

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Denver

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Tel: (303)736-0100

TestAmerica Job ID: 280-49015-1

Client Project/Site: John Noto

For:

Colorado Oil&Gas Conservation Commision

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Denver, Colorado 80203

Attn: Mr. John Noto



Authorized for release by:

11/27/2013 11:13:32 AM

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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.

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## Case Narrative

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

**Job ID: 280-49015-1**

**Laboratory: TestAmerica Denver**

Narrative

### CASE NARRATIVE

**Client: Colorado Oil&Gas Conservation Commission**

**Project: John Noto**

**Report Number: 280-49015-1**

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 at the TestAmerica Denver laboratory on November 8, 2013. The samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.4° C.

#### **SEMOVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM)**

Samples 12106269A1 (280-49015-1) and 12106269A2 (280-49015-2) were analyzed for Semivolatile organic compounds - Selected Ion Mode (SIM) in accordance with EPA SW-846 Method 8270C SIM.

Due to the nature of the sample matrix, samples 12106269A1 (280-49015-1) and 12106269A2 (280-49015-2) could not be concentrated to the final method required volume. Both sample extracts were dark and thick; therefore, the final volume was changed from 1mL to 10mL. In addition samples 12106269A1 (280-49015-1) and 12106269A2 (280-49015-2) required 2 different dilutions prior to analysis due to high concentrations of target compounds. The reporting limits have been adjusted accordingly. The surrogate recoveries were diluted below reportable limits.

Several spike recoveries, surrogate recoveries and RPD values were outside control limits in the MS and MSD associated with batch 280-201714. This MS/MSD batch was performed on a sample from another client and/or job. The associated LCS was in control and provides evidence that operating procedures were in control.

No other difficulties were encountered during the SIM analysis.

All other quality control parameters were within the acceptance limits.

#### **GASOLINE RANGE ORGANICS (GRO)**

Samples 12106269A1 (280-49015-1) and 12106269A2 (280-49015-2) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015B - GRO.

No difficulties were encountered during the GRO analysis.

All quality control parameters were within the acceptance limits.

#### **DIESEL RANGE ORGANICS**

Samples 12106269A1 (280-49015-1) and 12106269A2 (280-49015-2) were analyzed for diesel range organics in accordance with EPA

## Case Narrative

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

### Job ID: 280-49015-1 (Continued)

#### Laboratory: TestAmerica Denver (Continued)

SW-846 Method 8015B - DRO.

Samples 12106269A1 (280-49015-1)[20X] and 12106269A2 (280-49015-2)[10X] required dilution prior to analysis due to high analyte concentrations. The reporting limits have been adjusted accordingly. The surrogate recoveries could not be calculated accurately due to the dilutions performed.

A low concentration of DRO (C10-C28) was detected in method blank MB 280-200825/1-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 samples reported a result above the MDL and/or RL, the result has been flagged. Usability of the data was not compromised.

No other difficulties were encountered during the DRO analysis.

All other quality control parameters were within the acceptance limits.

#### SODIUM ABSORPTION RATIO

Samples 12106269A1 (280-49015-1), 12106269A2 (280-49015-2), 12106251A1 (280-49015-3) and 12106251A2 (280-49015-4) were analyzed for Sodium Absorption Ratio in accordance with USDA Handbook 60 - 20B.

No difficulties were encountered during the SAR analysis.

All quality control parameters were within the acceptance limits.

#### TOTAL METALS

Samples 12106269A1 (280-49015-1), 12106269A2 (280-49015-2), 12106251A1 (280-49015-3) and 12106251A2 (280-49015-4) were analyzed for total metals in accordance with EPA SW-846 Method 6010B.

Boron was detected in method blank MB 280-200220/1-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 samples reported a result above the MDL and/or RL, the result has been flagged.

Several spike recoveries were outside control limits in the MS and MSD associated with batch 280-201001. This MS/MSD batch was performed on a sample from another client and/or job. The associated LCS was in control and provides evidence that operating procedures were in control.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

#### TOTAL METALS

Samples 12106269A1 (280-49015-1), 12106269A2 (280-49015-2), 12106251A1 (280-49015-3) and 12106251A2 (280-49015-4) were analyzed for total metals in accordance with EPA SW-846 Method 6020.

No difficulties were encountered during the metals analysis.

All quality control parameters were within the acceptance limits.

#### TOTAL MERCURY

Samples 12106269A1 (280-49015-1), 12106269A2 (280-49015-2), 12106251A1 (280-49015-3) and 12106251A2 (280-49015-4) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

#### PH

## Case Narrative

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

### Job ID: 280-49015-1 (Continued)

#### Laboratory: TestAmerica Denver (Continued)

Samples 12106269A1 (280-49015-1), 12106269A2 (280-49015-2), 12106251A1 (280-49015-3) and 12106251A2 (280-49015-4) were analyzed for pH in accordance with EPA SW-846 Method 9045C.

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

#### SPECIFIC CONDUCTANCE

Samples 12106269A1 (280-49015-1), 12106269A2 (280-49015-2), 12106251A1 (280-49015-3) and 12106251A2 (280-49015-4) were analyzed for specific conductance in accordance with EPA SW-846 9050A.

No difficulties were encountered during the conductivity analysis.

All quality control parameters were within the acceptance limits.

#### PERCENT SOLIDS

Samples 12106269A1 (280-49015-1), 12106269A2 (280-49015-2), 12106251A1 (280-49015-3) and 12106251A2 (280-49015-4) were analyzed for percent solids in accordance with EPA SW846 3550C.

No difficulties were encountered during the % solids analysis.

All quality control parameters were within the acceptance limits.

# Definitions/Glossary

Client: Colorado Oil&Gas Conservation Commision

Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS/MSD Recovery and/or RPD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

### GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
B	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.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F	MS/MSD Recovery and/or RPD exceeds the control limits

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

**Client Sample ID: 12106269A1**

**Lab Sample ID: 280-49015-1**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Sodium Adsorption Ratio	62				No Unit	10		20B	Soluble
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	620000		200000	47000	ng/Kg	4	⊗	8270C SIM	Total/NA
Benzo[g,h,i]perylene	430000		200000	43000	ng/Kg	4	⊗	8270C SIM	Total/NA
Chrysene	1800000		200000	39000	ng/Kg	4	⊗	8270C SIM	Total/NA
Fluoranthene	540000		200000	39000	ng/Kg	4	⊗	8270C SIM	Total/NA
Fluorene	4900000		200000	18000	ng/Kg	4	⊗	8270C SIM	Total/NA
Pyrene	1400000		200000	43000	ng/Kg	4	⊗	8270C SIM	Total/NA
1-Methylnaphthalene	710000		200000	10000	ng/Kg	4	⊗	8270C SIM	Total/NA
2-Methylnaphthalene	340000		200000	12000	ng/Kg	4	⊗	8270C SIM	Total/NA
Naphthalene	16000 J		200000	13000	ng/Kg	4	⊗	8270C SIM	Total/NA
Phenanthrene - DL	13000000		490000	110000	ng/Kg	10	⊗	8270C SIM	Total/NA
DRO (C10-C28)	36000 B		490	84	mg/Kg	20	⊗	8015B	Total/NA
Motor Oil (C20-C38)	38000		1500	480	mg/Kg	20	⊗	8015B	Total/NA
Barium	150		1.0	0.077	mg/Kg	1	⊗	6010B	Total/NA
Boron	15 B		10	1.0	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.21 J		0.51	0.042	mg/Kg	1	⊗	6010B	Total/NA
Chromium	12		1.5	0.059	mg/Kg	1	⊗	6010B	Total/NA
Copper	11		2.0	0.22	mg/Kg	1	⊗	6010B	Total/NA
Iron	12000		15	3.9	mg/Kg	1	⊗	6010B	Total/NA
Lead	11		0.81	0.27	mg/Kg	1	⊗	6010B	Total/NA
Nickel	9.2		4.1	0.13	mg/Kg	1	⊗	6010B	Total/NA
Zinc	47		3.1	0.40	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	3400		620	52	ug/Kg	1	⊗	6020	Total/NA
Mercury	18		18	5.9	ug/Kg	1	⊗	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	7.83		0.100	0.100	SU	1		9045C	Soluble
Temperature	22.0		1.00	1.00	Degrees C	1		9045C	Soluble
Specific Conductance	92		2.0	2.0	umhos/cm	1		9050A	Soluble

