

Table 910-1		PIONEER NATURAL RESOURCES				
CONCENTRATION LEVELS		sampled 7/18,19/17				
Contaminant of Concern	Concentrations	Units	ENTERPRISE 12-28KU P&A TOP OF PIT SS	ENTERPRISE 12-28KU P&A BOTTOM OF PIT SS		
Organic Compounds in Soil						
TPH (Gasoline Range Organics)	500	mg/kg		ND		
TPH (Diesel Range Organics)		mg/kg		11		
Benzene		mg/kg		ND		
Toluene		mg/kg		ND		
Ethylbenzene		mg/kg		ND		
Xylenes (total)		mg/kg		ND		
Acenaphthene		1000	mg/kg			
Anthracene		1000	mg/kg			
Benzo(A)anthracene		0.22	mg/kg			
Benzo(B)fluoranthene		0.22	mg/kg			
Benzo(K)fluoranthene		2.2	mg/kg			
Benzo(A)pyrene		0.022	mg/kg			
Chrysene		22	mg/kg			
Dibenzo(A,H)anthracene		0.022	mg/kg			
Fluoranthene		1000	mg/kg			
Fluorene		1000	mg/kg			
Indeno(1,2,3,C,D)pyrene	0.22	mg/kg				
Napthalene	23	mg/kg				
Pyrene	1000	mg/kg				
Organic Compounds in Ground Water						
Benzene	5	µg/l				
Toluene	560 to 1000	µg/l				
Ethylbenzene	700	µg/l				
Xylenes (total)	1400 to 10,000	µg/l				
Inorganics in Soils						
Electrical Conductivity (EC)	<4000 or 2x background	umhos/cm	480	1500		
Sodium Adsorption Ratio (SAR)	<12	NA	5.6	4.8		
pH	6.0-9.0	NA	7.6	8.5		
Inorganics in Ground Water						
Total Dissolved Solids (TDS)	<1.25 x background	NA				
Chlorides	<1.25 x background	NA				
Sulfates	<1.25 x background	NA				
Metals in Soils						
Arsenic	0.39	mg/kg		NT		
Barium Total	15,000	mg/kg		270		
Boron	NA	mg/kg		ND		
Boron (Hot Water Soluble)	2	mg/L		NT		
Cadmium	70	mg/kg		ND		
Chromium (III)	120,000	mg/kg		28		
Chromium (VI)	23	mg/kg		ND		
Copper	3,100	mg/kg		51		
Lead	400	mg/kg		18		
Mercury	23	mg/kg		0.063		
Nickel	1,600	mg/kg		24		
Selenium	390	mg/kg		0.46		
Silver	390	mg/kg		ND		
Zinc	23,000	mg/kg		130		
Chromium	>23	mg/kg		28		
Liquid Hydrocarbons in Soils and Ground Water						
Liquid hydrocarbons including condensate and oil	Below detection level	NA				

NA - not applicable

NT - not tested

ND - below the method detection limit

Cr - if Total Cr is >23 mg/kg, an analysis is completed for Cr VI, to facilitate calculation of Cr III

# Client Sample Results

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

TestAmerica Job ID: 280-99402-1

**Client Sample ID: ENTERPRISE 12-28KU P&A TOP OF PIT SS**

**Lab Sample ID: 280-99402-11**

**Date Collected: 07/18/17 12:26**

**Matrix: Solid**

**Date Received: 07/20/17 10:00**

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	5.6		1.2		No Unit		07/20/17 18:24	07/31/17 22:31	10
Sodium	130		10		mg/Kg		07/20/17 18:24	07/31/17 22:31	10
Calcium	33		2.0		mg/Kg		07/20/17 18:24	07/31/17 22:31	10
Magnesium	3.5		2.0		mg/Kg		07/20/17 18:24	07/31/17 22:31	10

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.8		0.1		%			07/21/17 10:16	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6		0.1		SU		07/25/17 12:01	07/25/17 19:31	1
Specific Conductance (25C)	480		10		umhos/cm		07/25/17 12:01	07/28/17 13:00	1

