

State of Colorado
Oil and Gas Conservation Commission

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FOR OGCC USE ONLY

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☒ Site/Facility Closure ☐ Other (describe): _____

OGCC Employee

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No:

OGCC Operator Number: 10084Name of Operator: Pioneer Natural Resources USA, Inc.Address: 5205 N. O'Connor Blvd., Ste 200City: Irving State: TX Zip: 75039

Contact Name and Telephone:

LaCretia WhiteNo: 972-969-3738Fax: 972-969-3559API Number: 05-071-06629County: Las AnimasFacility Name: C. Brown 14-34 offsite pitFacility Number: 256456Well Name: C.BrownWell Number: 14-34Location: (QtrQtr, Sec, Twp, Rng, Meridian): SWSW 34 32S 65WLatitude: 37.211100 Longitude: -104.664405

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): produced waterSite Conditions: Is location within a sensitive area (according to Rule 901e)? ☐ Y ☒ N If yes, attach evaluation.Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): Non-crop LandSoil type, if not previously identified on Form 2A or Federal Surface Use Plan: Molinaro loamPotential receptors (water wells within 1/4 mi, surface waters, etc.): nearest water well - 1262' (if DWR point is accurate)nearest surface water - 270' (if live water present)

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):



Soils



Vegetation



Groundwater



Surface Water

Extent of Impact:

soil within pit

How Determined:

soil sampling

REMEDIALTION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

Produced water from this well was being stored in this offsite pit. The well is no longer going to the pit.

Describe how source is to be removed:

Produced water is not being sent to this pit and it is no longer needed.

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

Produced water may be surface discharged under a CDPS permit, disposed of in a Class II UIC injection well, or utilized for dust suppression.



REMEDIATION WORKPLAN (Cont.)

Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

OGCC Employee: _____

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

It is not expected that produced water stored in this pit communicated with nor affected groundwater.

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

Pioneer would like to terminate the permit for this facility. The landowner, Ms. Patricia Tamburelli, has requested that the existing offsite pond to the northeast of this well be left for rain water and snowmelt to collect for livestock and/or wildlife watering. Pioneer has also submitted a Form 4 variance request (DOC # 401066255), along with a letter signed by the landowner.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☐ Y ☒ N If yes, describe:

No impact to the surrounding environment occurred from the use of this pit.

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

N/A

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 2/28/13 Date Site Investigation Completed: 2/28/13 Date Remediation Plan Submitted: 6/21/16
Remediation Start Date: n/a Anticipated Completion Date: n/a Actual Completion Date: _____

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: LaCretia White

Signed: LaCretia White

Title: Staff Environmental Specialist

Date: 6/21/16

OGCC Approved: _____ Title: _____ Date: _____

Conditions of approval:

Approval of this Form 27 is conditional based on approval of pending Form 4 variance request (DocNum 401066255)

Notify area Environmental Protection Specialist when variance request is approved. If variance request is not approved operator will have 90 days to initiate pit closure procedures.

Some sample points exceed Table 910-1 Sodium Adsorption Ration (SAR) and pH concentration levels. These concentration levels are based on levels need to achieve reclamation and revegetation. Landowner has requested to keep the pit open therefore the Table 910-1 values do not apply. If variance request to hand over pit to landowner is not approved operator must contact area EPS for pit closure.

