solid	9056	246967
280-60687-3	D-67.1-6	Soluble	Solid	9056	246967
280-60687-3 DU	D-67.1-6	Soluble	Solid	9056	246967
280-60687-3 MS	D-67.1-6	Soluble	Solid	9056	246967
280-60687-3 MSD	D-67.1-6	Soluble	Solid	9056	246967
LCS 280-246967/1-A	Lab Control Sample	Soluble	Solid	9056	246967
LCSD 280-246967/2-A	Lab Control Sample Dup	Soluble	Solid	9056	246967
MB 280-246967/3-A	Method Blank	Soluble	Solid	9056	246967
MRL 280-246865/3	Lab Control Sample	Total/NA	Solid	9056	

#### Leach Batch: 246967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
280-60687-1	A-575.1-6	Soluble	Solid	DI Leach	
280-60687-2	B-26.1-6	Soluble	Solid	DI Leach	
280-60687-3 .	D-67.1-6	Soluble	Solid	DI Leach	
280-60687-3 DU	D-67.1-6	Soluble	Solid	DI Leach	
280-60687-3 MS	D-67.1-6	Soluble	Solid	DI Leach	
280-60687-3 MSD	D-67.1-6	Soluble	Solid	DI Leach	
LCS 280-246967/1-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 280-246967/2-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
MB 280-246967/3-A	Method Blank	Soluble	Solid	DI Leach	

#### **Lab Chronicle**

Client: Atlas Energy

Project/Site: Soil Hydrocarbon Characterization

TestAmerica Job ID: 280-60687-1

Client Sample ID: A-575.1-6

Lab Sample ID: 280-60687-1

Date Collected: 10/01/14 09:55

Matrix: Solid

Date Received: 10/02/14 09:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.31 g	5 mL	247591	10/01/14 09:55	TEM	TAL DEN
Total/NA	Analysis	8015C		1	6.31 g	5 mL	247618	10/13/14 15:46	TEM	TAL DEN
Total/NA	Prep	5030B			9.96 g	10 mL	247593	10/13/14 11:43	TEM	TAL DEN
Total/ <b>N</b> A	Analysis	8021B		1	9.96 g	10 mL	247638	10/13/14 17:36	TEM	TAL DEN
Total/NA	Prep	3546			30.8 g	1 mL	246421	10/06/14 18:30	EJP	TAL DEN
Total/NA	Analysis	8015C		1	30.8 g	1 mL	246910	10/09/14 13:27	TDJ	TAL DEN
Soluble	Leach	DI Leach			10.38 g	100 mL	246967	10/08/14 15:11	TLP	TAL DEN
Soluble	Analysis	9056		1	5 mL	5 mL	246865	10/08/14 18:59	DAW	TAL DEN

Client Sample ID: B-26.1-6

Date Collected: 10/01/14 09:56

Lab Sample ID: 280-60687-2

Matrix: Solid

Date Received: 10/02/14 09:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.993 g	5 mL	247591	10/01/14 09:56	TEM	TAL DEN
Total/NA	Analysis	8015C		1	5.993 g	5 mL	247618	10/13/14 16:19	TEM	TAL DEN
Total/NA	Prep	5030B			10.25 g	10 mL	247593	10/13/14 11:43	TEM	TAL DEN
Total/NA	Analysis	8021B		1	10.25 g	10 mL	247638	10/13/14 19:04	TEM	TAL DEN
Total/NA	Prep	3546			30.8 g	1 mL	246421	10/06/14 18:30	EJP	TAL DEN
Total/NA	Analysis	8015C		1	30.8 g	1 mL '	246910	10/09/14 13:03	TDJ	TAL DEN
Soluble	Leach	DI Leach			10.29 g	100 mL	246967	10/08/14 15:11	TLP	TAL DEN
Soluble	Analysis	9056		1	5 mL	5 mL	246865	10/08/14 19:16	DAW	TAL DEN

