

received 05/20/2014  
Project 8454  
Remediation 200406234

Client Sample Results

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

TestAmerica Job ID: 280-54999-1

Client Sample ID: VISTA 22-15 NATIVE NORTH      Lab Sample ID: 280-54999-1  
Date Collected: 04/30/14 11:48      Matrix: Solid  
Date Received: 05/02/14 09:55      Percent Solids: 81.0

Method: 6020 - Metals (ICP/MS)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Arsenic	4.2		0.11		mg/Kg	☼	05/05/14 12:15	05/05/14 21:14	1	

General Chemistry										
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Percent Moisture	19		0.10		%			05/08/14 13:31	1	

# Client Sample Results

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

TestAmerica Job ID: 280-54999-1

**Client Sample ID: VISTA 22-15 NATIVE EAST**

**Lab Sample ID: 280-54999-2**

Date Collected: 04/30/14 11:52

Matrix: Solid

Date Received: 05/02/14 09:55

Percent Solids: 93.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.3		0.093		mg/Kg	☼	05/05/14 12:15	05/05/14 21:29	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.1		0.10		%			05/08/14 13:31	1

# Client Sample Results

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

TestAmerica Job ID: 280-54999-1

**Client Sample ID: VISTA 22-15 NATIVE SOUTH**

**Lab Sample ID: 280-54999-3**

Date Collected: 04/30/14 11:56

Matrix: Solid

Date Received: 05/02/14 09:55

Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.0		0.11		mg/Kg	☼	05/05/14 12:15	05/05/14 21:33	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		0.10		%			05/08/14 13:31	1

# Client Sample Results

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

TestAmerica Job ID: 280-54999-1

**Client Sample ID: VISTA 22-15 NATIVE WEST**

**Lab Sample ID: 280-54999-4**

Date Collected: 04/30/14 12:03

Matrix: Solid

Date Received: 05/02/14 09:55

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.8		0.10		mg/Kg	☼	05/05/14 12:15	05/05/14 21:45	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		0.10		%			05/08/14 13:31	1

# Client Sample Results

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

TestAmerica Job ID: 280-54999-1

**Client Sample ID: VISTA 22-15 TOP OF PIT**

**Lab Sample ID: 280-54999-5**

Date Collected: 04/30/14 12:10

Matrix: Solid

Date Received: 05/02/14 09:55

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	23		1.2		No Unit		05/07/14 12:30	05/10/14 00:56	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.2		0.10		mg/Kg	☼	05/05/14 12:15	05/05/14 21:48	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13		0.10		%			05/08/14 13:31	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	7.88		0.100		SU			05/07/14 20:20	1
Specific Conductance	1200		2.0		umhos/cm			05/06/14 15:55	1

# Client Sample Results

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

TestAmerica Job ID: 280-54999-1

**Client Sample ID: VISTA 22-15 BOTTOM OF PIT**

**Lab Sample ID: 280-54999-6**

**Date Collected: 04/30/14 12:15**

**Matrix: Solid**

**Date Received: 05/02/14 09:55**

**Percent Solids: 75.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		6.0		ug/Kg	☼	05/06/14 16:00	05/07/14 02:34	1
Ethylbenzene	ND		6.0		ug/Kg	☼	05/06/14 16:00	05/07/14 02:34	1
Toluene	ND		6.0		ug/Kg	☼	05/06/14 16:00	05/07/14 02:34	1
Xylenes, Total	ND		6.0		ug/Kg	☼	05/06/14 16:00	05/07/14 02:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		58 - 140	05/06/14 16:00	05/07/14 02:34	1
Toluene-d8 (Surr)	114		80 - 126	05/06/14 16:00	05/07/14 02:34	1
4-Bromofluorobenzene (Surr)	112		76 - 127	05/06/14 16:00	05/07/14 02:34	1
Dibromofluoromethane (Surr)	97		75 - 121	05/06/14 16:00	05/07/14 02:34	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		1.6		mg/Kg	☼	05/07/14 11:53	05/08/14 15:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	72	X	77 - 123	05/07/14 11:53	05/08/14 15:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	12		5.1		mg/Kg	☼	05/05/14 21:10	05/07/14 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	80		49 - 115	05/05/14 21:10	05/07/14 18:00	1

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	90		1.2		No Unit	—	05/07/14 12:30	05/10/14 00:59	10

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	640		1.2		mg/Kg	☼	05/06/14 12:30	05/09/14 08:52	1
Boron	ND		12		mg/Kg	☼	05/06/14 12:30	05/09/14 08:52	1
Cadmium	ND		0.60		mg/Kg	☼	05/06/14 12:30	05/09/14 08:52	1
Calcium	4300		60		mg/Kg	☼	05/06/14 12:30	05/09/14 08:52	1
Magnesium	2300		24		mg/Kg	☼	05/06/14 12:30	05/09/14 08:52	1
Molybdenum	ND		2.4		mg/Kg	☼	05/06/14 12:30	05/09/14 08:52	1
Silver	ND		1.2		mg/Kg	☼	05/06/14 12:30	05/09/14 08:52	1
Sodium	3600		600		mg/Kg	☼	05/06/14 12:30	05/09/14 08:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.11		mg/Kg	☼	05/05/14 12:15	05/05/14 21:51	1
Chromium	8.3		0.23		mg/Kg	☼	05/05/14 12:15	05/05/14 21:51	1
Copper	18		0.28		mg/Kg	☼	05/05/14 12:15	05/05/14 21:51	1
Lead	11		0.11		mg/Kg	☼	05/05/14 12:15	05/05/14 21:51	1
Nickel	9.3		0.17		mg/Kg	☼	05/05/14 12:15	05/05/14 21:51	1
Selenium	1.2		0.23		mg/Kg	☼	05/05/14 12:15	05/05/14 21:51	1
Zinc	52		1.1		mg/Kg	☼	05/05/14 12:15	05/05/14 21:51	1

TestAmerica Denver

# Client Sample Results

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

TestAmerica Job ID: 280-54999-1

**Client Sample ID: VISTA 22-15 BOTTOM OF PIT**

**Lab Sample ID: 280-54999-6**

**Date Collected: 04/30/14 12:15**

**Matrix: Solid**

**Date Received: 05/02/14 09:55**

**Percent Solids: 75.4**

## Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		23		ug/Kg	☼	05/08/14 15:10	05/08/14 21:06	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		0.10		%	—		05/07/14 22:19	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	8.77		0.100		SU	—		05/07/14 20:20	1
Specific Conductance	390		2.0		umhos/cm	—		05/06/14 15:55	1