| Table 910-1 | | C. Brown 14-34 offsite pit sampled 2/28/13 | | | | | | | | | | | |
|---|---------------------------------|--|--------------------|---------------------|--------------------|------------------|-----------------|------------------|-----------------|--------------|-------------|--------------|-------------|
| CONCENTRATION LEVELS | | | | | | | | | | | | | |
| Contaminant of Concern | Concentrations | bottom of pit north | bottom of pit east | bottom of pit south | bottom of pit west | top of pit north | top of pit east | top of pit south | top of pit west | Native north | Native east | Native south | native west |
| Organic Compounds in Soil | | | | | | | | | | | | | |
| TPH (total volatile & extractable petroleum hydrocarbons) | 500mg/kg | 18 mg/Kg | 15 mg/Kg | ND | 5.3 mg/Kg | | | | | | | | |
| Benzene | 0.17 mg/kg | ND | ND | ND | ND | | | | | | | | |
| Toluene | 85 mg/kg | ND | ND | ND | ND | | | | | | | | |
| Ethylbenzene | 100mg/kg | ND | ND | ND | ND | | | | | | | | |
| Xylenes (total) | 175 mg/kg | ND | ND | ND | 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 umhos/cm or 2x background | 190 umhos/cm | 260 umhos/cm | 240 umhos/cm | 240 umhos/cm | 19 umhos/cm | 16 umhos/cm | 15 umhos/cm | 32 umhos/cm | | | | |
| Sodium Adsorption Ratio (SAR) | <12 | 12 | 19 | 7.8 | 25 | ND | ND | ND | 1.70 | | | | |
| pH | 6.0-9.0 | 9.92 | 9.87 | 8.56 | 9.91 | 8.23 | 8.25 | 8.24 | 8.27 | | | | |
| Inorganics in Ground Water | | | | | | | | | | | | | |
| Total Dissolved Solids (TDS) | <1.25 x background | | | | | | | | | | | | |
| Chlorides | <1.25 x background | | | | | | | | | | | | |
| Sulfates | <1.25 x background | | | | | | | | | | | | |
| Metals in Soils | | | | | | | | | | | | | |
| Arsenic | 0.39 mg/kg | 3.8 mg/Kg | 2.8 mg/Kg | 1.6 mg/Kg | 2.5 mg/Kg | 2.0 mg/Kg | 2.7 mg/Kg | 3.6 mg/Kg | 2.5 mg/Kg | 2.3 mg/Kg | 2.7 mg/Kg | 2.9 mg/Kg | 2.4 mg/Kg |
| Barium Total | 15,000 mg/kg | 260 mg/Kg | 300 mg/Kg | 340 mg/Kg | 240 mg/Kg | | | | | | | | |
| Boron | NA | ND | ND | ND | ND | | | | | | | | |
| Boron (Hot Water Soluble) | 2 mg/l | NT | NT | NT | NT | | | | | | | | |
| Cadmium | 70 mg/kg | ND | ND | ND | ND | | | | | | | | |
| Chromium | NA | 17 mg/Kg | 18 mg/Kg | 11 mg/Kg | 15 mg/Kg | | | | | | | | |
| Chromium (III) | 120,000 mg/kg | NT | NT | NT | NT | | | | | | | | |
| Chromium (VI) | 23 mg/kg | NT | NT | NT | NT | | | | | | | | |
| Copper | 3,100 mg/kg | 38 mg/Kg | 33 mg/Kg | 36 mg/Kg | 27 mg/Kg | | | | | | | | |
| Lead (inorganic) | 400 mg/kg | 21 mg/Kg | 17 mg/Kg | 18 mg/Kg | 17 mg/Kg | | | | | | | | |
| Mercury | 23 mg/kg | 98 ug/kg | 44 ug/kg | 38 ug/kg | 150 ug/kg | | | | | | | | |
| Nickel (soluble salts) | 1,600 mg/kg | 24 mg/Kg | 19 mg/Kg | 14 mg/Kg | 15 mg/Kg | | | | | | | | |
| Selenium | 390 mg/kg | 0.67 mg/Kg | 0.43 mg/Kg | 0.28 mg/Kg | 0.97 mg/Kg | | | | | | | | |
| Silver | 390 mg/kg | ND | ND | ND | ND | | | | | | | | |
| Zinc | 23,000 mg/kg | 130 mg/Kg | 92 mg/Kg | 90 mg/Kg | 150 mg/Kg | | | | | | | | |
| Liquid Hydrocarbons in Soils and Ground Water | | | | | | | | | | | | | |
| Liquid hydrocarbons including condensate and o | Below detection level | ND | ND | ND | ND | | | | | | | | |

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 NATIVE NORTH

Lab Sample ID: 280-39412-1

Date Collected: 02/28/13 13:25

Matrix: Solid

Date Received: 03/01/13 10:00

Percent Solids: 89.4

Method: 6020 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Arsenic | 2.3 | | 0.10 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 15:31 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|----|------|---|----------|----------------|---------|
| Percent Moisture | 11 | | 0.10 | | % | | | 03/04/13 10:00 | 1 |