Client Sample ID: D-67.1-6

Date Collected: 10/01/14 09:57

Date Received: 10/02/14 09:20

Lab Sample ID: 280-60687-3

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.133 g	5 mL	247591	10/01/14 09:57	TEM	TAL DEN
Total/NA	Analysis	8015C		1	6.133 g	5 mL	247618	10/13/14 16:51	TEM	TAL DEN
Total/NA	Prep	5030B			10.00 g	10 mL	247593	10/13/14 11:43	TEM	TAL DEN
Total/NA	Analysis	8021B		1	10.00 g	10 mL	247638	10/13/14 19:34	TEM	TAL DEN
Total/NA	Prep	3546			30.7 g	1 mL	246421	10/06/14 18:30	EJP	TAL DEN
Total/NA	Analysis	8015C		1	30.7 g	1 mL	246910	10/09/14 12:39	TDJ	TAL DEN
Soluble	Leach	DI Leach			10.58 g	100 mL	246967	10/08/14 15:11	TLP	TAL DEN
Soluble	Analysis	9056		1	5 mL	5 mL	246865	10/08/14 19:34	DAW	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TestAmerica Denver

## Login Sample Receipt Checklist

Client: Atlas Energy

Job Number: 280-60687-1

Login Number: 60687

List Number: 1

Creator: Conquest, Tyler W

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Analyses listed on COC; Sample D-67.2 not designated for specific analyses
s the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## **Chain of Custody Record**



THE LEADER IN ENVIRONMENTAL TESTING

Phone (303) 736-0100 Fax (303) 431-7171																	THE LEADER IN E	NAIKONMENIAT LE	ESTING
Client Information	Sanfoler:	MA	Ison		del, Di	Lea R						arner T	racking	No(s).			COC No: 280-36492-1480	34.1	
Client Contact: Mr. Randy Madison	Phone: 75	445-	6706	E-M. dile		el@tes	stame	ericair	1C.COI	m							Page.		
Company: Atlas Energy									Αn	alysis	Requ	ueste	d d				Job#:		
Address. 309 Silver Street	Due Date Reque	sted;			1					Ī	Τİ						Preservation Cod	les:	
City: Raton	TAT Requested	(days): Standaı	rd TAT														A - HCL B - NaOH C - Zn Acetate	M - Hexane N - None O - AsNaO2	
State, Zip: NM, 87740						_	(ç)										D - Nitric Acid E - NaHSO4	P - Na2O4S Q - Na2SO3	
Phone: 575-445-6706(Tel)	PO#. Purchase Ord	er not require	ed			cs only	nlos (	° (60							ľ		F - MeOH G - Amchior	R - Na2S2SO3 S - H2SO4	
Email: rmadison@atlasenergy.com	WO#:	or not roquit			OC No	romatics	e Organics (GC)	Organics (GC)	graphy								H - Ascorbic Acid I - Ice J - DI Water	T - TSP Dodecahy U - Acetone V - MCAA	/drate
Project Name:	Project #: 28012438					for A	Rang	nge C	mato						-	iners	K - EDTA L - EDA	W - ph 4-5 Z - other (specify)	
Soil Hydrocarbon Characterization Site:	\$\$OW#:	<u>`</u>				Soils	ije je	Diesel Range	Chro		1 1					ğ	Other:	(-1, 7)	
Raton, NM			Υ	<del>,</del>			Gas	Dies	lo .			-			ľ	16		·	
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, 0=waste/oil, BT=Tissue, A=Air	Field Fillera	8021B - BTEX (GC)	8015C_TVPH	8015C_TEPH -	9056_Chloride, Ion Chromatography							Total Number	Special In	structions/Note	<b>:</b> :
Rhitigin allandragani appetanaspetanaspetanaspetanaspetanaspetanaspetanaspetanaspetanaspetanaspetanaspetanaspe				ation Code	X	(IA)	域	Ŋ	N §						2 3 1	X	(Paulinguages	a,5 g variage conti	Judi High
H-576.1	10/1/14	0822	G	Solid	$\coprod$		X												
A-575.2 ·	PIII	2956	G	Solid	11		X			-		-			-				
A-575.3	. 10/1/14	0957	(-	Solid		X													
A-5754	- 19/1/19	2958	(>	Solid	Ш	X		,								擊			
A-575.5	10/1/19	1000	<u> </u>	Solid		_		X											
A575.6	10/1/14	1003	16	Solid				)	$\langle \perp$							識			
				Solid	Ш														
				Solid															
				Solid															
				Solid	Ш										$\perp$				
	<u> </u>			Solid	Ш					_		1							
Possible Hazard Identification  Non-Hazard Flammable Skin Imitant	Poison B Unki	nown 🗀	Radiological		Sa		Dispo etum			e may	_	essed oosal E			$\overline{}$		d longer than 1 i	month) Months	
Deliverable Requested: I, II, III, IV, Other (specify)					Sp	ecial l	nstruc	ctions	s/QC	Require			•						
Empty Kit Relinquished by:		Date:			Time:							Meth	ned of S	Shipment	E				
Reinguished by:	Date/Time:	5/60	)	Company Company	5		ved by:							Date/Tim 【 <b>ろ</b> / Date/Tim	2/6	ip-c	926	Company	
				_ ampaily		, 1000	- 60 Dy.							الا اجبریت					
Relinquished by:	Date/Time.		<u> </u>	Company		Recen	ved by:							Date/Tim	ne:			Company	
Custody Seals Intact: Custody Seal No.:		- 11				Cooler	Temp	erature	e(s) °C	and Oth	er Rema	rks:			٠.		.,	3, 4 " " . "	