**Client Sample ID: 12106269A2**

**Lab Sample ID: 280-49015-2**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Sodium Adsorption Ratio	51				No Unit	10		20B	Soluble
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	680000		200000	49000	ng/Kg	4	⊗	8270C SIM	Total/NA
Benzo[a]anthracene	210000		200000	37000	ng/Kg	4	⊗	8270C SIM	Total/NA
Benzo[g,h,i]perylene	460000		200000	45000	ng/Kg	4	⊗	8270C SIM	Total/NA
Chrysene	1800000		200000	41000	ng/Kg	4	⊗	8270C SIM	Total/NA
Fluoranthene	560000		200000	41000	ng/Kg	4	⊗	8270C SIM	Total/NA
Fluorene	2700000		200000	19000	ng/Kg	4	⊗	8270C SIM	Total/NA
Pyrene	1400000		200000	45000	ng/Kg	4	⊗	8270C SIM	Total/NA
1-Methylnaphthalene	360000		200000	11000	ng/Kg	4	⊗	8270C SIM	Total/NA
2-Methylnaphthalene	110000 J		200000	13000	ng/Kg	4	⊗	8270C SIM	Total/NA
Phenanthrene - DL	14000000		510000	110000	ng/Kg	10	⊗	8270C SIM	Total/NA
DRO (C10-C28)	40000 B		330	56	mg/Kg	10	⊗	8015B	Total/NA
Motor Oil (C20-C38)	40000		1000	320	mg/Kg	10	⊗	8015B	Total/NA
Barium	140		1.0	0.079	mg/Kg	1	⊗	6010B	Total/NA
Boron	11 B		10	1.0	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.23 J		0.52	0.042	mg/Kg	1	⊗	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Denver

# Detection Summary

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Client Sample ID: 12106269A2 (Continued)

## Lab Sample ID: 280-49015-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	13		1.6	0.060	mg/Kg	1	⊗	6010B	Total/NA
Copper	15		2.1	0.22	mg/Kg	1	⊗	6010B	Total/NA
Iron	14000		16	3.9	mg/Kg	1	⊗	6010B	Total/NA
Lead	13		0.83	0.28	mg/Kg	1	⊗	6010B	Total/NA
Nickel	11		4.1	0.13	mg/Kg	1	⊗	6010B	Total/NA
Zinc	53		3.1	0.41	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	4300		610	51	ug/Kg	1	⊗	6020	Total/NA
Mercury	19		17	5.5	ug/Kg	1	⊗	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	7.62		0.100	0.100	SU	1		9045C	Soluble
Temperature	22.2		1.00	1.00	Degrees C	1		9045C	Soluble
Specific Conductance	72		2.0	2.0	umhos/cm	1		9050A	Soluble

## Client Sample ID: 12106251A1

## Lab Sample ID: 280-49015-3

Analyte	Result	Qualifier	None	None	Unit	Dil Fac	D	Method	Prep Type
Sodium Adsorption Ratio	6.7				No Unit	10		20B	Soluble
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	260		1.0	0.078	mg/Kg	1	⊗	6010B	Total/NA
Boron	6.8	J B	10	1.0	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.21	J	0.51	0.042	mg/Kg	1	⊗	6010B	Total/NA
Chromium	13		1.5	0.059	mg/Kg	1	⊗	6010B	Total/NA
Copper	16		2.0	0.22	mg/Kg	1	⊗	6010B	Total/NA
Iron	15000		15	3.9	mg/Kg	1	⊗	6010B	Total/NA
Lead	34		0.82	0.28	mg/Kg	1	⊗	6010B	Total/NA
Nickel	11		4.1	0.13	mg/Kg	1	⊗	6010B	Total/NA
Zinc	70		3.1	0.41	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	5800		650	55	ug/Kg	1	⊗	6020	Total/NA
Mercury	400		18	5.7	ug/Kg	1	⊗	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	8.69		0.100	0.100	SU	1		9045C	Soluble
Temperature	22.2		1.00	1.00	Degrees C	1		9045C	Soluble
Specific Conductance	88		2.0	2.0	umhos/cm	1		9050A	Soluble

## Client Sample ID: 12106251A2

## Lab Sample ID: 280-49015-4

Analyte	Result	Qualifier	None	None	Unit	Dil Fac	D	Method	Prep Type
Sodium Adsorption Ratio	29				No Unit	10		20B	Soluble
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	160		1.0	0.079	mg/Kg	1	⊗	6010B	Total/NA
Boron	9.4	J B	10	1.0	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.30	J	0.52	0.042	mg/Kg	1	⊗	6010B	Total/NA
Chromium	14		1.6	0.060	mg/Kg	1	⊗	6010B	Total/NA
Copper	12		2.1	0.22	mg/Kg	1	⊗	6010B	Total/NA
Iron	15000		16	3.9	mg/Kg	1	⊗	6010B	Total/NA
Lead	22		0.83	0.28	mg/Kg	1	⊗	6010B	Total/NA
Nickel	11		4.1	0.13	mg/Kg	1	⊗	6010B	Total/NA
Zinc	61		3.1	0.41	mg/Kg	1	⊗	6010B	Total/NA
Arsenic	5300		620	52	ug/Kg	1	⊗	6020	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Denver

## Detection Summary

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

### Client Sample ID: 12106251A2 (Continued)

### Lab Sample ID: 280-49015-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	260		18	5.9	ug/Kg	1	⊗	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	9.14		0.100	0.100	SU	1		9045C	Soluble
Temperature	22.3		1.00	1.00	Degrees C	1		9045C	Soluble
Specific Conductance	120		2.0	2.0	umhos/cm	1		9050A	Soluble

This Detection Summary does not include radiochemical test results.

TestAmerica Denver

## Method Summary

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

Method	Method Description	Protocol	Laboratory
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL DEN
8015B	Gasoline Range Organics - (GC)	SW846	TAL DEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL DEN
20B	Sodium Adsorption Ratio	USDA	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
6020	Metals (ICP/MS)	SW846	TAL DEN
7471A	Mercury (CVAA)	SW846	TAL DEN
9045C	pH	SW846	TAL DEN
9050A	Specific Conductance	SW846	TAL DEN
Moisture	Percent Moisture	EPA	TAL DEN

### Protocol References:

EPA = US Environmental Protection Agency

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

USDA = "USDA Agriculture Handbook 60, section 20B".

### Laboratory References:

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

## Sample Summary

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-49015-1	12106269A1	Solid	11/08/13 11:00	11/08/13 14:57
280-49015-2	12106269A2	Solid	11/08/13 11:05	11/08/13 14:57
280-49015-3	12106251A1	Solid	11/08/13 11:45	11/08/13 14:57
280-49015-4	12106251A2	Solid	11/08/13 11:45	11/08/13 14:57

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TestAmerica Denver

# Client Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

**Client Sample ID: 12106269A1**

**Date Collected: 11/08/13 11:00**

**Date Received: 11/08/13 14:57**

**Lab Sample ID: 280-49015-1**

**Matrix: Solid**

**Percent Solids: 94.5**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[b]fluoranthene</b>	<b>620000</b>		200000	47000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
Benzo[a]pyrene	ND		200000	29000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
Benzo[a]anthracene	ND		200000	35000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
Benzo[k]fluoranthene	ND		200000	39000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
<b>Benzo[g,h,i]perylene</b>	<b>430000</b>		200000	43000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
Anthracene	ND		200000	28000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
Dibenz(a,h)anthracene	ND		200000	51000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
<b>Chrysene</b>	<b>1800000</b>		200000	39000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
Acenaphthene	ND		200000	6300	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
Acenaphthylene	ND		200000	6700	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
<b>Fluoranthene</b>	<b>540000</b>		200000	39000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
<b>Fluorene</b>	<b>4900000</b>		200000	18000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
<b>Pyrene</b>	<b>1400000</b>		200000	43000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
Indeno[1,2,3-cd]pyrene	ND		200000	43000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
<b>1-Methylnaphthalene</b>	<b>710000</b>		200000	10000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
<b>2-Methylnaphthalene</b>	<b>340000</b>		200000	12000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
Naphthalene	16000 J		200000	13000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:18	4
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	0	DX	39 - 120				11/14/13 20:10	11/18/13 21:18	4
Nitrobenzene-d5	0	DX	42 - 120				11/14/13 20:10	11/18/13 21:18	4
Terphenyl-d14	0	DX	35 - 124				11/14/13 20:10	11/18/13 21:18	4

**Client Sample ID: 12106269A2**

**Date Collected: 11/08/13 11:05**

**Date Received: 11/08/13 14:57**

**Lab Sample ID: 280-49015-2**

**Matrix: Solid**

**Percent Solids: 94.9**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzo[b]fluoranthene</b>	<b>680000</b>		200000	49000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
Benzo[a]pyrene	ND		200000	30000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
<b>Benzo[a]anthracene</b>	<b>210000</b>		200000	37000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
Benzo[k]fluoranthene	ND		200000	41000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
<b>Benzo[g,h,i]perylene</b>	<b>460000</b>		200000	45000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
Anthracene	ND		200000	29000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
Dibenz(a,h)anthracene	ND		200000	53000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
<b>Chrysene</b>	<b>1800000</b>		200000	41000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
Acenaphthene	ND		200000	6500	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
Acenaphthylene	ND		200000	6900	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
<b>Fluoranthene</b>	<b>560000</b>		200000	41000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
<b>Fluorene</b>	<b>2700000</b>		200000	19000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
<b>Pyrene</b>	<b>1400000</b>		200000	45000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
Indeno[1,2,3-cd]pyrene	ND		200000	45000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
<b>1-Methylnaphthalene</b>	<b>360000</b>		200000	11000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
<b>2-Methylnaphthalene</b>	<b>110000 J</b>		200000	13000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
Naphthalene	ND		200000	13000	ng/Kg	⊗	11/14/13 20:10	11/18/13 21:45	4
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	0	DX	39 - 120				11/14/13 20:10	11/18/13 21:45	4
Nitrobenzene-d5	0	DX	42 - 120				11/14/13 20:10	11/18/13 21:45	4
Terphenyl-d14	0	DX	35 - 124				11/14/13 20:10	11/18/13 21:45	4