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 NATIVE WEST

Lab Sample ID: 280-39412-2

Date Collected: 02/28/13 13:30

Matrix: Solid

Date Received: 03/01/13 10:00

Percent Solids: 93.8

Method: 6020 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Arsenic | 2.4 | | 0.11 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 15:50 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|----|------|---|----------|----------------|---------|
| Percent Moisture | 6.3 | | 0.10 | | % | | | 03/04/13 10:00 | 1 |

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 NATIVE SOUTH

Lab Sample ID: 280-39412-3

Date Collected: 02/28/13 13:35

Matrix: Solid

Date Received: 03/01/13 10:00

Percent Solids: 85.7

Method: 6020 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Arsenic | 2.9 | | 0.11 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 15:53 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|----|------|---|----------|----------------|---------|
| Percent Moisture | 14 | | 0.10 | | % | | | 03/04/13 10:00 | 1 |

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 NATIVE EAST

Lab Sample ID: 280-39412-4

Date Collected: 02/28/13 13:40

Matrix: Solid

Date Received: 03/01/13 10:00

Percent Solids: 72.2

Method: 6020 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Arsenic | 2.7 | | 0.13 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:05 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|----|------|---|----------|----------------|---------|
| Percent Moisture | 28 | | 0.10 | | % | | | 03/04/13 10:00 | 1 |

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 OFFSITE WEST SIDE TOP OF PIT

Lab Sample ID: 280-39412-5

Date Collected: 02/28/13 13:45

Matrix: Solid

Date Received: 03/01/13 10:00

Method: 20B - Sodium Adsorption Ratio - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------|--------|-----------|-----|----|---------|---|----------------|----------------|---------|
| Sodium Adsorption Ratio | 1.7 | | 1.2 | | No Unit | | 03/08/13 08:00 | 03/08/13 17:45 | 10 |

Method: 6020 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|-------|-----|-------|---|----------------|----------------|---------|
| Arsenic | 2.5 | | 0.095 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:08 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|----|------|---|----------|----------------|---------|
| Percent Moisture | 8.5 | | 0.10 | | % | | | 03/04/13 10:00 | 1 |

General Chemistry - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------|--------|-----------|-------|----|----------|---|----------|----------------|---------|
| pH adj. to 25 deg C | 8.27 | | 0.100 | | SU | | | 03/06/13 18:26 | 1 |
| Specific Conductance | 32 | | 2.0 | | umhos/cm | | | 03/05/13 13:55 | 1 |

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 OFFSITE NORTH SIDE TOP OF PIT

Lab Sample ID: 280-39412-6

Date Collected: 02/28/13 13:50

Matrix: Solid

Date Received: 03/01/13 10:00

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 | | 03/08/13 08:00 | 03/08/13 17:50 | 10 |

Method: 6020 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Arsenic | 2.0 | | 0.11 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:12 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|----|------|---|----------|----------------|---------|
| Percent Moisture | 12 | | 0.10 | | % | | | 03/04/13 10:00 | 1 |

General Chemistry - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------|--------|-----------|-------|----|----------|---|----------|----------------|---------|
| pH adj. to 25 deg C | 8.23 | | 0.100 | | SU | | | 03/06/13 18:26 | 1 |
| Specific Conductance | 19 | | 2.0 | | umhos/cm | | | 03/05/13 13:55 | 1 |

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 OFFSITE SOUTH SIDE TOP OF PIT

Lab Sample ID: 280-39412-7

Date Collected: 02/28/13 13:55

Matrix: Solid

Date Received: 03/01/13 10:00

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 | | 03/08/13 08:00 | 03/08/13 17:52 | 10 |

Method: 6020 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Arsenic | 3.6 | | 0.11 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:16 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|----|------|---|----------|----------------|---------|
| Percent Moisture | 17 | | 0.10 | | % | | | 03/04/13 10:00 | 1 |

General Chemistry - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------|--------|-----------|-------|----|----------|---|----------|----------------|---------|
| pH adj. to 25 deg C | 8.24 | | 0.100 | | SU | | | 03/06/13 18:26 | 1 |
| Specific Conductance | 15 | | 2.0 | | umhos/cm | | | 03/05/13 13:55 | 1 |

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 OFFSITE EAST SIDE TOP OF PIT