[-7]

10/15/2014

Page 19 of 21

4955 Yarrow Street Arvada, CO 80002

## **Chain of Custody Record**



Phone (303) 736-0100 Fax (303) 431-7171																THE LEADER IN EN	nvironmental testing
Client Information	Sámpler: Kandy	L.N	Adis	N Lab	del, Dil	Lea R					C	arrier Trac	cking No	o(s):		COC No: 280-36492-1480	4.1
Client Contact Mr. Randy Madison	Phone:	-445	6706	E-Ma	ail <sup>.</sup> a.binde	el@tes	stame	ericaiı	nc.co	m						Page:	
Company: Atlas Energy											Regu	ested				Job #:	
Address:	Due Date Reques	ited:			型器	9					T T				256	Preservation Cod	es:
309 Silver Street City:	TAT Requested (	dave),			- 1											A-HCL	M - Hexane
Raton		Standar	TAT b						ļ						.01	B - NaOH C - Zn Acetate	N - None O - AsNaO2
State, Zip: NM, 87740							5			1	} }			1 1	253	D - Nitric Acid E - NaHSO4	P-Na204S Q-Na2SO3
Phone.	PO#:					for Aromallos only	Organics (GC)	(00)						1		F - MeOH G - Amchlor	R - Na2S2SO3 S - H2SO4
575-445-6706(Tel) Email.	Purchase Orde	er not require	ed		- 2	allos	gani	nkcs	È							H - Ascorbic Acid	T - TSP Dodecahydrate U - Acetone
rmadison@atlasenergy.com	J***				ō	Ag	Ö	Organics (GC)	grap	İ						J - DI Water	V - MCAA
Project Name: Soil Hydrocarbon Characterization	Project # 28012438				18		Range	Range	Chromatography						3106	K-EDTA L-EDA	W - ph 4-5 Z - other (specify)
Site:	SSOW#:					Solls	l ie	el Re	Š				1		Ü	Other:	
Raton, NM			,	-,	ls Is	(36)	Gas	Diesel	<u></u>	1					15		
			Sample	Matrix	100	8021B - BTEX (GC)	/PH.	8015С_ТЕРН -	9066_Chlorida,						ng n		
	1	Samula	Type	(W≒water, S=solid,	国际	B - B	8015C_TVPH	5	동			1		] ]			
Sample Identification	Sample Date	Sample Time	(C=comp, G=grab)	BTaTisano, ARAir	國副	8021	8015	8015	9008	i	1 1		J	1 1	Total	Special Ins	structions/Note:
Hills this commence of the second control of			Breserv	atlon Code	XX	(in		N.	N					<b>新疆和</b>	N. N.	Siliticasia ileasia	and the management of the second
5-26.	10/1/19	1308	G	Solid	П		X										
8-26.7	1011114	1216	چ)	Şolid	$\Pi$	11	V	$\neg$						1		-	
R-21. 3	10/1/14	1212	5	Solid	Ħ	X		$\dashv$	$\dashv$			++			797- 229		
R-264	0/1/14	1314	ĺτ	Solid		X			_								
B-26,5	01/14	1318	الح	Solid	Ħ			X									
7-26.6	DILEY	317	5	Solid					X								
	(,,,)			Solid													
				Solid											温温		
				Solid					ŀ								
				Solid	Ш												
				Solid													
Possible Hazard Identification ☐ Non-Hezard ☐ Flammable ☐ Skın Irritant ☐ Pois	· <b>X</b>				Sa	mple	Disp	osal	(Afe	e may	be ass	essed if	samp	les are r	etaine	d longer than 1 n	
Non-Hazard Flammable Skin Irritant Pois	on B Vnkn	ownF	Radiological	· · · · · · · · · · · · · · · · · · ·		Re				Possis	Disp ements:	osal By	Lab		Archi	ve For	Months
Deliverable Requested: I, II, III, IV, Other (specify)					Эр	eciai i	msuu	Cuons	S/UC	Requii	ements.						
Empty Kit Relinquished by:		Date:			Time:							Method	d of Ship				
Peliturished by Limblan	Date/Title: //4	916	Q	ATT as	-	Recen	ved by						Dai (එ	te/Time: 1/2/14	-0	926	Corripany
Relinquished	Date/Time.		-	Company		Recen	ved by:	:					Dat	te/Time:			Company
Relinquished by:	Date/Time:		_	Company	-	Receiv	ved by:	:					Dat	te/Time:		-	Company
Custody Seals Intact: Custody Seal No.:				31		Cooler	r Temp	eratur	e(s) °C	and Oth	er Rema	ks:		1		7, 11 1 10	