TestAmerica Denver

# Client Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) - DL

Client Sample ID: 12106269A1							Lab Sample ID: 280-49015-1			
							Matrix: Solid			
							Percent Solids: 94.5			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Phenanthrene	13000000		490000	110000	ng/Kg	☀	11/14/13 20:10	11/19/13 23:09	10	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
2-Fluorobiphenyl	0	DX	39 - 120				11/14/13 20:10	11/19/13 23:09	10	
Nitrobenzene-d5	0	DX	42 - 120				11/14/13 20:10	11/19/13 23:09	10	
Terphenyl-d14	0	DX	35 - 124				11/14/13 20:10	11/19/13 23:09	10	
Client Sample ID: 12106269A2							Lab Sample ID: 280-49015-2			
							Matrix: Solid			
							Percent Solids: 94.9			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Phenanthrene	14000000		510000	110000	ng/Kg	☀	11/14/13 20:10	11/22/13 00:03	10	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
2-Fluorobiphenyl	0	XD	39 - 120				11/14/13 20:10	11/22/13 00:03	10	
Nitrobenzene-d5	0	XD	42 - 120				11/14/13 20:10	11/22/13 00:03	10	
Terphenyl-d14	0	XD	35 - 124				11/14/13 20:10	11/22/13 00:03	10	

## Method: 8015B - Gasoline Range Organics - (GC)

Client Sample ID: 12106269A1							Lab Sample ID: 280-49015-1			
							Matrix: Solid			
							Percent Solids: 94.5			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO) -C6-C10	ND		1.2	0.33	mg/Kg	☀	11/18/13 11:38	11/18/13 20:25	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene	94		77 - 123				11/18/13 11:38	11/18/13 20:25	1	
Client Sample ID: 12106269A2							Lab Sample ID: 280-49015-2			
							Matrix: Solid			
							Percent Solids: 94.9			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO) -C6-C10	ND		1.2	0.33	mg/Kg	☀	11/18/13 11:38	11/18/13 20:50	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene	89		77 - 123				11/18/13 11:38	11/18/13 20:50	1	

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: 12106269A1							Lab Sample ID: 280-49015-1			
							Matrix: Solid			
							Percent Solids: 94.5			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
DRO (C10-C28)	36000	B	490	84	mg/Kg	☀	11/13/13 21:05	11/17/13 23:19	20	
Motor Oil (C20-C38)	38000		1500	480	mg/Kg	☀	11/13/13 21:05	11/17/13 23:19	20	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
o-Terphenyl	2212	DX	49 - 115				11/13/13 21:05	11/17/13 23:19	20	

TestAmerica Denver

# Client Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: 12106269A2								Lab Sample ID: 280-49015-2			
Date Collected: 11/08/13 11:05								Matrix: Solid			
Date Received: 11/08/13 14:57								Percent Solids: 94.9			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
DRO (C10-C28)	40000	B	330	56	mg/Kg	⊗	11/13/13 21:05	11/17/13 23:48	10		
Motor Oil (C20-C38)	40000		1000	320	mg/Kg	⊗	11/13/13 21:05	11/17/13 23:48	10		
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac		
o-Terphenyl	130	D X	49 - 115				11/13/13 21:05	11/17/13 23:48	10		

## Method: 20B - Sodium Adsorption Ratio - Soluble

Client Sample ID: 12106269A1								Lab Sample ID: 280-49015-1			
Date Collected: 11/08/13 11:00								Matrix: Solid			
Date Received: 11/08/13 14:57											
Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac		
Sodium Adsorption Ratio	62				No Unit		11/12/13 21:58	11/19/13 01:33	10		

Client Sample ID: 12106269A2								Lab Sample ID: 280-49015-2			
Date Collected: 11/08/13 11:05								Matrix: Solid			
Date Received: 11/08/13 14:57											
Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac		
Sodium Adsorption Ratio	51				No Unit		11/12/13 21:58	11/19/13 01:36	10		

Client Sample ID: 12106251A1								Lab Sample ID: 280-49015-3			
Date Collected: 11/08/13 11:45								Matrix: Solid			
Date Received: 11/08/13 14:57											
Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac		
Sodium Adsorption Ratio	6.7				No Unit		11/12/13 21:58	11/19/13 01:38	10		

Client Sample ID: 12106251A2								Lab Sample ID: 280-49015-4			
Date Collected: 11/08/13 11:45								Matrix: Solid			
Date Received: 11/08/13 14:57											
Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac		
Sodium Adsorption Ratio	29				No Unit		11/12/13 21:58	11/19/13 01:40	10		

## Method: 6010B - Metals (ICP)

Client Sample ID: 12106269A1								Lab Sample ID: 280-49015-1			
Date Collected: 11/08/13 11:00								Matrix: Solid			
Date Received: 11/08/13 14:57								Percent Solids: 94.5			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Barium	150		1.0	0.077	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:35	1		
Boron	15	B	10	1.0	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:35	1		
Cadmium	0.21	J	0.51	0.042	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:35	1		
Chromium	12		1.5	0.059	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:35	1		
Copper	11		2.0	0.22	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:35	1		
Iron	12000		15	3.9	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:35	1		
Lead	11		0.81	0.27	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:35	1		
Nickel	9.2		4.1	0.13	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:35	1		
Selenium	ND		1.3	0.87	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:35	1		
Silver	ND		1.0	0.16	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:35	1		
Zinc	47		3.1	0.40	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:35	1		

TestAmerica Denver

# Client Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: 12106269A2**

**Date Collected: 11/08/13 11:05**

**Date Received: 11/08/13 14:57**

**Lab Sample ID: 280-49015-2**

**Matrix: Solid**

**Percent Solids: 94.9**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	140		1.0	0.079	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:38	1
Boron	11	B	10	1.0	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:38	1
Cadmium	0.23	J	0.52	0.042	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:38	1
Chromium	13		1.6	0.060	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:38	1
Copper	15		2.1	0.22	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:38	1
Iron	14000		16	3.9	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:38	1
Lead	13		0.83	0.28	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:38	1
Nickel	11		4.1	0.13	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:38	1
Selenium	ND		1.3	0.89	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:38	1
Silver	ND		1.0	0.17	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:38	1
Zinc	53		3.1	0.41	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:38	1

**Client Sample ID: 12106251A1**

**Date Collected: 11/08/13 11:45**

**Date Received: 11/08/13 14:57**

**Lab Sample ID: 280-49015-3**

**Matrix: Solid**

**Percent Solids: 90.7**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	260		1.0	0.078	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:40	1
Boron	6.8	J B	10	1.0	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:40	1
Cadmium	0.21	J	0.51	0.042	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:40	1
Chromium	13		1.5	0.059	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:40	1
Copper	16		2.0	0.22	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:40	1
Iron	15000		15	3.9	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:40	1
Lead	34		0.82	0.28	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:40	1
Nickel	11		4.1	0.13	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:40	1
Selenium	ND		1.3	0.88	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:40	1
Silver	ND		1.0	0.16	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:40	1
Zinc	70		3.1	0.41	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:40	1

**Client Sample ID: 12106251A2**

**Date Collected: 11/08/13 11:45**

**Date Received: 11/08/13 14:57**

**Lab Sample ID: 280-49015-4**

**Matrix: Solid**

**Percent Solids: 93.7**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	160		1.0	0.079	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:43	1
Boron	9.4	J B	10	1.0	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:43	1
Cadmium	0.30	J	0.52	0.042	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:43	1
Chromium	14		1.6	0.060	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:43	1
Copper	12		2.1	0.22	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:43	1
Iron	15000		16	3.9	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:43	1
Lead	22		0.83	0.28	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:43	1
Nickel	11		4.1	0.13	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:43	1
Selenium	ND		1.3	0.89	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:43	1
Silver	ND		1.0	0.17	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:43	1
Zinc	61		3.1	0.41	mg/Kg	⊗	11/12/13 12:00	11/14/13 06:43	1

