

State of Colorado Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303) 894-2100 Fax: (303) 894-2109

FOR OGCC USE ONLY

received 03/17/2010 Document 200389356 Pit Facility 435036 Location 308777

EARTHEN PIT REPORT / PERMIT

This form is to be used for both reporting and permitting pits. Rule 903 describes when a Permit with prior approval, or a Report within 30 days, is required for pits. Submit required attachments and forms.

FORM SUBMITTED FOR:

Pit Report [X] Pit Permit

Complete the Attachment Checklist

Table with columns: Attachment, Oper, OGCC. Rows include Detailed Site Plan, Topo Map with Pit Location, Water Analysis (Form 25), Source Wells (Form 26), Pit Design Plan & Cross Sect., Design Calculations, Sensitive Area Determination, Mud Program, Form 2A.

OGCC Operator Number: 10084 Name of Operator: PIONEER NATURAL RESOURCES USA, Inc. Address: 1401 17th STREET, SUITE 1200 City: DENVER State: CO Zip: 80202

Contact Name and Telephone: David Castro No: 303-298-8100 Fax: 303-298-7800

API Number (of associated well): 05-071-08612 COGCC Facility ID (of other associated facility): Pit Location (QtrQtr, Sec, Twp, Rng, Meridian) SWSW, SEC. 29, T33S, R65W, 6TH P.M. Latitude: 37.13886 Longitude: -104.70112 County: LAS ANIMAS Pit Use: [X] Production [] Drilling [] Special Purpose [] Pit Type: [] Lined [X] Unlined Surface Discharge Permit: [X] Yes [] No Offsite disposal of pit contents: [] Injection [] Commercial Pit/Facility Name: Gough 14-29 Pit/Facility No: Form 25 to provide Produced Water Analysis results. See COA

Existing Site Conditions

Is the location in a "Sensitive Area"? [] Yes [X] No Attach data used for determination. Distance (in feet) to nearest surface water: 437' ground water: 22' water wells: 2332' LAND USE (or attach copy of Form 2A, if previously submitted for associated well) Select one which best describes land use: Crop Land: [] Irrigated [] Dry Land [] Improved Pasture [] Hay Meadow [] CRP Non-Crop Land: [X] Rangeland [] Timber [] Recreational [] Other (describe): Subdivided: [] Industrial [] Commercial [] Residential Form 2A Attached SOILS (or attach copy of Form 2A, if previously submitted for associated well) Soil map units from USNRCS survey: Sheet No: 58 Soil Complex/Series No: LST Soils Series Name: Lorencito Sarcillo Trujillo Horizon thickness (in inches): A: A: 0-5 B: AC: 4-16 C: Cr: 16-26 Attach detailed site plan and topo map with pit location.

Pit Design and Construction

Size of pit (feet): Length: 30 Width: 55 Depth: 6 Calculated pit volume (bbls): 1763 Daily inflow rate (bbls/day): UNKNOWN Daily disposal rates (attach calculations): Evaporation 2.3 bbl/day Percolation: 119 bbl/day Type of liner material: NONE Thickness: N/A Attach description of proposed design and construction (include sketches and calculations). Method of treatment of produced water prior to discharge into pit (separator, heater treater, other): SEPARATOR Is pit fenced? [] Yes [X] No Is pit netted? [] Yes [X] No

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

Print Name: David Castro Signed: [Signature] Title: Environmental Coordinator Date: 3/17/2010 OGCC Approved: Title: Date:

CONDITIONS OF APPROVAL, IF ANY:

~~Representative water sample to be provided within sixty (60) days of first gas sales.~~

Facility Number: 435036

approved 11/13/2013

Form 15-Additional Information

Raton Basin

1. Contacts

Primary Contact Person:

David Castro
Pioneer Natural Resources USA, Inc.
1401 17th Street, Suite 1200
Denver, Colorado 80202
303-298-8100
303-298-7800 (FAX)

Local Contact Person:

Elton Smith
Pioneer Natural Resources USA, Inc.
11318 County Road 53.5
Trinidad, Colorado 81082
719-846-7898
719-846-1657 (FAX)

2. Purpose of this application. Pioneer has submitted this application to convert the existing drilling reserve pit on the wellsite to an unlined earthen pit for the storage, evaporation and disposal of produced groundwater. Produced water will be piped directly from the wellhead to the converted reserve pits via a surface line. This unlined earthen pit is located within the confines of the existing wellsite. The reserve pit proposed for use as an unlined earthen pit is constructed such that the water level will not be above the elevation of the original ground level, thereby reducing the possibility of seepage through the berm. Any excess water production will be trucked or piped to the nearest permitted multi-well unlined earthen pit or disposed of in an existing Class II injection well. In the future, Pioneer could discharge from this unlined earthen pit under a CDPHE surface discharge permit.