Lab Sample ID: 280-39412-8

Date Collected: 02/28/13 14:00

Matrix: Solid

Date Received: 03/01/13 10:00

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 | | 03/08/13 08:00 | 03/08/13 17:55 | 10 |

Method: 6020 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Arsenic | 2.7 | | 0.12 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:20 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|----|------|---|----------|----------------|---------|
| Percent Moisture | 16 | | 0.10 | | % | | | 03/04/13 10:00 | 1 |

General Chemistry - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------|--------|-----------|-------|----|----------|---|----------|----------------|---------|
| pH adj. to 25 deg C | 8.25 | | 0.100 | | SU | | | 03/06/13 18:26 | 1 |
| Specific Conductance | 16 | | 2.0 | | umhos/cm | | | 03/05/13 13:55 | 1 |

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 OFFSITE NORTH BOTTOM OF PIT

Lab Sample ID: 280-39412-9

Date Collected: 02/28/13 14:05

Matrix: Solid

Date Received: 03/01/13 10:00

Percent Solids: 84.6

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Benzene | ND | | 5.7 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 22:43 | 1 |
| Ethylbenzene | ND | | 5.7 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 22:43 | 1 |
| Toluene | ND | | 5.7 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 22:43 | 1 |
| Xylenes, Total | ND | | 2.8 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 22:43 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 91 | | 58 - 140 | 03/04/13 16:00 | 03/04/13 22:43 | 1 |
| Toluene-d8 (Surr) | 103 | | 80 - 126 | 03/04/13 16:00 | 03/04/13 22:43 | 1 |
| 4-Bromofluorobenzene (Surr) | 105 | | 76 - 127 | 03/04/13 16:00 | 03/04/13 22:43 | 1 |
| Dibromofluoromethane (Surr) | 95 | | 75 - 121 | 03/04/13 16:00 | 03/04/13 22:43 | 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 | | 1.4 | | mg/Kg | ☼ | 03/04/13 11:30 | 03/05/13 18:00 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| a,a,a-Trifluorotoluene | 97 | | 77 - 123 | 03/04/13 11:30 | 03/05/13 18:00 | 1 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Diesel Range Organics [C10-C28] | 18 | | 4.6 | | mg/Kg | ☼ | 03/04/13 18:40 | 03/07/13 01:11 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------|-----------|-----------|----------|----------------|----------------|---------|
| o-Terphenyl | 68 | | 49 - 115 | 03/04/13 18:40 | 03/07/13 01:11 | 1 |

Method: 20B - Sodium Adsorption Ratio - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------|--------|-----------|-----|----|---------|---|----------------|----------------|---------|
| Sodium Adsorption Ratio | 12 | | 1.2 | | No Unit | | 03/08/13 08:00 | 03/08/13 17:57 | 10 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Barium | 260 | | 1.0 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:08 | 1 |
| Boron | ND | | 10 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:08 | 1 |
| Cadmium | ND | | 0.51 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:08 | 1 |
| Calcium | 3200 | | 51 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:08 | 1 |
| Magnesium | 4000 | | 21 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:08 | 1 |
| Molybdenum | ND | | 2.1 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:08 | 1 |
| Silver | ND | | 1.0 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:08 | 1 |
| Sodium | 2800 | | 510 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:08 | 1 |

Method: 6020 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Arsenic | 3.8 | | 0.11 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:24 | 1 |
| Chromium | 17 | | 0.22 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:24 | 1 |
| Copper | 38 | | 0.28 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:24 | 1 |
| Lead | 21 | | 0.11 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:24 | 1 |
| Nickel | 24 | | 0.17 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:24 | 1 |
| Selenium | 0.67 | | 0.22 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:24 | 1 |
| Zinc | 130 | | 1.1 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:24 | 1 |

TestAmerica Denver

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 OFFSITE NORTH BOTTOM OF PIT

Lab Sample ID: 280-39412-9

Date Collected: 02/28/13 14:05

Matrix: Solid

Date Received: 03/01/13 10:00

Percent Solids: 84.6

Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|----|-----|-------|---|----------------|----------------|---------|
| Mercury | 98 | | 21 | | ug/Kg | ☼ | 03/04/13 14:15 | 03/04/13 16:49 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|----|------|---|----------|----------------|---------|
| Percent Moisture | 15 | | 0.10 | | % | — | | 03/04/13 10:00 | 1 |