# Client Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 6020 - Metals (ICP/MS)

Client Sample ID: 12106269A1 Date Collected: 11/08/13 11:00 Date Received: 11/08/13 14:57							Lab Sample ID: 280-49015-1 Matrix: Solid Percent Solids: 94.5			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Arsenic	3400		620	52	ug/Kg	⊗	11/12/13 12:00	11/13/13 02:23	1	
Client Sample ID: 12106269A2 Date Collected: 11/08/13 11:05 Date Received: 11/08/13 14:57							Lab Sample ID: 280-49015-2 Matrix: Solid Percent Solids: 94.9			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Arsenic	4300		610	51	ug/Kg	⊗	11/12/13 12:00	11/13/13 02:26	1	
Client Sample ID: 12106251A1 Date Collected: 11/08/13 11:45 Date Received: 11/08/13 14:57							Lab Sample ID: 280-49015-3 Matrix: Solid Percent Solids: 90.7			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Arsenic	5800		650	55	ug/Kg	⊗	11/12/13 12:00	11/13/13 02:30	1	
Client Sample ID: 12106251A2 Date Collected: 11/08/13 11:45 Date Received: 11/08/13 14:57							Lab Sample ID: 280-49015-4 Matrix: Solid Percent Solids: 93.7			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Arsenic	5300		620	52	ug/Kg	⊗	11/12/13 12:00	11/13/13 02:41	1	

## Method: 7471A - Mercury (CVAA)

Client Sample ID: 12106269A1 Date Collected: 11/08/13 11:00 Date Received: 11/08/13 14:57							Lab Sample ID: 280-49015-1 Matrix: Solid Percent Solids: 94.5			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	18		18	5.9	ug/Kg	⊗	11/11/13 14:10	11/12/13 02:28	1	
Client Sample ID: 12106269A2 Date Collected: 11/08/13 11:05 Date Received: 11/08/13 14:57							Lab Sample ID: 280-49015-2 Matrix: Solid Percent Solids: 94.9			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	19		17	5.5	ug/Kg	⊗	11/11/13 14:10	11/12/13 02:31	1	
Client Sample ID: 12106251A1 Date Collected: 11/08/13 11:45 Date Received: 11/08/13 14:57							Lab Sample ID: 280-49015-3 Matrix: Solid Percent Solids: 90.7			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	400		18	5.7	ug/Kg	⊗	11/11/13 14:10	11/12/13 02:33	1	
Client Sample ID: 12106251A2 Date Collected: 11/08/13 11:45 Date Received: 11/08/13 14:57							Lab Sample ID: 280-49015-4 Matrix: Solid Percent Solids: 93.7			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	260		18	5.9	ug/Kg	⊗	11/11/13 14:10	11/12/13 02:35	1	

TestAmerica Denver

# Client Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## General Chemistry

**Client Sample ID: 12106269A1**

**Date Collected: 11/08/13 11:00**

**Date Received: 11/08/13 14:57**

**Lab Sample ID: 280-49015-1**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.5		0.10	0.10	%			11/13/13 10:23	1

**Client Sample ID: 12106269A2**

**Date Collected: 11/08/13 11:05**

**Date Received: 11/08/13 14:57**

**Lab Sample ID: 280-49015-2**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.1		0.10	0.10	%			11/13/13 10:23	1

**Client Sample ID: 12106251A1**

**Date Collected: 11/08/13 11:45**

**Date Received: 11/08/13 14:57**

**Lab Sample ID: 280-49015-3**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.3		0.10	0.10	%			11/13/13 10:23	1

**Client Sample ID: 12106251A2**

**Date Collected: 11/08/13 11:45**

**Date Received: 11/08/13 14:57**

**Lab Sample ID: 280-49015-4**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.3		0.10	0.10	%			11/13/13 10:23	1

## General Chemistry - Soluble

**Client Sample ID: 12106269A1**

**Lab Sample ID: 280-49015-1**

**Matrix: Solid**

**Date Collected: 11/08/13 11:00**

**Date Received: 11/08/13 14:57**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	7.83		0.100	0.100	SU			11/16/13 15:52	1
Temperature	22.0		1.00	1.00	Degrees C			11/16/13 15:52	1
Specific Conductance	92		2.0	2.0	umhos/cm			11/13/13 21:25	1

**Client Sample ID: 12106269A2**

**Lab Sample ID: 280-49015-2**

**Matrix: Solid**

**Date Collected: 11/08/13 11:05**

**Date Received: 11/08/13 14:57**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	7.62		0.100	0.100	SU			11/16/13 15:52	1
Temperature	22.2		1.00	1.00	Degrees C			11/16/13 15:52	1
Specific Conductance	72		2.0	2.0	umhos/cm			11/13/13 21:25	1

**Client Sample ID: 12106251A1**

**Lab Sample ID: 280-49015-3**

**Matrix: Solid**

**Date Collected: 11/08/13 11:45**

**Date Received: 11/08/13 14:57**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	8.69		0.100	0.100	SU			11/16/13 15:52	1
Temperature	22.2		1.00	1.00	Degrees C			11/16/13 15:52	1
Specific Conductance	88		2.0	2.0	umhos/cm			11/13/13 21:25	1

**Client Sample ID: 12106251A2**

**Lab Sample ID: 280-49015-4**

**Matrix: Solid**

**Date Collected: 11/08/13 11:45**

**Date Received: 11/08/13 14:57**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	9.14		0.100	0.100	SU			11/16/13 15:52	1

TestAmerica Denver

# Client Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## General Chemistry - Soluble (Continued)

Client Sample ID: 12106251A2

Lab Sample ID: 280-49015-4

Date Collected: 11/08/13 11:45

Matrix: Solid

Date Received: 11/08/13 14:57

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature	22.3		1.00	1.00	Degrees C			11/16/13 15:52	1
Specific Conductance	120		2.0	2.0	umhos/cm			11/13/13 21:25	1

# QC Association Summary

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## GC/MS Semi VOA

### Prep Batch: 201110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1 - DL	12106269A1	Total/NA	Solid	3546	
280-49015-1	12106269A1	Total/NA	Solid	3546	
280-49015-2	12106269A2	Total/NA	Solid	3546	
280-49015-2 - DL	12106269A2	Total/NA	Solid	3546	
280-49040-B-6-C MS	Matrix Spike	Total/NA	Solid	3546	
280-49040-B-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	
LCS 280-201110/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 280-201110/1-A	Method Blank	Total/NA	Solid	3546	

### Analysis Batch: 201518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Total/NA	Solid	8270C SIM	201110
280-49015-2	12106269A2	Total/NA	Solid	8270C SIM	201110
LCS 280-201110/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	201110
MB 280-201110/1-A	Method Blank	Total/NA	Solid	8270C SIM	201110

### Analysis Batch: 201714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1 - DL	12106269A1	Total/NA	Solid	8270C SIM	201110
280-49040-B-6-C MS	Matrix Spike	Total/NA	Solid	8270C SIM	201110
280-49040-B-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	201110

### Analysis Batch: 202095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-2 - DL	12106269A2	Total/NA	Solid	8270C SIM	201110

## GC VOA

### Prep Batch: 201549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Total/NA	Solid	5030B	
280-49015-2	12106269A2	Total/NA	Solid	5030B	
280-49015-2 MS	12106269A2	Total/NA	Solid	5030B	
280-49015-2 MSD	12106269A2	Total/NA	Solid	5030B	
LCS 280-201549/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 280-201549/25-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
MB 280-201549/1-A	Method Blank	Total/NA	Solid	5030B	

### Analysis Batch: 201616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Total/NA	Solid	8015B	201549
280-49015-2	12106269A2	Total/NA	Solid	8015B	201549
280-49015-2 MS	12106269A2	Total/NA	Solid	8015B	201549
280-49015-2 MSD	12106269A2	Total/NA	Solid	8015B	201549
LCS 280-201549/2-A	Lab Control Sample	Total/NA	Solid	8015B	201549
LCSD 280-201549/25-A	Lab Control Sample Dup	Total/NA	Solid	8015B	201549
MB 280-201549/1-A	Method Blank	Total/NA	Solid	8015B	201549

# QC Association Summary

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## GC Semi VOA

### Prep Batch: 200825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-48965-A-6-G MS	Matrix Spike	Total/NA	Solid	3546	
280-48965-A-6-H MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	
280-49015-1	12106269A1	Total/NA	Solid	3546	
280-49015-2	12106269A2	Total/NA	Solid	3546	
LCS 280-200825/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 280-200825/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 280-200825/1-A	Method Blank	Total/NA	Solid	3546	

### Analysis Batch: 201440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-48965-A-6-G MS	Matrix Spike	Total/NA	Solid	8015B	200825
280-48965-A-6-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	200825
LCS 280-200825/2-A	Lab Control Sample	Total/NA	Solid	8015B	200825
LCSD 280-200825/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	200825
MB 280-200825/1-A	Method Blank	Total/NA	Solid	8015B	200825

### Analysis Batch: 201444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Total/NA	Solid	8015B	200825
280-49015-2	12106269A2	Total/NA	Solid	8015B	200825

## Metals

### Prep Batch: 200220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Total/NA	Solid	3050B	
280-49015-2	12106269A2	Total/NA	Solid	3050B	
280-49015-3	12106251A1	Total/NA	Solid	3050B	
280-49015-4	12106251A2	Total/NA	Solid	3050B	
280-49025-A-3-B MS	Matrix Spike	Total/NA	Solid	3050B	
280-49025-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
LCS 280-200220/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 280-200220/1-A	Method Blank	Total/NA	Solid	3050B	