3. Sensitive area determination. This area has been determined to be located in a non-sensitive area because the proposed unlined earthen pit is located in an upland area outside of any arroyos or drainage. Depth to groundwater is shown on the attached Form 15.

4. Well site survey and color map. The proposed pit is located on the well site and is shown on the attached color map.

5. Water quality testing. Pioneer typically collects a representative water sample from the wellhead approximately 60 to 90 days after first gas sales. If final water quality results are available, they shall be submitted with this pit permit application. If final water quality results are not available at the time of pit permit application submittal, results shall be submitted to the Commission as soon as final reports are received by Pioneer.

6. Calculations:

Surface area = length x width = 55 feet x 30 feet = 1650 sq. feet

Storage capacity = length x width x depth = 55 feet x 30 feet x 6 feet =
9900 cubic feet. 9900 cubic feet x 1 barrel/5.615 cubic feet = 1763 barrels

Daily evaporative loss. Based on climatic data and a conversion table provided by COGCC, evaporation loss for this area (Las Animas County) averages 45 pan inches/year = 2.3 barrel(s)/day for 1650 square feet of pit surface.

Percolation rate. Based on soil survey data and maps provided by the United States Department of Agriculture, the soil type/series found at/near this location has an unknown permeability at the depth of the pit bottom. Rates from shallower soils range from 0.00 to 2 inches per hour. This calculation assumes a lower range permeability of 0.2 inch/hour. Given this already low rate and the presence of clays in this soil at depths below 14 inches, no additional reduction in permeability due to siltation of the pit bottom, clay swelling or inclusions of less permeable soils is assumed.

Soil percolation rate at pit bottom = 0.017 ft/hr

Estimated percolation rate for pit = 0.017 ft/hr (1650 ft²) (1 bbl/5.615 ft³) =
1.99 bbl(s)/hr (24hr/day) = 119 bbls/day. Therefore the pit should be able to contain expected inflow.

7. *Water wells within 1/8 mile* Known, permitted water wells (based on State records) within a one-mile radius are shown on the attached map.

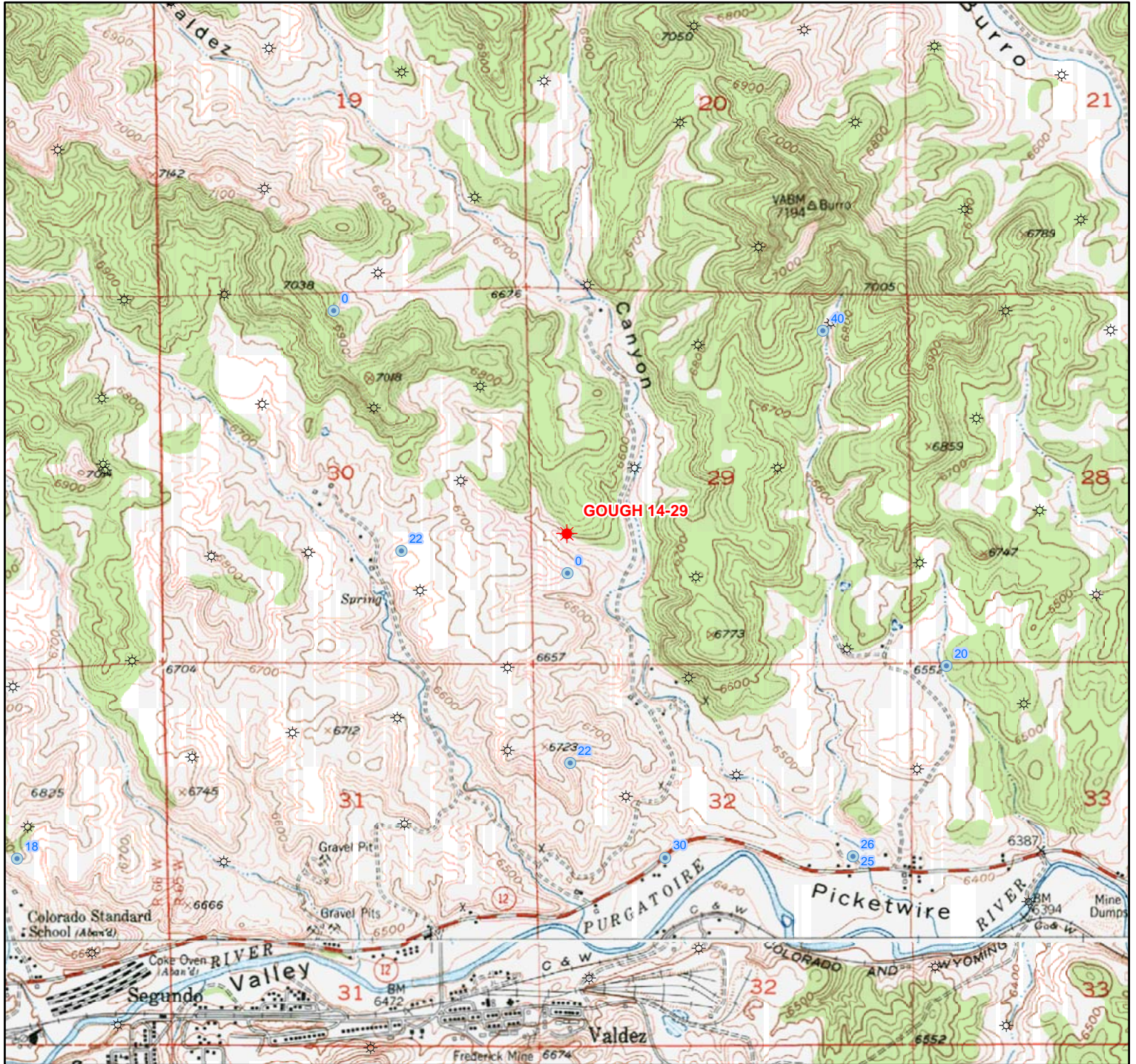
8. *Inspection and reporting.* Typically, water production and/or the unlined earthen pit is monitored at least once a day by Pioneer field personnel. All spills and/or releases will be reported in accordance with COGCC and CDPHE regulations.