General Chemistry - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------|--------|-----------|-------|----|----------|---|----------|----------------|---------|
| pH adj. to 25 deg C | 9.92 | | 0.100 | | SU | — | | 03/06/13 18:26 | 1 |
| Specific Conductance | 190 | | 2.0 | | umhos/cm | — | | 03/05/13 13:55 | 1 |

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 OFFSITE WEST BOTTOM OF PIT

Lab Sample ID: 280-39412-10

Date Collected: 02/28/13 14:10

Matrix: Solid

Date Received: 03/01/13 10:00

Percent Solids: 80.2

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Benzene | ND | | 6.1 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 23:02 | 1 |
| Ethylbenzene | ND | | 6.1 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 23:02 | 1 |
| Toluene | ND | | 6.1 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 23:02 | 1 |
| Xylenes, Total | ND | | 3.1 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 23:02 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 94 | | 58 - 140 | 03/04/13 16:00 | 03/04/13 23:02 | 1 |
| Toluene-d8 (Surr) | 102 | | 80 - 126 | 03/04/13 16:00 | 03/04/13 23:02 | 1 |
| 4-Bromofluorobenzene (Surr) | 99 | | 76 - 127 | 03/04/13 16:00 | 03/04/13 23:02 | 1 |
| Dibromofluoromethane (Surr) | 99 | | 75 - 121 | 03/04/13 16:00 | 03/04/13 23:02 | 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 | | 1.5 | | mg/Kg | ☼ | 03/04/13 11:30 | 03/05/13 18:38 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| a,a,a-Trifluorotoluene | 97 | | 77 - 123 | 03/04/13 11:30 | 03/05/13 18:38 | 1 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Diesel Range Organics [C10-C28] | 5.3 | | 4.8 | | mg/Kg | ☼ | 03/04/13 18:40 | 03/07/13 01:40 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------|-----------|-----------|----------|----------------|----------------|---------|
| o-Terphenyl | 64 | | 49 - 115 | 03/04/13 18:40 | 03/07/13 01:40 | 1 |

Method: 20B - Sodium Adsorption Ratio - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------|--------|-----------|-----|----|---------|---|----------------|----------------|---------|
| Sodium Adsorption Ratio | 25 | | 1.2 | | No Unit | | 03/08/13 08:00 | 03/08/13 18:00 | 10 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Barium | 240 | | 1.2 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:17 | 1 |
| Boron | ND | | 12 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:17 | 1 |
| Cadmium | ND | | 0.60 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:17 | 1 |
| Calcium | 4800 | | 60 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:17 | 1 |
| Magnesium | 2700 | | 24 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:17 | 1 |
| Molybdenum | ND | | 2.4 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:17 | 1 |
| Silver | ND | | 1.2 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:17 | 1 |
| Sodium | 3400 | | 600 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:17 | 1 |

Method: 6020 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Arsenic | 2.5 | | 0.12 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:28 | 1 |
| Chromium | 15 | | 0.24 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:28 | 1 |
| Copper | 27 | | 0.30 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:28 | 1 |
| Lead | 17 | | 0.12 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:28 | 1 |
| Nickel | 15 | | 0.18 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:28 | 1 |
| Selenium | 0.97 | | 0.24 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:28 | 1 |
| Zinc | 150 | | 1.2 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:28 | 1 |

TestAmerica Denver

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 OFFSITE WEST BOTTOM OF PIT

Lab Sample ID: 280-39412-10

Date Collected: 02/28/13 14:10

Matrix: Solid

Date Received: 03/01/13 10:00

Percent Solids: 80.2

Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|----|-----|-------|---|----------------|----------------|---------|
| Mercury | 150 | | 23 | | ug/Kg | ☼ | 03/04/13 14:15 | 03/04/13 16:51 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|----|------|---|----------|----------------|---------|
| Percent Moisture | 20 | | 0.10 | | % | — | | 03/04/13 10:00 | 1 |

General Chemistry - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------|--------|-----------|-------|----|----------|---|----------|----------------|---------|
| pH adj. to 25 deg C | 9.91 | | 0.100 | | SU | — | | 03/06/13 18:26 | 1 |
| Specific Conductance | 240 | | 2.0 | | umhos/cm | — | | 03/05/13 13:55 | 1 |