### Prep Batch: 200221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-48965-A-14-C MS	Matrix Spike	Total/NA	Solid	3050B	
280-48965-A-14-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
280-49015-1	12106269A1	Total/NA	Solid	3050B	
280-49015-2	12106269A2	Total/NA	Solid	3050B	
280-49015-3	12106251A1	Total/NA	Solid	3050B	
280-49015-4	12106251A2	Total/NA	Solid	3050B	
LCS 280-200221/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 280-200221/1-A	Method Blank	Total/NA	Solid	3050B	

### Prep Batch: 200314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-48951-A-3-B MS	Matrix Spike	Total/NA	Solid	7471A	
280-48951-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	
280-49015-1	12106269A1	Total/NA	Solid	7471A	

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# QC Association Summary

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Metals (Continued)

### Prep Batch: 200314 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-2	12106269A2	Total/NA	Solid	7471A	
280-49015-3	12106251A1	Total/NA	Solid	7471A	
280-49015-4	12106251A2	Total/NA	Solid	7471A	
LCS 280-200314/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 280-200314/1-A	Method Blank	Total/NA	Solid	7471A	

### Analysis Batch: 200545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-48951-A-3-B MS	Matrix Spike	Total/NA	Solid	7471A	200314
280-48951-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	200314
280-49015-1	12106269A1	Total/NA	Solid	7471A	200314
280-49015-2	12106269A2	Total/NA	Solid	7471A	200314
280-49015-3	12106251A1	Total/NA	Solid	7471A	200314
280-49015-4	12106251A2	Total/NA	Solid	7471A	200314
LCS 280-200314/2-A	Lab Control Sample	Total/NA	Solid	7471A	200314
MB 280-200314/1-A	Method Blank	Total/NA	Solid	7471A	200314

### Prep Batch: 200651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Soluble	Solid	20B	
280-49015-2	12106269A2	Soluble	Solid	20B	
280-49015-3	12106251A1	Soluble	Solid	20B	
280-49015-4	12106251A2	Soluble	Solid	20B	
MB 280-200651/1-A	Method Blank	Soluble	Solid	20B	

### Analysis Batch: 200705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-48965-A-14-C MS	Matrix Spike	Total/NA	Solid	6020	200221
280-48965-A-14-D MSD	Matrix Spike Duplicate	Total/NA	Solid	6020	200221
280-49015-1	12106269A1	Total/NA	Solid	6020	200221
280-49015-2	12106269A2	Total/NA	Solid	6020	200221
280-49015-3	12106251A1	Total/NA	Solid	6020	200221
280-49015-4	12106251A2	Total/NA	Solid	6020	200221
LCS 280-200221/2-A	Lab Control Sample	Total/NA	Solid	6020	200221
MB 280-200221/1-A	Method Blank	Total/NA	Solid	6020	200221

### Analysis Batch: 201001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Total/NA	Solid	6010B	200220
280-49015-2	12106269A2	Total/NA	Solid	6010B	200220
280-49015-3	12106251A1	Total/NA	Solid	6010B	200220
280-49015-4	12106251A2	Total/NA	Solid	6010B	200220
280-49025-A-3-B MS	Matrix Spike	Total/NA	Solid	6010B	200220
280-49025-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	200220
LCS 280-200220/2-A	Lab Control Sample	Total/NA	Solid	6010B	200220
MB 280-200220/1-A	Method Blank	Total/NA	Solid	6010B	200220

### Analysis Batch: 201755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Soluble	Solid	20B	200651
280-49015-2	12106269A2	Soluble	Solid	20B	200651

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# QC Association Summary

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Metals (Continued)

### Analysis Batch: 201755 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-3	12106251A1	Soluble	Solid	20B	200651
280-49015-4	12106251A2	Soluble	Solid	20B	200651
MB 280-200651/1-A	Method Blank	Soluble	Solid	20B	200651

## General Chemistry

### Analysis Batch: 200753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Total/NA	Solid	Moisture	
280-49015-2	12106269A2	Total/NA	Solid	Moisture	
280-49015-2 DU	12106269A2	Total/NA	Solid	Moisture	
280-49015-3	12106251A1	Total/NA	Solid	Moisture	
280-49015-4	12106251A2	Total/NA	Solid	Moisture	

### Leach Batch: 200891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Soluble	Solid	DI Leach	
280-49015-1 DU	12106269A1	Soluble	Solid	DI Leach	
280-49015-2	12106269A2	Soluble	Solid	DI Leach	
280-49015-3	12106251A1	Soluble	Solid	DI Leach	
280-49015-4	12106251A2	Soluble	Solid	DI Leach	
MB 280-200891/1-A	Method Blank	Soluble	Solid	DI Leach	

### Analysis Batch: 200899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Soluble	Solid	9050A	200891
280-49015-1 DU	12106269A1	Soluble	Solid	9050A	200891
280-49015-2	12106269A2	Soluble	Solid	9050A	200891
280-49015-3	12106251A1	Soluble	Solid	9050A	200891
280-49015-4	12106251A2	Soluble	Solid	9050A	200891
LCS 280-200899/3	Lab Control Sample	Total/NA	Solid	9050A	
LCSD 280-200899/4	Lab Control Sample Dup	Total/NA	Solid	9050A	
MB 280-200891/1-A	Method Blank	Soluble	Solid	9050A	200891

### Leach Batch: 201391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Soluble	Solid	DI Leach	
280-49015-2	12106269A2	Soluble	Solid	DI Leach	
280-49015-3	12106251A1	Soluble	Solid	DI Leach	
280-49015-4	12106251A2	Soluble	Solid	DI Leach	
280-49079-F-21-B DU	Duplicate	Soluble	Solid	DI Leach	

### Analysis Batch: 201408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-49015-1	12106269A1	Soluble	Solid	9045C	201391
280-49015-2	12106269A2	Soluble	Solid	9045C	201391
280-49015-3	12106251A1	Soluble	Solid	9045C	201391
280-49015-4	12106251A2	Soluble	Solid	9045C	201391
280-49079-F-21-B DU	Duplicate	Soluble	Solid	9045C	201391
LCS 280-201408/28	Lab Control Sample	Total/NA	Solid	9045C	

TestAmerica Denver

## QC Association Summary

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

### General Chemistry (Continued)

#### Analysis Batch: 201408 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 280-201408/5	Lab Control Sample Dup	Total/NA	Solid	9045C	

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TestAmerica Denver

# QC Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

**Lab Sample ID:** MB 280-201110/1-A

**Matrix:** Solid

**Analysis Batch:** 201518

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 201110

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		5000		1200	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Benzo[a]pyrene	ND		5000		740	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Benzo[a]anthracene	ND		5000		890	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Benzo[k]fluoranthene	ND		5000		990	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Benzo[g,h,i]perylene	ND		5000		1100	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Phenanthrene	ND		5000		1100	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Anthracene	ND		5000		720	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Dibenz(a,h)anthracene	ND		5000		1300	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Chrysene	ND		5000		990	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Acenaphthene	ND		5000		160	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Acenaphthylene	ND		5000		170	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Fluoranthene	ND		5000		990	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Fluorene	ND		5000		470	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Pyrene	ND		5000		1100	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Indeno[1,2,3-cd]pyrene	ND		5000		1100	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
1-Methylnaphthalene	ND		5000		260	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
2-Methylnaphthalene	ND		5000		310	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Naphthalene	ND		5000		320	ng/Kg		11/14/13 20:10	11/18/13 12:11		1
Surrogate	MB	MB	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
	Result	Qualifier									
2-Fluorobiphenyl	83		39 - 120					11/14/13 20:10	11/18/13 12:11		1
Nitrobenzene-d5	70		42 - 120					11/14/13 20:10	11/18/13 12:11		1
Terphenyl-d14	79		35 - 124					11/14/13 20:10	11/18/13 12:11		1

**Lab Sample ID:** LCS 280-201110/2-A

**Matrix:** Solid

**Analysis Batch:** 201518

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 201110

Analyte	Spike	LCS	LCS	%Rec.			
	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzo[b]fluoranthene	28800	23700		ng/Kg		82	37 - 120
Benzo[a]pyrene	28800	21900		ng/Kg		76	20 - 120
Benzo[a]anthracene	28800	24400		ng/Kg		85	36 - 120
Benzo[k]fluoranthene	28800	24200		ng/Kg		84	46 - 120
Benzo[g,h,i]perylene	28800	24500		ng/Kg		85	20 - 123
Phenanthrene	28800	25000		ng/Kg		87	44 - 120
Anthracene	28800	24700		ng/Kg		86	43 - 120
Dibenz(a,h)anthracene	28800	23700		ng/Kg		82	20 - 120
Chrysene	28800	27700		ng/Kg		96	34 - 120
Acenaphthene	28800	24800		ng/Kg		86	35 - 120
Acenaphthylene	28800	23100		ng/Kg		81	41 - 120
Fluoranthene	28800	23900		ng/Kg		83	45 - 120
Fluorene	28800	24100		ng/Kg		84	44 - 120
Pyrene	28800	23800		ng/Kg		83	43 - 120
Indeno[1,2,3-cd]pyrene	28800	24100		ng/Kg		84	20 - 127
Naphthalene	28800	27900		ng/Kg		97	44 - 120