Topographic Map

Gough 14-29

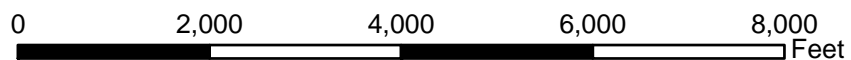
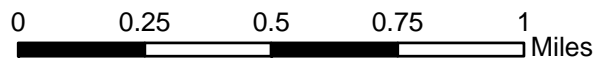
PIONEER
NATURAL RESOURCES



Legend

-  Permitted Well
-  Other Operator's Wells
-  Water Well
(Static Level ft)

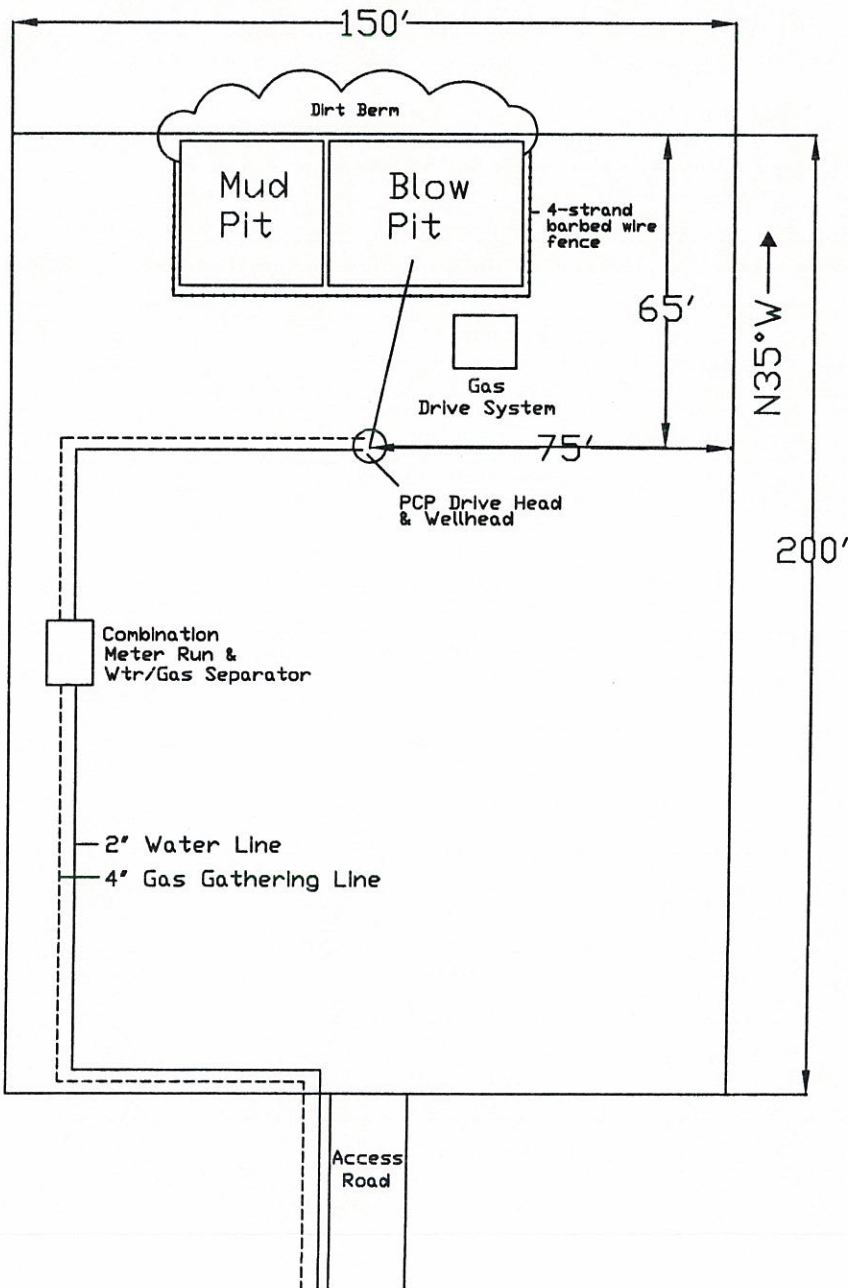
1:24,000



Projection: UTM
 Datum: NAD 1983
 Zone: 13N
 Units: Feet

PIONEER NATURAL RESOURCES USA, INC.
 WELLSITE/PRODUCTION EQUIPMENT LAYOUT
 GOUGH #14-29
 SWSW Section 29, T33S-R65W
 Las Animas County, Colorado

Note: Mud & Blow Pits will be converted to unlined evaporation pits for production



Note:
 Approx. Scale 1"=40'
 Water Line —————
 Gas Line - - - - -

6/23/05

State of Colorado
Oil and Gas Conservation Commission

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FOR OGCC USE ONLY

DRILL SITE/ACCESS ROAD RECLAMATION FORM

This form shall be submitted in duplicate with the application for permit-to-drill (OGCC Form 2) unless a Federal 13-point surface plan is included. Also required are a minimum of two photographs (site and access road). Soil and plant community information is from United States Natural Resources Conservation Services (USNRCS).

1. OGCC Operator Number: <u>10084</u>	4. Contact Name and Telephone: <u>Cheryl Johnson</u>	Complete the Attachment Checklist
2. Name of Operator: <u>PIONEER NATURAL RESOURCES USA, INC.</u>	No: <u>(303) 675-2616</u>	
3. Address: <u>1404 17th Street, Suite 1200</u>	Fax: <u>(303) 294-1275</u>	
City: <u>Denver</u> State: <u>CO</u> Zip: <u>80202</u>		
5. Well Name and No.: <u>Gough 14-29</u>	6. County: <u>Las Animas</u>	
7. Location (QtrQtr, Sec, Twp, Rng, Meridian): <u>SW/SW - 29 - 33S 65W 6th pm</u>		

Pre-Drilling Information
Current Land Use

8. Crop Land: Irrigated Dry Land Improved Pasture Hay Meadow CRP