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 OFFSITE SOUTH BOTTOM

Lab Sample ID: 280-39412-11

OF PIT

Date Collected: 02/28/13 14:20

Matrix: Solid

Date Received: 03/01/13 10:00

Percent Solids: 84.0

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Benzene | ND | | 5.8 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 23:21 | 1 |
| Ethylbenzene | ND | | 5.8 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 23:21 | 1 |
| Toluene | ND | | 5.8 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 23:21 | 1 |
| Xylenes, Total | ND | | 2.9 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 23:21 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 91 | | 58 - 140 | 03/04/13 16:00 | 03/04/13 23:21 | 1 |
| Toluene-d8 (Surr) | 101 | | 80 - 126 | 03/04/13 16:00 | 03/04/13 23:21 | 1 |
| 4-Bromofluorobenzene (Surr) | 101 | | 76 - 127 | 03/04/13 16:00 | 03/04/13 23:21 | 1 |
| Dibromofluoromethane (Surr) | 99 | | 75 - 121 | 03/04/13 16:00 | 03/04/13 23:21 | 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 | | 1.4 | | mg/Kg | ☼ | 03/04/13 11:30 | 03/05/13 19:17 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| a,a,a-Trifluorotoluene | 99 | | 77 - 123 | 03/04/13 11:30 | 03/05/13 19:17 | 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 | | 4.7 | | mg/Kg | ☼ | 03/04/13 18:40 | 03/07/13 02:09 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------|-----------|-----------|----------|----------------|----------------|---------|
| o-Terphenyl | 65 | | 49 - 115 | 03/04/13 18:40 | 03/07/13 02:09 | 1 |

Method: 20B - Sodium Adsorption Ratio - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------|--------|-----------|-----|----|---------|---|----------------|----------------|---------|
| Sodium Adsorption Ratio | 7.8 | | 1.2 | | No Unit | | 03/08/13 08:00 | 03/08/13 18:02 | 10 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Barium | 340 | | 1.1 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:20 | 1 |
| Boron | ND | | 11 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:20 | 1 |
| Cadmium | ND | | 0.54 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:20 | 1 |
| Calcium | 3100 | | 54 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:20 | 1 |
| Magnesium | 3200 | | 22 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:20 | 1 |
| Molybdenum | ND | | 2.2 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:20 | 1 |
| Silver | ND | | 1.1 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:20 | 1 |
| Sodium | 650 | | 540 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:20 | 1 |

Method: 6020 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Arsenic | 1.6 | | 0.11 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:31 | 1 |
| Chromium | 11 | | 0.22 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:31 | 1 |
| Copper | 36 | | 0.28 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:31 | 1 |
| Lead | 18 | | 0.11 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:31 | 1 |
| Nickel | 14 | | 0.17 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:31 | 1 |
| Selenium | 0.28 | | 0.22 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:31 | 1 |
| Zinc | 90 | | 1.1 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:31 | 1 |

TestAmerica Denver

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 OFFSITE SOUTH BOTTOM OF PIT

Lab Sample ID: 280-39412-11

Date Collected: 02/28/13 14:20

Matrix: Solid

Date Received: 03/01/13 10:00

Percent Solids: 84.0

Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|----|-----|-------|---|----------------|----------------|---------|
| Mercury | 38 | | 17 | | ug/Kg | ☼ | 03/04/13 14:15 | 03/04/13 16:53 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|----|------|---|----------|----------------|---------|
| Percent Moisture | 16 | | 0.10 | | % | — | | 03/04/13 10:00 | 1 |

General Chemistry - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------|--------|-----------|-------|----|----------|---|----------|----------------|---------|
| pH adj. to 25 deg C | 8.56 | | 0.100 | | SU | — | | 03/06/13 18:26 | 1 |
| Specific Conductance | 240 | | 2.0 | | umhos/cm | — | | 03/05/13 13:55 | 1 |

