


Table 910-1				
CONCENTRATION LEVELS				
Contaminant of Concern	Concentrations	Units	CEDAR 31-19 TOP OF PIT	CEDAR 31-19 BOTTOM OF PIT
Organic Compounds in Soil				
TPH (Gasoline Range Organics)	500	mg/kg		ND
TPH (Diesel Range Organics)		mg/kg		290
Benzene	0.17	mg/kg		ND
Toluene	85	mg/kg		ND
Ethylbenzene	100	mg/kg		ND
Xylenes (total)	175	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	930	2700
Sodium Adsorption Ratio (SAR)	<12	NA	ND	4.8
pH	6.0-9.0	NA	6.8	11.1
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		NA
Barium Total	15,000	mg/kg		210
Boron	NA	mg/kg		ND
Boron (Hot Water Soluble)	2	mg/L		NT
Cadmium	70	mg/kg		ND
Chromium (III)	120,000	mg/kg		NA
Chromium (VI)	23	mg/kg		NA
Copper	3,100	mg/kg		18
Lead	400	mg/kg		8.3
Mercury	23	mg/kg		0.023
Nickel	1,600	mg/kg		11
Selenium	390	mg/kg		0.32
Silver	390	mg/kg		ND
Zinc	23,000	mg/kg		41
Chromium		mg/kg		13
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: 280-96407-1

Client Sample ID: CEDAR 31-19 TOP OF PIT

Lab Sample ID: 280-96407-3

Date Collected: 04/24/17 11:53

Matrix: Solid

Date Received: 04/27/17 08:55

Method: 20B - Sodium Adsorption Ratio - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	ND		1.2		No Unit		05/03/17 18:26	05/05/17 05:52	10
Sodium	64		10		mg/Kg		05/03/17 18:26	05/05/17 05:52	10
Calcium	440		2.0		mg/Kg		05/03/17 18:26	05/05/17 05:52	10
Magnesium	150		2.0		mg/Kg		05/03/17 18:26	05/05/17 05:52	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.6		0.1		%			05/01/17 11:43	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.8		0.1		SU		05/04/17 10:53	05/04/17 11:22	1
Specific Conductance (25C)	930		10		umhos/cm		05/04/17 10:53	05/08/17 11:50	1

Client Sample Results

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

TestAmerica Job ID: 280-96407-1

Client Sample ID: CEDAR 31-19 BOTTOM OF PIT

Lab Sample ID: 280-96407-4

Date Collected: 04/24/17 11:55

Matrix: Solid

Date Received: 04/27/17 08:55

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0067		mg/Kg	☼	05/04/17 15:00	05/04/17 19:38	1
Ethylbenzene	ND		0.0067		mg/Kg	☼	05/04/17 15:00	05/04/17 19:38	1
Toluene	ND		0.0067		mg/Kg	☼	05/04/17 15:00	05/04/17 19:38	1
Xylenes, Total	ND		0.0067		mg/Kg	☼	05/04/17 15:00	05/04/17 19:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		58 - 140	05/04/17 15:00	05/04/17 19:38	1
Toluene-d8 (Surr)	94		80 - 126	05/04/17 15:00	05/04/17 19:38	1
4-Bromofluorobenzene (Surr)	99		76 - 127	05/04/17 15:00	05/04/17 19:38	1
Dibromofluoromethane (Surr)	81		75 - 121	05/04/17 15:00	05/04/17 19:38	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		1.3		mg/Kg	☼	05/01/17 16:13	05/02/17 12:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	81		77 - 123	05/01/17 16:13	05/02/17 12:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	290		4.5		mg/Kg	☼	05/08/17 06:45	05/12/17 19:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	96		49 - 115	05/08/17 06:45	05/12/17 19:45	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		05/03/17 18:26	05/05/17 05:54	10

Method: 6010B - Total Metals

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	210		0.85		mg/Kg	☼	04/28/17 14:30	05/02/17 05:12	1
Boron	ND		8.5		mg/Kg	☼	04/28/17 14:30	05/02/17 05:12	1
Cadmium	ND		0.42		mg/Kg	☼	04/28/17 14:30	05/02/17 05:12	1
Calcium	16000		42		mg/Kg	☼	04/28/17 14:30	05/02/17 05:12	1
Magnesium	3700		17		mg/Kg	☼	04/28/17 14:30	05/02/17 05:12	1
Molybdenum	ND		1.7		mg/Kg	☼	04/28/17 14:30	05/02/17 05:12	1
Silver	ND		0.85		mg/Kg	☼	04/28/17 14:30	05/02/17 05:12	1
Sodium	ND		420		mg/Kg	☼	04/28/17 14:30	05/02/17 13:35	1

Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	13		0.19		mg/Kg	☼	04/27/17 20:48	04/29/17 03:00	1
Copper	18		0.24		mg/Kg	☼	04/27/17 20:48	04/29/17 03:00	1
Lead	8.3		0.095		mg/Kg	☼	04/27/17 20:48	04/29/17 03:00	1
Nickel	11		0.14		mg/Kg	☼	04/27/17 20:48	04/29/17 03:00	1
Selenium	0.32		0.19		mg/Kg	☼	04/27/17 20:48	04/29/17 03:00	1
Zinc	41		0.95		mg/Kg	☼	04/27/17 20:48	04/29/17 03:00	1

TestAmerica Denver

Client Sample Results

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

TestAmerica Job ID: 280-96407-1

Client Sample ID: CEDAR 31-19 BOTTOM OF PIT

Lab Sample ID: 280-96407-4

Date Collected: 04/24/17 11:55

Matrix: Solid

Date Received: 04/27/17 08:55

Percent Solids: 84.9

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.023		mg/Kg	☼	05/12/17 12:24	05/12/17 23:02	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.1		0.1		%	—		05/01/17 11:43	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	11.1		0.1		SU	—	05/04/17 10:53	05/04/17 11:22	1
Specific Conductance (25C)	2700		10		umhos/cm	—	05/04/17 10:53	05/08/17 11:50	1