# Client Sample Results

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

TestAmerica Job ID: 280-99402-1

**Client Sample ID: ENTERPRISE 12-28KU P&A BOTTOM OF PIT SS**

**Lab Sample ID: 280-99402-12**

**Date Collected: 07/18/17 12:32**

**Matrix: Solid**

**Date Received: 07/20/17 10:00**

**Percent Solids: 78.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0062		mg/Kg	☼	07/28/17 20:56	07/28/17 23:54	1
Ethylbenzene	ND		0.0062		mg/Kg	☼	07/28/17 20:56	07/28/17 23:54	1
Toluene	ND		0.0062		mg/Kg	☼	07/28/17 20:56	07/28/17 23:54	1
Xylenes, Total	ND		0.0062		mg/Kg	☼	07/28/17 20:56	07/28/17 23:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		58 - 140	07/28/17 20:56	07/28/17 23:54	1
Toluene-d8 (Surr)	108		80 - 126	07/28/17 20:56	07/28/17 23:54	1
4-Bromofluorobenzene (Surr)	136	* X	76 - 127	07/28/17 20:56	07/28/17 23:54	1
Dibromofluoromethane (Surr)	97		75 - 121	07/28/17 20:56	07/28/17 23:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	ND		1.5		mg/Kg	☼	07/26/17 11:28	07/28/17 02:53	1

-C6-C10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	84		77 - 123	07/26/17 11:28	07/28/17 02:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11		5.0		mg/Kg	☼	07/25/17 12:37	07/27/17 19:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	73		49 - 115	07/25/17 12:37	07/27/17 19:39	1

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	4.8		1.2		No Unit	—	07/20/17 18:24	07/31/17 22:36	10

## Method: 6010B - Total Metals

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	270		1.0		mg/Kg	☼	07/24/17 13:40	07/25/17 03:42	1
Boron	ND		10		mg/Kg	☼	07/24/17 13:40	07/25/17 03:42	1
Cadmium	ND		0.52		mg/Kg	☼	07/24/17 13:40	07/25/17 03:42	1
Calcium	8500		52		mg/Kg	☼	07/24/17 13:40	07/25/17 03:42	1
Magnesium	4500		21		mg/Kg	☼	07/24/17 13:40	07/25/17 03:42	1
Molybdenum	ND		2.1		mg/Kg	☼	07/24/17 13:40	07/25/17 03:42	1
Silver	ND		1.0		mg/Kg	☼	07/24/17 13:40	07/25/17 03:42	1
Sodium	1600		520		mg/Kg	☼	07/24/17 13:40	07/25/17 03:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	28		0.22		mg/Kg	☼	07/24/17 13:40	07/25/17 00:11	1
Copper	51		0.27		mg/Kg	☼	07/24/17 13:40	07/25/17 00:11	1
Lead	18		0.11		mg/Kg	☼	07/24/17 13:40	07/25/17 00:11	1
Nickel	24		0.16		mg/Kg	☼	07/24/17 13:40	07/25/17 00:11	1
Selenium	0.46		0.22		mg/Kg	☼	07/24/17 13:40	07/25/17 00:11	1
Zinc	130		1.1		mg/Kg	☼	07/24/17 13:40	07/25/17 00:11	1

TestAmerica Denver

# Client Sample Results

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

TestAmerica Job ID: 280-99402-1

**Client Sample ID: ENTERPRISE 12-28KU P&A BOTTOM OF PIT SS**

**Lab Sample ID: 280-99402-12**

**Date Collected: 07/18/17 12:32**

**Matrix: Solid**

**Date Received: 07/20/17 10:00**

**Percent Solids: 78.6**

## Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.063		0.022		mg/Kg	☼	07/21/17 12:30	07/21/17 15:30	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.50		mg/Kg	☼	07/28/17 09:08	08/01/17 09:10	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	28		2.0		mg/Kg	—		08/01/17 14:15	1
Percent Moisture	21.4		0.1		%			07/21/17 10:16	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.5		0.1		SU	—	07/25/17 12:01	07/25/17 19:31	1
Specific Conductance (25C)	1500		10		umhos/cm		07/25/17 12:01	07/28/17 13:00	1