

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Soil Testing Suite

Client received 08/14/2014  
Project 8593  
Doc #1733895

TestAmerica Job ID: 280-57758-1

Client Sample ID: LORENCITO 15-6-34-66 NATIVE

Lab Sample ID: 280-57758-1

Date Collected: 07/14/14 12:50

Matrix: Solid

Date Received: 07/15/14 09:30

Percent Solids: 91.8

Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.3		0.092		mg/Kg	☆	07/16/14 15:25	07/17/14 10:02	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.2		0.10		%			07/18/14 11:17	1

# Client Sample Results

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Soil Testing Suite

TestAmerica Job ID: 280-57758-1

**Client Sample ID: LORENCITO 15-6-34-66 NATIVE EAST**

**Lab Sample ID: 280-57758-2**

**Date Collected: 07/14/14 12:55**

**Matrix: Solid**

**Date Received: 07/15/14 09:30**

**Percent Solids: 92.3**

## Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.8		0.097		mg/Kg	☆	07/16/14 15:25	07/17/14 10:06	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.7		0.10		%			07/18/14 11:17	1

## Client Sample Results

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Soil Testing Suite

TestAmerica Job ID: 280-57758-1

**Client Sample ID: LORENCITO 15-6-34-66 NATIVE SOUTH**

**Lab Sample ID: 280-57758-3**

**Date Collected: 07/14/14 12:59**

**Matrix: Solid**

**Date Received: 07/15/14 09:30**

**Percent Solids: 93.2**

### Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.9		0.093		mg/Kg	☆	07/16/14 15:25	07/17/14 10:10	1

### General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.8		0.10		%			07/18/14 11:17	1

# Client Sample Results

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Soil Testing Suite

TestAmerica Job ID: 280-57758-1

**Client Sample ID: LORENCITO 15-6-34-66 NATIVE WEST**

**Lab Sample ID: 280-57758-4**

Date Collected: 07/14/14 13:05

Matrix: Solid

Date Received: 07/15/14 09:30

Percent Solids: 92.7

## Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.8		0.10		mg/Kg	☼	07/16/14 15:25	07/17/14 10:14	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.3		0.10		%	—		07/18/14 11:17	1

# Client Sample Results

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Soil Testing Suite

TestAmerica Job ID: 280-57758-1

**Client Sample ID: LORENCITO 15-6-34-66 OFFSITE TOP OF PIT**

**Lab Sample ID: 280-57758-5**

Date Collected: 07/14/14 13:10

Matrix: Solid

Date Received: 07/15/14 09:30

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	2.2		1.2		No Unit		08/04/14 16:19	08/11/14 21:57	10

## Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.3		0.097		mg/Kg	☼	07/16/14 15:25	07/17/14 10:17	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.5		0.10		%			07/18/14 11:17	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	8.18		0.100		SU			07/22/14 15:46	1
Specific Conductance	370		20		umhos/cm			07/23/14 13:43	1

# Client Sample Results

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Soil Testing Suite

TestAmerica Job ID: 280-57758-1

**Client Sample ID: LORENCITO 15-6-34-66 OFFSITE BOTTOM OF PIT**

**Lab Sample ID: 280-57758-6**

Date Collected: 07/14/14 13:15

Matrix: Solid

Date Received: 07/15/14 09:30

Percent Solids: 93.5

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.6		ug/Kg	☼	07/16/14 17:00	07/16/14 22:39	1
Ethylbenzene	ND		5.6		ug/Kg	☼	07/16/14 17:00	07/16/14 22:39	1
Toluene	ND		5.6		ug/Kg	☼	07/16/14 17:00	07/16/14 22:39	1
Xylenes, Total	ND		5.6		ug/Kg	☼	07/16/14 17:00	07/16/14 22:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		58 - 140	07/16/14 17:00	07/16/14 22:39	1
Toluene-d8 (Surr)	109		80 - 126	07/16/14 17:00	07/16/14 22:39	1
4-Bromofluorobenzene (Surr)	106		76 - 127	07/16/14 17:00	07/16/14 22:39	1
Dibromofluoromethane (Surr)	98		75 - 121	07/16/14 17:00	07/16/14 22:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.2		mg/Kg	☼	07/18/14 11:05	07/18/14 19:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	94		77 - 123	07/18/14 11:05	07/18/14 19:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.1		mg/Kg	☼	07/18/14 11:21	07/22/14 17:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	66		49 - 115	07/18/14 11:21	07/22/14 17:25	1

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	7.2		1.2		No Unit		07/17/14 09:57	07/24/14 18:04	10

## Method: 6010B - Total Metals

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	210		0.94		mg/Kg	☼	07/16/14 15:25	07/23/14 18:38	1
Boron	ND		9.4		mg/Kg	☼	07/16/14 15:25	07/23/14 18:38	1
Cadmium	ND		0.47		mg/Kg	☼	07/16/14 15:25	07/23/14 18:38	1
Calcium	6300		47		mg/Kg	☼	07/16/14 15:25	07/23/14 18:38	1
Magnesium	3800		19		mg/Kg	☼	07/16/14 15:25	07/24/14 12:46	1
Molybdenum	ND		1.9		mg/Kg	☼	07/16/14 15:25	07/23/14 18:38	1
Silver	ND		0.94		mg/Kg	☼	07/16/14 15:25	07/23/14 18:38	1
Sodium	490		470		mg/Kg	☼	07/16/14 15:25	07/23/14 18:38	1

## Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.1		0.093		mg/Kg	☼	07/16/14 15:25	07/17/14 10:36	1
Chromium	24		0.19		mg/Kg	☼	07/16/14 15:25	07/17/14 10:36	1
Copper	35		0.23		mg/Kg	☼	07/16/14 15:25	07/17/14 10:36	1
Lead	15		0.093		mg/Kg	☼	07/16/14 15:25	07/17/14 10:36	1
Nickel	19		0.14		mg/Kg	☼	07/16/14 15:25	07/17/14 10:36	1
Selenium	0.32		0.19		mg/Kg	☼	07/16/14 15:25	07/17/14 10:36	1
Zinc	90		0.93		mg/Kg	☼	07/16/14 15:25	07/17/14 10:36	1

TestAmerica Denver

# Client Sample Results

Client: Pioneer Natural Resources USA, Inc.  
Project/Site: Soil Testing Suite

TestAmerica Job ID: 280-57758-1

**Client Sample ID: LORENCITO 15-6-34-66 OFFSITE BOTTOM  
OF PIT**

**Lab Sample ID: 280-57758-6**

**Date Collected: 07/14/14 13:15**

**Matrix: Solid**

**Date Received: 07/15/14 09:30**

**Percent Solids: 93.5**

## Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	28		17		ug/Kg	☼	07/16/14 10:00	07/16/14 14:46	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.43		mg/Kg	☼	07/28/14 09:38	07/29/14 17:50	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	24		2.0		mg/Kg			08/09/14 09:17	1
Percent Moisture	6.5		0.10		%			07/17/14 11:25	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	8.32		0.100		SU			07/22/14 15:46	1
Specific Conductance	620		20		umhos/cm			07/23/14 13:43	1