

**Form 15-Additional Information**

received 11/29/2011  
Facility 426706

**Raton Basin**

**1. *Contacts***

**Primary Contact Person:**

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

**Local Contact Person:**

Duane Hiss  
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 a lined 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 lined earthen pit is located within the confines of the existing wellsite. 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 lined earthen pit under a CDPHE surface discharge permit.

**3. *Sensitive area determination.*** This proposed earthen pit shall be lined with a 30 mil Faille Finish Fabric Liner; no percolation of produced water shall occur from this lined pit.

**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 = 70 feet x 35 feet = 2450 sq. feet

Storage capacity = length x width x depth = 70 feet x 35 feet x 6 feet =  
14700 cubic feet. 14700 cubic feet x 1 barrel/5.615 cubic feet = 2617 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 = 3.5 barrel(s)/day for 2450 square feet of pit surface.

**Percolation rate.** Not applicable- no percolation.

*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 lined 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.

PIONEER NATURAL RESOURCES USA, INC.  
LINED EARTHEN PIT APPLICATION  
WELL/LOCATION: Erin 21-15  
Scale: 1" = 5'