# QC Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

**Lab Sample ID: LCS 280-201110/2-A**

**Matrix: Solid**

**Analysis Batch: 201518**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 201110**

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
2-Fluorobiphenyl			86		39 - 120
Nitrobenzene-d5			84		42 - 120
Terphenyl-d14			85		35 - 124

**Lab Sample ID: 280-49040-B-6-C MS**

**Matrix: Solid**

**Analysis Batch: 201714**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

**Prep Batch: 201110**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier	Added	Result	Qualifier					
Benzo[b]fluoranthene	ND		33000	24400		ng/Kg	⊗	74	37 - 120	
Benzo[a]pyrene	ND		33000	24100		ng/Kg	⊗	73	20 - 120	
Benzo[a]anthracene	ND		33000	25400		ng/Kg	⊗	77	36 - 120	
Benzo[k]fluoranthene	ND		33000	24600		ng/Kg	⊗	74	46 - 120	
Benzo[g,h,i]perylene	ND		33000	25400		ng/Kg	⊗	77	20 - 123	
Phenanthrene	18000		33000	35800		ng/Kg	⊗	54	44 - 120	
Anthracene	6100		33000	29100		ng/Kg	⊗	70	43 - 120	
Dibenz(a,h)anthracene	ND		33000	25000		ng/Kg	⊗	76	20 - 120	
Chrysene	ND		33000	27000		ng/Kg	⊗	82	34 - 120	
Acenaphthene	ND		33000	31000		ng/Kg	⊗	94	35 - 120	
Acenaphthylene	ND		33000	31400		ng/Kg	⊗	95	41 - 120	
Fluoranthene	2200	J	33000	24700		ng/Kg	⊗	68	45 - 120	
Fluorene	25000		33000	34600	F	ng/Kg	⊗	31	44 - 120	
Pyrene	3300	J	33000	25000		ng/Kg	⊗	66	43 - 120	
Indeno[1,2,3-cd]pyrene	ND		33000	24900		ng/Kg	⊗	75	20 - 127	
Naphthalene	530000	E	33000	550000	E 4	ng/Kg	⊗	68	44 - 120	
Surrogate	MS	MS								
	%Recovery	Qualifier								
2-Fluorobiphenyl	55			39 - 120						
Nitrobenzene-d5	629	X		42 - 120						
Terphenyl-d14	63			35 - 124						

**Lab Sample ID: 280-49040-B-6-D MSD**

**Matrix: Solid**

**Analysis Batch: 201714**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

**Prep Batch: 201110**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzo[b]fluoranthene	ND		33500	27900		ng/Kg	⊗	83	37 - 120	14	28
Benzo[a]pyrene	ND		33500	27200		ng/Kg	⊗	81	20 - 120	12	30
Benzo[a]anthracene	ND		33500	28900		ng/Kg	⊗	86	36 - 120	13	40
Benzo[k]fluoranthene	ND		33500	27600		ng/Kg	⊗	82	46 - 120	12	28
Benzo[g,h,i]perylene	ND		33500	28200		ng/Kg	⊗	84	20 - 123	10	30
Phenanthrene	18000		33500	52800		ng/Kg	⊗	104	44 - 120	38	42
Anthracene	6100		33500	39700		ng/Kg	⊗	100	43 - 120	31	50
Dibenz(a,h)anthracene	ND		33500	27400		ng/Kg	⊗	82	20 - 120	9	25
Chrysene	ND		33500	30600		ng/Kg	⊗	91	34 - 120	12	41
Acenaphthene	ND		33500	61900	F	ng/Kg	⊗	185	35 - 120	67	50
Acenaphthylene	ND		33500	62200	F	ng/Kg	⊗	185	41 - 120	66	50
Fluoranthene	2200	J	33500	28900		ng/Kg	⊗	80	45 - 120	16	30

TestAmerica Denver

# QC Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

**Lab Sample ID: 280-49040-B-6-D MSD**

**Matrix: Solid**

**Analysis Batch: 201714**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

**Prep Batch: 201110**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Fluorene	25000		33500	72100	F	ng/Kg	⊗	142	44 - 120	70	50
Pyrene	3300	J	33500	30100		ng/Kg	⊗	80	43 - 120	19	30
Indeno[1,2,3-cd]pyrene	ND		33500	28100		ng/Kg	⊗	84	20 - 127	12	50
Naphthalene	530000	E	33500	1400000	E 4 F	ng/Kg	⊗	2587	44 - 120	87	50
<b>Surrogate</b>											
2-Fluorobiphenyl	94			39 - 120							
Nitrobenzene-d5	1583	X		42 - 120							
Terphenyl-d14	79			35 - 124							

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 280-201549/1-A**

**Client Sample ID: Method Blank**

**Matrix: Solid**

**Prep Type: Total/NA**

**Analysis Batch: 201616**

**Prep Batch: 201549**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO) -C6-C10	ND		1.2	0.33	mg/Kg		11/18/13 11:38	11/18/13 19:11	1
<b>Surrogate</b>									
a,a,a-Trifluorotoluene	94			77 - 123			Prepared	Analyzed	Dil Fac
							11/18/13 11:38	11/18/13 19:11	1

**Lab Sample ID: LCS 280-201549/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Solid**

**Prep Type: Total/NA**

**Analysis Batch: 201616**

**Prep Batch: 201549**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Gasoline Range Organics (GRO) -C6-C10	5.50	5.93		mg/Kg		108	85 - 153
<b>Surrogate</b>							
a,a,a-Trifluorotoluene	92			77 - 123			

**Lab Sample ID: LCSD 280-201549/25-A**

**Client Sample ID: Lab Control Sample Dup**

**Matrix: Solid**

**Prep Type: Total/NA**

**Analysis Batch: 201616**

**Prep Batch: 201549**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier						
Gasoline Range Organics (GRO) -C6-C10	5.50	6.17		mg/Kg		112	85 - 153	4	30
<b>Surrogate</b>									
a,a,a-Trifluorotoluene	98			77 - 123					

TestAmerica Denver

# QC Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

**Lab Sample ID: 280-49015-2 MS**

**Matrix: Solid**

**Analysis Batch: 201616**

**Client Sample ID: 12106269A2**

**Prep Type: Total/NA**

**Prep Batch: 201549**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Gasoline Range Organics (GRO) -C6-C10	ND		5.80	5.65		mg/Kg	⊗	97	85 - 153
<b>Surrogate</b>									
a,a,a-Trifluorotoluene	95			77 - 123					

**Lab Sample ID: 280-49015-2 MSD**

**Matrix: Solid**

**Analysis Batch: 201616**

**Client Sample ID: 12106269A2**

**Prep Type: Total/NA**

**Prep Batch: 201549**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Gasoline Range Organics (GRO) -C6-C10	ND		5.63	4.95		mg/Kg	⊗	88	85 - 153	13	30
<b>Surrogate</b>											
a,a,a-Trifluorotoluene	94			77 - 123							

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 280-200825/1-A**

**Client Sample ID: Method Blank**

**Matrix: Solid**

**Prep Type: Total/NA**

**Analysis Batch: 201440**

**Prep Batch: 200825**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
DRO (C10-C28)	0.926	J	3.9	0.66	mg/Kg		11/13/13 21:05	11/16/13 03:10	1
Motor Oil (C20-C38)	ND		12	3.8	mg/Kg		11/13/13 21:05	11/16/13 03:10	1
<b>Surrogate</b>									
o-Terphenyl	76		49 - 115				11/13/13 21:05	11/16/13 03:10	1

**Lab Sample ID: LCS 280-200825/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Solid**

**Prep Type: Total/NA**

**Analysis Batch: 201440**

**Prep Batch: 200825**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
DRO (C10-C28)	63.5	50.0		mg/Kg		79	53 - 115
<b>Surrogate</b>							
o-Terphenyl	70	49 - 115					

**Lab Sample ID: LCSD 280-200825/3-A**

**Client Sample ID: Lab Control Sample Dup**

**Matrix: Solid**

**Prep Type: Total/NA**

**Analysis Batch: 201440**

**Prep Batch: 200825**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	Limit
	Added	Result	Qualifier						
DRO (C10-C28)	64.6	53.3		mg/Kg		83	53 - 115	6	23

TestAmerica Denver

# QC Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID:** LCSD 280-200825/3-A

**Matrix:** Solid

**Analysis Batch:** 201440

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 200825

Surrogate	LCSD	LCSD	
	%Recovery	Qualifier	Limits
o-Terphenyl	75		49 - 115

**Lab Sample ID:** 280-48965-A-6-G MS

**Matrix:** Solid

**Analysis Batch:** 201440

**Client Sample ID:** Matrix Spike

**Prep Type:** Total/NA

**Prep Batch:** 200825

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit mg/Kg	D	%Rec.	Limits
DRO (C10-C28)	6.9	B	83.6	67.4			⊗	72	56 - 115
<b>Surrogate</b>									
o-Terphenyl									