[-Z]

5.9+0 ITEG 10/2/14 Transfored: Ti

## TestAmerica Denver 4955 Yarrow Street

**Chain of Custody Record** 



Arvada, CO 80002 Phone (303) 736-0100 Fax (303) 431-7171	Onam of C	ustouy Re	acora						glastickget? digthass.	vironmental testing
Client Information Client Contact:			l, DiLea R			Carrier T	acking No(s	s):	COC No: 280-36492-1480	4.1
	Phone 379-45-(6)	DO E-Mail:		stamericai	nc.com	- 1			Page:	
Mr. Randy Madison Company: Atlas Energy						Requeste	d		Job#:	
Address; 309 Sliver Street	Due Date Requested:	:			ΤÍ		T	計畫 報告	Preservation Cod	es:
City: Raton State, Zip: NM, 87740 Phone 575-445-6706(Tel) Email:	TAT Requested (days): Standard TAT  PO#: Purchase Order not required WO #:		ocivo)	ge Organios (GC) Organios (GC)	raphy				A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water	M - Hexane N - None O - AsNaO2 P - Na2O4\$ Q - Na2SO3 R - Na2S2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA
madison@atlasenergy.com Project Name:	Project#.		lor Ar	egue?	natog			a) teik	K-EDTA	W - ph 4-5 Z - other (specify)
Soil Hydrocarbon Characterization Site. Raton, NM	28012438 \$\$OW#:		Solls	soline F	Ion Chromatography			toonla	Other:	2 Salis (spessiy)
rator, we	Sam Typ Sample (C=cc	e (W=water,	FRIGERIGIES FRANKERISINSD 8021B - BTEX (GC)	8015C_TVPH - Gasolina Rang 8015C_TEPH - Diesel Range	9058_Chloride, la			Total Nomber o		
Sample Identification	Sample Date   Time   G=gr			8 8 Elle 1600	S Company was	Carlel of also decis	ikkana tara		Special In	structions/Note:
and the state of t	10/1/14/203 G	ervation Code:		Y	AND BURE HERE				A SHADING TO SAN	Patrick Street Street Street Street
1777	D1114 204 6		1				†			
n-47.3	101/14/207 G	Solid	TX		_					
0-67.4	10/1/14 DOS G	Solid	X	,						
0-67.5	10/1/14/1209 6	Solid		X						
5-67-6	10/114 1210 6	Solid			X			y S		
	, , <i>B</i>	Solid								
		Solid						粉		
		Solid						F.		
		Solid					<u> </u>	700		
		Solid		·						
Possible Hazard Identification  Non-Hazard Flammable Skin Irritant Polso  Deliverable Requested: I, II, III, IV, Other (specify)	n B Hunknown Radiolog	rical	$\square_R$	etum To C	Г	Disposal E			ed longer than 1 i	month) Months
Empty Kit Relinquished by:	Date:	lτ	ime:				od of Shipm	nent		
Belinghished by	Date(Time.) 145 1600	Company	Rece	ived by:					@82à	Company
Reflictuation of the second	Date Time	Company (1)		ived by		<del>-</del>	Date.	Time: 12/14- Time:	U y a C	Company
Relinquished by:	Date/Time:	Company	Rece	ived by:			Date	Time		Company
Custody Seals Intact: Custody Seal No.	Markey St. Commercial		Coole	r Temperatu	e(s) °C and Othe	er Remarks:		1 1	``.	

رتح