

Table 910-1		PIONEER NATURAL RESOURCES						
CONCENTRATION LEVELS								
Contaminant of Concern	Concentrations	Units	State 21-36TR Top of Pit	State 21-36TR Bottom of Pit	State 21-36TR Native North	State 21-36TR Native East	State 21-36TR Native South	State 21-36TR Native West
Organic Compounds in Soil								
TPH (Gasoline Range Organics)		mg/kg		ND				
TPH (Diesel Range Organics)	500	mg/kg		17				
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	570	2100				
Sodium Adsorption Ratio (SAR)	<12	NA	7.2	8.1				
pH	6.0-9.0	NA	7.63	7.63				
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	2.5	3.3	2.8	2.7	1.9	2.5
Barium Total	15,000	mg/kg		400				
Boron	NA	mg/kg		ND				
Boron (Hot Water Soluble)	2	mg/L		NT				
Cadmium	70	mg/kg		ND				
Chromium (III)	120,000	mg/kg		26				
Chromium (VI)	23	mg/kg		ND				
Copper	3,100	mg/kg		36				
Lead	400	mg/kg		19				
Mercury	23	mg/kg		0.027				
Nickel	1,600	mg/kg		24				
Selenium	390	mg/kg		0.75				
Silver	390	mg/kg		ND				
Zinc	23,000	mg/kg		96				
Chromium	<23	mg/kg		26				
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 Suite

TestAmerica Job ID: 280-85019-1

Client Sample ID: State 21-36TR Top of Pit

Lab Sample ID: 280-85019-7

Date Collected: 06/28/16 10:19

Matrix: Solid

Date Received: 06/29/16 09:30

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		06/30/16 11:47	07/09/16 10:15	10
Sodium	200		10		mg/Kg		06/30/16 11:47	07/09/16 10:15	10
Calcium	33		2.0		mg/Kg		06/30/16 11:47	07/09/16 10:15	10
Magnesium	15		2.0		mg/Kg		06/30/16 11:47	07/09/16 10:15	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	3.7		0.1		%			07/01/16 07:17	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.63		0.100		SU		07/05/16 17:44	07/11/16 12:18	1
Specific Conductance (25C)	570		10		umhos/cm		07/05/16 17:44	07/08/16 14:00	1

Client Sample Results

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

TestAmerica Job ID: 280-85019-1

Client Sample ID: State 21-36TR Top of Pit

Lab Sample ID: 280-85019-7

Date Collected: 06/28/16 10:19

Matrix: Solid

Date Received: 06/29/16 09:30

Percent Solids: 96.3

Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.5		0.075		mg/Kg	☼	07/01/16 08:50	07/01/16 22:05	1

Client Sample Results

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

TestAmerica Job ID: 280-85019-1

Client Sample ID: State 21-36TR Bottom of Pit

Date Collected: 06/28/16 10:22

Date Received: 06/29/16 09:30

Lab Sample ID: 280-85019-8

Matrix: Solid

Percent Solids: 71.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0087		mg/Kg	☼	06/29/16 17:00	06/30/16 02:03	1
Ethylbenzene	ND		0.0087		mg/Kg	☼	06/29/16 17:00	06/30/16 02:03	1
Toluene	ND		0.0087		mg/Kg	☼	06/29/16 17:00	06/30/16 02:03	1
Xylenes, Total	ND		0.0087		mg/Kg	☼	06/29/16 17:00	06/30/16 02:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		58 - 140	06/29/16 17:00	06/30/16 02:03	1
Toluene-d8 (Surr)	94		80 - 126	06/29/16 17:00	06/30/16 02:03	1
4-Bromofluorobenzene (Surr)	96		76 - 127	06/29/16 17:00	06/30/16 02:03	1
Dibromofluoromethane (Surr)	87		75 - 121	06/29/16 17:00	06/30/16 02:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	ND	*	1.6		mg/Kg	☼	07/06/16 11:16	07/06/16 18:50	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	80		77 - 123	07/06/16 11:16	07/06/16 18:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	ND		1.6		mg/Kg	☼	07/08/16 12:25	07/08/16 17:19	1
-C6-C10									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	87		77 - 123	07/08/16 12:25	07/08/16 17:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	17		5.5		mg/Kg	☼	07/06/16 09:42	07/13/16 06:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	74		49 - 115	07/06/16 09:42	07/13/16 06:03	1

Method: 20B - Sodium Adsorption Ratio - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	8.1		1.2		No Unit		06/30/16 11:47	07/02/16 10:23	10

Method: 6010B - Total Metals

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	400		5.9		mg/Kg	☼	07/06/16 14:30	07/08/16 20:42	5
Boron	ND		12		mg/Kg	☼	07/06/16 14:30	07/07/16 00:39	1
Cadmium	ND		0.59		mg/Kg	☼	07/06/16 14:30	07/07/16 00:39	1
Calcium	13000		290		mg/Kg	☼	07/06/16 14:30	07/08/16 20:42	5
Magnesium	5100		24		mg/Kg	☼	07/06/16 14:30	07/07/16 00:39	1
Molybdenum	ND		2.4		mg/Kg	☼	07/06/16 14:30	07/07/16 00:39	1
Silver	ND		1.2		mg/Kg	☼	07/06/16 14:30	07/07/16 00:39	1
Sodium	4400		2900		mg/Kg	☼	07/06/16 14:30	07/08/16 20:42	5

Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.3		0.11		mg/Kg	☼	07/01/16 08:50	07/01/16 22:09	1

TestAmerica Denver

Client Sample Results

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

TestAmerica Job ID: 280-85019-1

Client Sample ID: State 21-36TR Bottom of Pit

Lab Sample ID: 280-85019-8

Date Collected: 06/28/16 10:22

Matrix: Solid

Date Received: 06/29/16 09:30

Percent Solids: 71.1

Method: 6020 - Total Metals by ICP-MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	26		0.22		mg/Kg	☼	07/01/16 08:50	07/01/16 22:09	1
Copper	36		0.27		mg/Kg	☼	07/01/16 08:50	07/01/16 22:09	1
Lead	19		0.11		mg/Kg	☼	07/01/16 08:50	07/01/16 22:09	1
Nickel	24		0.16		mg/Kg	☼	07/01/16 08:50	07/01/16 22:09	1
Selenium	0.75		0.22		mg/Kg	☼	07/01/16 08:50	07/01/16 22:09	1
Zinc	96		1.1		mg/Kg	☼	07/01/16 08:50	07/01/16 22:09	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.025		mg/Kg	☼	07/05/16 11:10	07/05/16 19:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.57		mg/Kg	☼	07/10/16 15:00	07/12/16 11:47	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (III)	26		2.0		mg/Kg	—		07/12/16 15:31	1
Percent Moisture	28.9		0.1		%	—		07/01/16 07:17	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.63		0.100		SU	—	07/05/16 17:44	07/11/16 12:18	1
Specific Conductance (25C)	2100		10		umhos/cm	—	07/05/16 17:44	07/08/16 14:00	1

Client Sample Results

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

TestAmerica Job ID: 280-85019-1

Client Sample ID: State 21-36TR Native North

Lab Sample ID: 280-85019-9

Date Collected: 06/28/16 10:25

Matrix: Solid

Date Received: 06/29/16 09:30

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.4		0.1		%			07/01/16 07:17	1

Client Sample Results

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

TestAmerica Job ID: 280-85019-1

Client Sample ID: State 21-36TR Native North

Lab Sample ID: 280-85019-9

Date Collected: 06/28/16 10:25

Matrix: Solid

Date Received: 06/29/16 09:30

Percent Solids: 94.6

Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.8		0.10		mg/Kg	☼	07/01/16 08:50	07/01/16 22:12	1

Client Sample Results

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

TestAmerica Job ID: 280-85019-1

Client Sample ID: State 21-36TR Native East

Lab Sample ID: 280-85019-10

Date Collected: 06/28/16 10:27

Matrix: Solid

Date Received: 06/29/16 09:30

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	3.8		0.1		%			07/01/16 07:17	1

Client Sample Results

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

TestAmerica Job ID: 280-85019-1

Client Sample ID: State 21-36TR Native East

Lab Sample ID: 280-85019-10

Date Collected: 06/28/16 10:27

Matrix: Solid

Date Received: 06/29/16 09:30

Percent Solids: 96.2

Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.7		0.093		mg/Kg	☼	07/01/16 08:50	07/01/16 22:16	1

Client Sample Results

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

TestAmerica Job ID: 280-85019-1

Client Sample ID: State 21-36TR Native South

Lab Sample ID: 280-85019-11

Date Collected: 06/28/16 10:28

Matrix: Solid

Date Received: 06/29/16 09:30

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.4		0.1		%			07/01/16 07:17	1

Client Sample Results

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

TestAmerica Job ID: 280-85019-1

Client Sample ID: State 21-36TR Native South

Lab Sample ID: 280-85019-11

Date Collected: 06/28/16 10:28

Matrix: Solid

Date Received: 06/29/16 09:30

Percent Solids: 94.6

Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9		0.083		mg/Kg	☼	07/01/16 08:50	07/01/16 22:20	1

Client Sample Results

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

TestAmerica Job ID: 280-85019-1

Client Sample ID: State 21-36TR Native West

Lab Sample ID: 280-85019-12

Date Collected: 06/28/16 10:30

Matrix: Solid

Date Received: 06/29/16 09:30

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.8		0.1		%			07/01/16 07:17	1

Client Sample Results

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

TestAmerica Job ID: 280-85019-1

Client Sample ID: State 21-36TR Native West

Lab Sample ID: 280-85019-12

Date Collected: 06/28/16 10:30

Matrix: Solid

Date Received: 06/29/16 09:30

Percent Solids: 98.2

Method: 6020 - Total Metals by ICP-MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.5		0.082		mg/Kg	☼	07/01/16 08:50	07/01/16 22:23	1