# QC Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 280-200220/1-A**

**Matrix: Solid**

**Analysis Batch: 201001**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 200220**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Silver	ND				1.0	0.16	mg/Kg		11/12/13 12:00	11/14/13 05:57	1
Zinc	ND				3.0	0.40	mg/Kg		11/12/13 12:00	11/14/13 05:57	1

**Lab Sample ID: LCS 280-200220/2-A**

**Matrix: Solid**

**Analysis Batch: 201001**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 200220**

Analyte	Spike Added	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier							
Barium	200	204				mg/Kg		102	87 - 112	
Boron	100	93.9				mg/Kg		94	80 - 120	
Cadmium	10.0	9.30				mg/Kg		93	87 - 110	
Chromium	20.0	19.9				mg/Kg		100	84 - 114	
Copper	25.0	23.6				mg/Kg		94	88 - 110	
Iron	100	99.9				mg/Kg		100	87 - 120	
Lead	50.0	47.0				mg/Kg		94	86 - 110	
Nickel	50.0	46.2				mg/Kg		92	87 - 110	
Selenium	200	190				mg/Kg		95	83 - 110	
Silver	5.00	4.78				mg/Kg		96	87 - 114	
Zinc	50.0	48.2				mg/Kg		96	76 - 114	

**Lab Sample ID: 280-49025-A-3-B MS**

**Matrix: Solid**

**Analysis Batch: 201001**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

**Prep Batch: 200220**

Analyte	Sample	Sample	Spike	MS	MS	Result	Qualifier	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier	Added	Result	Qualifier							
Barium	230		218	422		mg/Kg	⊗	89	52 - 159			
Boron	4.3	J B	109	102		mg/Kg	⊗	90	80 - 120			
Cadmium	0.20	J	10.9	9.74		mg/Kg	⊗	88	40 - 130			
Chromium	100		21.8	147	4	mg/Kg	⊗	213	70 - 200			
Copper	17		27.2	43.7		mg/Kg	⊗	96	37 - 187			
Iron	12000		109	13200	4	mg/Kg	⊗	1445	70 - 200			
Lead	260		54.5	334	4	mg/Kg	⊗	129	70 - 200			
Nickel	32		54.5	81.8		mg/Kg	⊗	92	61 - 126			
Selenium	ND		218	150	F	mg/Kg	⊗	69	76 - 104			
Silver	ND		5.45	4.51		mg/Kg	⊗	83	75 - 141			
Zinc	53		54.5	111		mg/Kg	⊗	108	70 - 200			

**Lab Sample ID: 280-49025-A-3-C MSD**

**Matrix: Solid**

**Analysis Batch: 201001**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

**Prep Batch: 200220**

Analyte	Sample	Sample	Spike	MSD	MSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier								
Barium	230		228	418		mg/Kg	⊗	83	52 - 159		1	20	
Boron	4.3	J B	114	101		mg/Kg	⊗	85	80 - 120		1	20	
Cadmium	0.20	J	11.4	10.1		mg/Kg	⊗	86	40 - 130		3	20	
Chromium	100		22.8	124	4	mg/Kg	⊗	99	70 - 200		18	20	
Copper	17		28.5	42.2		mg/Kg	⊗	87	37 - 187		4	20	
Iron	12000		114	11900	4	mg/Kg	⊗	240	70 - 200		10	20	
Lead	260		57.0	376	4	mg/Kg	⊗	196	70 - 200		12	20	

TestAmerica Denver

# QC Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID:** 280-49025-A-3-C MSD

**Matrix:** Solid

**Analysis Batch:** 201001

**Client Sample ID:** Matrix Spike Duplicate

**Prep Type:** Total/NA

**Prep Batch:** 200220

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Nickel	32		57.0	80.3	F	mg/Kg	⊗	85	61 - 126	2	20
Selenium	ND		228	169	F	mg/Kg	⊗	74	76 - 104	12	20
Silver	ND		5.70	4.77		mg/Kg	⊗	84	75 - 141	6	20
Zinc	53		57.0	105		mg/Kg	⊗	91	70 - 200	6	20

## Method: 6020 - Metals (ICP/MS)

**Lab Sample ID:** MB 280-200221/1-A

**Client Sample ID:** Method Blank

**Matrix:** Solid

**Prep Type:** Total/NA

**Analysis Batch:** 200705

**Prep Batch:** 200221

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		600	51	ug/Kg	-	11/12/13 12:00	11/13/13 02:01	1

**Lab Sample ID:** LCS 280-200221/2-A

**Client Sample ID:** Lab Control Sample

**Matrix:** Solid

**Prep Type:** Total/NA

**Analysis Batch:** 200705

**Prep Batch:** 200221

Analyte	MB	MB	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Arsenic	ND		20000	19400		ug/Kg	-	97	83 - 111

**Lab Sample ID:** 280-48965-A-14-C MS

**Client Sample ID:** Matrix Spike

**Matrix:** Solid

**Prep Type:** Total/NA

**Analysis Batch:** 200705

**Prep Batch:** 200221

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Arsenic	2500		20400	21000		ug/Kg	⊗	91	83 - 111

**Lab Sample ID:** 280-48965-A-14-D MSD

**Client Sample ID:** Matrix Spike Duplicate

**Matrix:** Solid

**Prep Type:** Total/NA

**Analysis Batch:** 200705

**Prep Batch:** 200221

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Arsenic	2500		20200	21100		ug/Kg	⊗	92	83 - 111

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID:** MB 280-200314/1-A

**Client Sample ID:** Method Blank

**Matrix:** Solid

**Prep Type:** Total/NA

**Analysis Batch:** 200545

**Prep Batch:** 200314

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		17	5.5	ug/Kg	-	11/11/13 14:10	11/12/13 01:22	1

TestAmerica Denver

# QC Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 7471A - Mercury (CVAA) (Continued)

**Lab Sample ID: LCS 280-200314/2-A**

**Matrix: Solid**

**Analysis Batch: 200545**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Mercury	417	442		ug/Kg		106	87 - 111

**Lab Sample ID: 280-48951-A-3-B MS**

**Matrix: Solid**

**Analysis Batch: 200545**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Mercury	10	J	563	578		ug/Kg	⊗	101	87 - 111

**Lab Sample ID: 280-48951-A-3-C MSD**

**Matrix: Solid**

**Analysis Batch: 200545**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Mercury	10	J	627	640		ug/Kg	⊗	100	87 - 111	10	20

## Method: 9045C - pH

**Lab Sample ID: LCS 280-201408/28**

**Matrix: Solid**

**Analysis Batch: 201408**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
pH adj. to 25 deg C	7.00	6.990		SU		100	97 - 103

**Lab Sample ID: LCSD 280-201408/5**

**Matrix: Solid**

**Analysis Batch: 201408**

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
pH adj. to 25 deg C	7.00	6.980		SU		100	97 - 103	0	5

**Lab Sample ID: 280-49079-F-21-B DU**

**Matrix: Solid**

**Analysis Batch: 201408**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
pH adj. to 25 deg C	8.03		7.980		SU		0.6	5
Temperature	22.1		22.20		Degrees C		0.5	5

## Method: 9050A - Specific Conductance

**Lab Sample ID: LCS 280-200899/3**

**Matrix: Solid**

**Analysis Batch: 200899**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Specific Conductance	1410	1420		umhos/cm		100	90 - 110

TestAmerica Denver

# QC Sample Results

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

## Method: 9050A - Specific Conductance (Continued)

Lab Sample ID: LCSD 280-200899/4

Matrix: Solid

Analysis Batch: 200899

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Specific Conductance	1410	1410		umhos/cm		100	90 - 110	0	10

Lab Sample ID: MB 280-200891/1-A

Matrix: Solid

Analysis Batch: 200899

Client Sample ID: Method Blank  
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		2.0	2.0	umhos/cm			11/13/13 21:25	1

Lab Sample ID: 280-49015-1 DU

Matrix: Solid

Analysis Batch: 200899

Client Sample ID: 12106269A1  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Specific Conductance	92		98.4		umhos/cm		7	20

## Method: Moisture - Percent Moisture

Lab Sample ID: 280-49015-2 DU

Matrix: Solid

Analysis Batch: 200753

Client Sample ID: 12106269A2  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Moisture	5.1		4.2		%		20	20