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

Client Sample ID: C.BROWN 14-34 OFFSITE EAST BOTTOM OF PIT

Lab Sample ID: 280-39412-12

Date Collected: 02/28/13 14:39

Matrix: Solid

Date Received: 03/01/13 10:00

Percent Solids: 80.4

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Benzene | ND | | 6.1 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 23:40 | 1 |
| Ethylbenzene | ND | | 6.1 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 23:40 | 1 |
| Toluene | ND | | 6.1 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 23:40 | 1 |
| Xylenes, Total | ND | | 3.0 | | ug/Kg | ☼ | 03/04/13 16:00 | 03/04/13 23:40 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 92 | | 58 - 140 | 03/04/13 16:00 | 03/04/13 23:40 | 1 |
| Toluene-d8 (Surr) | 109 | | 80 - 126 | 03/04/13 16:00 | 03/04/13 23:40 | 1 |
| 4-Bromofluorobenzene (Surr) | 109 | | 76 - 127 | 03/04/13 16:00 | 03/04/13 23:40 | 1 |
| Dibromofluoromethane (Surr) | 100 | | 75 - 121 | 03/04/13 16:00 | 03/04/13 23:40 | 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 | | 1.5 | | mg/Kg | ☼ | 03/04/13 11:30 | 03/05/13 19:55 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------------|-----------|-----------|----------|----------------|----------------|---------|
| a,a,a-Trifluorotoluene | 84 | | 77 - 123 | 03/04/13 11:30 | 03/05/13 19:55 | 1 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------------|--------|-----------|-----|-----|-------|---|----------------|----------------|---------|
| Diesel Range Organics [C10-C28] | 15 | | 4.8 | | mg/Kg | ☼ | 03/04/13 18:40 | 03/07/13 02:38 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------|-----------|-----------|----------|----------------|----------------|---------|
| o-Terphenyl | 68 | | 49 - 115 | 03/04/13 18:40 | 03/07/13 02:38 | 1 |

Method: 20B - Sodium Adsorption Ratio - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------|--------|-----------|-----|----|---------|---|----------------|----------------|---------|
| Sodium Adsorption Ratio | 19 | | 1.2 | | No Unit | | 03/08/13 08:00 | 03/08/13 18:05 | 10 |

Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Barium | 300 | | 1.2 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:22 | 1 |
| Boron | ND | | 12 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:22 | 1 |
| Cadmium | ND | | 0.58 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:22 | 1 |
| Calcium | 3200 | | 58 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:22 | 1 |
| Magnesium | 3600 | | 23 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:22 | 1 |
| Molybdenum | ND | | 2.3 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:22 | 1 |
| Silver | ND | | 1.2 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:22 | 1 |
| Sodium | 2500 | | 580 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/07/13 15:22 | 1 |

Method: 6020 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|-------|---|----------------|----------------|---------|
| Arsenic | 2.8 | | 0.11 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:43 | 1 |
| Chromium | 18 | | 0.22 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:43 | 1 |
| Copper | 33 | | 0.28 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:43 | 1 |
| Lead | 17 | | 0.11 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:43 | 1 |
| Nickel | 19 | | 0.17 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:43 | 1 |
| Selenium | 0.43 | | 0.22 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:43 | 1 |
| Zinc | 92 | | 1.1 | | mg/Kg | ☼ | 03/05/13 08:15 | 03/05/13 16:43 | 1 |

TestAmerica Denver

Client Sample Results

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

TestAmerica Job ID: 280-39412-1

**Client Sample ID: C.BROWN 14-34 OFFSITE EAST BOTTOM
OF PIT**

Lab Sample ID: 280-39412-12

Date Collected: 02/28/13 14:39

Matrix: Solid

Date Received: 03/01/13 10:00

Percent Solids: 80.4

Method: 7471A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|----|-----|-------|---|----------------|----------------|---------|
| Mercury | 44 | | 18 | | ug/Kg | ☼ | 03/04/13 14:15 | 03/04/13 16:56 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|----|------|---|----------|----------------|---------|
| Percent Moisture | 20 | | 0.10 | | % | — | | 03/04/13 10:00 | 1 |

General Chemistry - Soluble

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------|--------|-----------|-------|----|----------|---|----------|----------------|---------|
| pH adj. to 25 deg C | 9.87 | | 0.100 | | SU | — | | 03/06/13 18:26 | 1 |
| Specific Conductance | 260 | | 2.0 | | umhos/cm | — | | 03/05/13 13:55 | 1 |