9. Non-Crop Land: Rangeland Timber Recreational Other (describe): _____

10. Subdivided: Industrial Commercial Residential

Attach color photographs of drill site and access road; identify each photo by date, well name and location.

Soils

11. Soil map units from USNRCS survey: Sheet No: Madrid Soil Complex/Series No: LST

Soils Series Name: Lorencito Sarcillo Trujillo Horizon thickness (in inches): A: 0-5; B: AC: 4-16; C: Cr: 16-26

Soils Series Name: _____ Horizon thickness (in inches): A: _____; B: _____; C: _____

Plant Community

Complete this section only if operations are to be conducted upon non-crop land.

12. Plant species from: USNRCS or Field Observation Date of observation: 6/23/05

List individual species: Grass, thistle

13. Check one predominant plant community for the drill site:

Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye, Thistle)

Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)

Shrub and Brush Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)

Plains Deciduous Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)

Mountain Conifer Riparian (Spruce, Fir, Ponderosa Pine)

Evergreen Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon)

Aquatic (Bullrush, Sedges, Cattail, Arrowhead)

Tundra (Alpine, Willow, Currant, Raspberry)

Other (describe): _____

14. Was an Army Corps of Engineers Section 404 Permit filed? Yes No If yes, attach appropriate documentation.

Comments:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road; that I am familiar with the conditions which presently exist, that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Cheryl Johnson

Signed: Cheryl Johnson Title: Engineering Tech Date: 9-28-05

PIONEER NATURAL RESOURCES USA, INC.
UNLINED EARTHEN PIT APPLICATION
WELL/LOCATION: Gough 14-29
Scale: 1" = 5'