TestAmerica Denver

# Lab Chronicle

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

**Client Sample ID: 12106269A1**

**Date Collected: 11/08/13 11:00**

**Date Received: 11/08/13 14:57**

**Lab Sample ID: 280-49015-1**

**Matrix: Solid**

**Percent Solids: 94.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			32.3 g	10000 uL	201110	11/14/13 20:10	EJP	TAL DEN
Total/NA	Analysis	8270C SIM		4	32.3 g	10000 uL	201518	11/18/13 21:18	KGV	TAL DEN
Total/NA	Prep	3546	DL		32.3 g	10000 uL	201110	11/14/13 20:10	EJP	TAL DEN
Total/NA	Analysis	8270C SIM	DL	10	32.3 g	10000 uL	201714	11/19/13 23:09	KGV	TAL DEN
Total/NA	Prep	5030B			10.27 g	10 mL	201549	11/18/13 11:38	TEM	TAL DEN
Total/NA	Analysis	8015B		1	10.27 g	10 mL	201616	11/18/13 20:25	TEM	TAL DEN
Total/NA	Prep	3546			30.90 g	6000 uL	200825	11/13/13 21:05	EJP	TAL DEN
Total/NA	Analysis	8015B		20	30.90 g	6000 uL	201444	11/17/13 23:19	AMP	TAL DEN
Total/NA	Prep	7471A			.60 g	50 mL	200314	11/11/13 14:10	JM	TAL DEN
Total/NA	Analysis	7471A		1	.60 g	50 mL	200545	11/12/13 02:28	JM	TAL DEN
Total/NA	Prep	3050B			1.03 g	100 mL	200221	11/12/13 12:00	LLB	TAL DEN
Total/NA	Analysis	6020		1	1.03 g	100 mL	200705	11/13/13 02:23	LMT	TAL DEN
Total/NA	Prep	3050B			1.04 g	100 mL	200220	11/12/13 12:00	LLB	TAL DEN
Total/NA	Analysis	6010B		1	1.04 g	100 mL	201001	11/14/13 06:35	SJS	TAL DEN
Soluble	Prep	20B			1.0 g	1.0 mL	200651	11/12/13 21:58	JAM	TAL DEN
Soluble	Analysis	20B		10			201755	11/19/13 01:33	SJS	TAL DEN
Total/NA	Analysis	Moisture		1			200753	11/13/13 10:23	JLH	TAL DEN
Soluble	Leach	DI Leach			100 g	100 mL	200891	11/13/13 19:39	AFB	TAL DEN
Soluble	Analysis	9050A		1			200899	11/13/13 21:25	AFB	TAL DEN
Soluble	Leach	DI Leach			40.21 g	40 mL	201391	11/16/13 09:45	AFH	TAL DEN
Soluble	Analysis	9045C		1			201408	11/16/13 15:52	AFH	TAL DEN

**Client Sample ID: 12106269A2**

**Date Collected: 11/08/13 11:05**

**Date Received: 11/08/13 14:57**

**Lab Sample ID: 280-49015-2**

**Matrix: Solid**

**Percent Solids: 94.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			31.1 g	10000 uL	201110	11/14/13 20:10	EJP	TAL DEN
Total/NA	Analysis	8270C SIM		4	31.1 g	10000 uL	201518	11/18/13 21:45	KGV	TAL DEN
Total/NA	Prep	3546	DL		31.1 g	10000 uL	201110	11/14/13 20:10	EJP	TAL DEN
Total/NA	Analysis	8270C SIM	DL	10	31.1 g	10000 uL	202095	11/22/13 00:03	KGV	TAL DEN
Total/NA	Prep	5030B			10.34 g	10 mL	201549	11/18/13 11:38	TEM	TAL DEN
Total/NA	Analysis	8015B		1	10.34 g	10 mL	201616	11/18/13 20:50	TEM	TAL DEN
Total/NA	Prep	3546			30.47 g	8000 uL	200825	11/13/13 21:05	EJP	TAL DEN
Total/NA	Analysis	8015B		10	30.47 g	8000 uL	201444	11/17/13 23:48	AMP	TAL DEN
Total/NA	Prep	7471A			.64 g	50 mL	200314	11/11/13 14:10	JM	TAL DEN
Total/NA	Analysis	7471A		1	.64 g	50 mL	200545	11/12/13 02:31	JM	TAL DEN
Total/NA	Prep	3050B			1.04 g	100 mL	200221	11/12/13 12:00	LLB	TAL DEN
Total/NA	Analysis	6020		1	1.04 g	100 mL	200705	11/13/13 02:26	LMT	TAL DEN
Total/NA	Prep	3050B			1.02 g	100 mL	200220	11/12/13 12:00	LLB	TAL DEN
Total/NA	Analysis	6010B		1	1.02 g	100 mL	201001	11/14/13 06:38	SJS	TAL DEN
Soluble	Prep	20B			1.0 g	1.0 mL	200651	11/12/13 21:58	JAM	TAL DEN
Soluble	Analysis	20B		10			201755	11/19/13 01:36	SJS	TAL DEN

TestAmerica Denver

## Lab Chronicle

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

**Client Sample ID: 12106269A2**

Date Collected: 11/08/13 11:05

Date Received: 11/08/13 14:57

**Lab Sample ID: 280-49015-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			200753	11/13/13 10:23	JLH	TAL DEN
Soluble	Leach	DI Leach			100 g	100 mL	200891	11/13/13 19:39	AFB	TAL DEN
Soluble	Analysis	9050A		1			200899	11/13/13 21:25	AFB	TAL DEN
Soluble	Leach	DI Leach			40.60 g	40 mL	201391	11/16/13 09:45	AFH	TAL DEN
Soluble	Analysis	9045C		1			201408	11/16/13 15:52	AFH	TAL DEN

**Client Sample ID: 12106251A1**

Date Collected: 11/08/13 11:45

Date Received: 11/08/13 14:57

**Lab Sample ID: 280-49015-3**

Matrix: Solid

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			.64 g	50 mL	200314	11/11/13 14:10	JM	TAL DEN
Total/NA	Analysis	7471A		1	.64 g	50 mL	200545	11/12/13 02:33	JM	TAL DEN
Total/NA	Prep	3050B			1.02 g	100 mL	200221	11/12/13 12:00	LLB	TAL DEN
Total/NA	Analysis	6020		1	1.02 g	100 mL	200705	11/13/13 02:30	LMT	TAL DEN
Total/NA	Prep	3050B			1.08 g	100 mL	200220	11/12/13 12:00	LLB	TAL DEN
Total/NA	Analysis	6010B		1	1.08 g	100 mL	201001	11/14/13 06:40	SJS	TAL DEN
Soluble	Prep	20B			1.0 g	1.0 mL	200651	11/12/13 21:58	JAM	TAL DEN
Soluble	Analysis	20B		10			201755	11/19/13 01:38	SJS	TAL DEN
Total/NA	Analysis	Moisture		1			200753	11/13/13 10:23	JLH	TAL DEN
Soluble	Leach	DI Leach			100 g	100 mL	200891	11/13/13 19:39	AFB	TAL DEN
Soluble	Analysis	9050A		1			200899	11/13/13 21:25	AFB	TAL DEN
Soluble	Leach	DI Leach			36.07 g	40 mL	201391	11/16/13 09:45	AFH	TAL DEN
Soluble	Analysis	9045C		1			201408	11/16/13 15:52	AFH	TAL DEN

**Client Sample ID: 12106251A2**

Date Collected: 11/08/13 11:45

Date Received: 11/08/13 14:57

**Lab Sample ID: 280-49015-4**

Matrix: Solid

Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			.60 g	50 mL	200314	11/11/13 14:10	JM	TAL DEN
Total/NA	Analysis	7471A		1	.60 g	50 mL	200545	11/12/13 02:35	JM	TAL DEN
Total/NA	Prep	3050B			1.04 g	100 mL	200221	11/12/13 12:00	LLB	TAL DEN
Total/NA	Analysis	6020		1	1.04 g	100 mL	200705	11/13/13 02:41	LMT	TAL DEN
Total/NA	Prep	3050B			1.03 g	100 mL	200220	11/12/13 12:00	LLB	TAL DEN
Total/NA	Analysis	6010B		1	1.03 g	100 mL	201001	11/14/13 06:43	SJS	TAL DEN
Soluble	Prep	20B			1.0 g	1.0 mL	200651	11/12/13 21:58	JAM	TAL DEN
Soluble	Analysis	20B		10			201755	11/19/13 01:40	SJS	TAL DEN
Total/NA	Analysis	Moisture		1			200753	11/13/13 10:23	JLH	TAL DEN
Soluble	Leach	DI Leach			100 g	100 mL	200891	11/13/13 19:39	AFB	TAL DEN
Soluble	Analysis	9050A		1			200899	11/13/13 21:25	AFB	TAL DEN
Soluble	Leach	DI Leach			40.12 g	40 mL	201391	11/16/13 09:45	AFH	TAL DEN
Soluble	Analysis	9045C		1			201408	11/16/13 15:52	AFH	TAL DEN

TestAmerica Denver

## Lab Chronicle

Client: Colorado Oil&Gas Conservation Commision  
Project/Site: John Noto

TestAmerica Job ID: 280-49015-1

### Laboratory References:

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

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## Login Sample Receipt Checklist

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-49015-1

**Login Number: 49015**

**List Source: TestAmerica Denver**

**List Number: 1**

**Creator: Dedio, Michael T**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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.	True	
Is the Field Sampler's name present on COC?	N/A	
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	

