

District I  
1625 N. French Dr , Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S St Francis Dr , Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Department  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-144  
June 16, 2008

**For temporary pits, closed-loop systems, and below-grade tanks,** submit to the appropriate NMOCD District Office.  
**For permanent pits and exceptions** submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

**Pit, Closed-Loop System, Below-Grade Tank, or  
Proposed Alternative Method Permit or Closure Plan Application**

Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  
☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method

**Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request**

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

Operator: Devon Energy Production Company, L.P. OGRID #: 6137  
Address: 20 N. Broadway, Oklahoma City, OK 73102  
Facility or well name: NEBU 22M  
API Number: 30-039--30504 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr O (SW SE) Section 36 Township 31N Range 7W County: Rio Arriba  
Center of Proposed Design: Latitude 36.85083 Longitude -107.51951 NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC

Temporary: ☒ Drilling ☐ Workover

☐ Permanent ☐ Emergency ☐ Cavitation

☒ Lined ☐ Unlined

Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC

☐ Other \_\_\_\_\_ ☐ String-Reinforced

Seams: ☒ Welded ☐ Factory ☐ Other \_\_\_\_\_

Volume: 11,848 bbl Dimensions: L 130' x W 60' x D 12'

☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC

☐ Drying Pad ☐ Tanks ☐ Haul-off Bins ☐ Other \_\_\_\_\_

☐ Lined ☐ Unlined

Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC

☐ Other \_\_\_\_\_

Seams: ☐ Welded ☐ Factory ☐ Other \_\_\_\_\_

Volume: \_\_\_\_\_ bbl \_\_\_\_\_ yd<sup>3</sup>

Dimensions: Length \_\_\_\_\_ x Width \_\_\_\_\_

☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC

Volume: 80 bbl

Type of fluid: Produced Water

Tank Construction material: Steel

☐ Secondary containment with leak detection

☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off

☐ Visible sidewalls and liner

☐ Visible sidewalls only

☒ Other Double wall with visible sidewalls

Liner type: Thickness \_\_\_\_\_ mil ☐ HDPE ☐ PVC

☐ Other \_\_\_\_\_

**Fencing:** Subsection D of 19.15.17.11 NMAC

☐ Chain link, six feet in height, two strands of barbed wire at top

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

**Netting:** Subsection E of 19.15.17.11 NMAC

☐ Screen ☐ Netting ☐ Other \_\_\_\_\_

☒ Monthly inspections

**Signs:** Subsection C of 19.15.17.11 NMAC

☐ 12"x24", 2' lettering, providing Operator's name, site location, and emergency telephone numbers

☒ Signed in compliance with 19.15.3.103 NMAC

☐ **Alternative Method:**

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

**Administrative Approvals and Exceptions:**

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

**Please check a box if one or more of the following is requested, if not leave blank:**

☒ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

**Siting Criteria (regarding permitting):** 19.15.17.10 NMAC

**Instructions:** *The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.*

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

*(Applies to temporary, emergency, or cavitation pits and below-grade tanks)*

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☒ No

☐ NA

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

*(Applies to permanent pits)*

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

☒ NA

Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☒ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☒ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☒ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☒ No

**Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC

**Instructions:** *Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

- ☒ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☒ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☒ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

**Closed-loop Systems Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC

**Instructions:** *Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Geologic and Hydrogeologic Data (required for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (required for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

NMAC

☐ Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_

**Permanent Pits Permit Application Checklist:** Subsection B of 19.15.17.9 NMAC

**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

**Proposed Closure:** 19.15.17.13 NMAC

Type: ☒ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ Permanent Pit ☒ Below-grade Tank ☐ Closed-loop System ☐ Alternative

Proposed Closure Method: ☒ Waste Excavation and Removal (Below-Grade Tank)  
☒ On-site Closure Method (only for temporary pits and closed-loop systems)  
☒ In-place Burial ☐ On-site Trench Burial  
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

**Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC

**Instructions:** Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No  
☐ NA

Ground water is between 50 and 100 feet below the bottom of the buried waste

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No  
☐ NA

Ground water is more than 100 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☒ Yes ☐ No  
☐ NA

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☒ No

Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☒ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☒ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☒ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☒ No

**Waste Excavation and Removal Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

**Waste Removal Closure For Closed-loop Systems That Utilize Haul-off Bins Only:** (19.15.17.13.D NMAC) *Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings.*

Disposal Facility Name: \_\_\_\_\_

Disposal Facility Permit Number: \_\_\_\_\_

**On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☒ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Construction and Design of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☒ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- ☒ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

**Operator Application Certification:**

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): \_\_\_\_\_ Melisa Castro

Title: \_\_\_\_\_ Senior Staff Operations Technician

Signature: \_\_\_\_\_

Date: \_\_\_\_\_ July 24, 2008

e-mail address: \_\_\_\_\_ melisa.castro@dvn.com

Telephone: \_\_\_\_\_ (405) 552-7917

**OCD Approval:** ☒ Permit Application (including closure plan) ☐ Closure Plan (only)

OCD Representative Signature: \_\_\_\_\_

Approval Date: \_\_\_\_\_ 8-5-08

Title: \_\_\_\_\_

Enviro / spc

OCD Permit Number: \_\_\_\_\_

**Closure Report (required within 60 days of closure completion):** Subsection K of 19.15.17.13 NMAC

☐ Closure Completion Date: \_\_\_\_\_

**Closure Method:**

- ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method
- ☐ If different from approved plan, please explain.

**Closure Report Attachment Checklist:** *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Proof of Closure Notice
- ☐ Proof of Deed Notice (if applicable)
- ☐ Plot Plan
- ☐ Confirmation Sampling Analytical Results
- ☐ Waste Material Sampling Analytical Results
- ☐ Disposal Facility Name and Permit Number
- ☐ Soil Backfilling and Cover Installation
- ☐ Re-vegetation Application Rates and Seeding Technique
- ☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude \_\_\_\_\_

Longitude \_\_\_\_\_

NAD: ☐ 1927 ☐ 1983

**Operator Closure Certification:**

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_

Telephone: \_\_\_\_\_

District I  
PO Box 1980, Hobbs NM 88241-1980  
District II  
PO Drawer KK, Artesia, NM 87211-0719  
District III  
1000 Rio Brazos Rd, Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number <b>30039-30504</b>		2 Pool Code <b>72319/80690</b>		3 Pool Name <b>Blanco Mesavilla / S Los Pinos F/S Pictured Cliffs</b>		
4 Property Code <b>19041</b>		5 Property Name <b>NEBU</b>			6 Well Number <b># 22M</b>	
7 OGRID No <b>4137</b>		8 Operator Name <b>Devon Energy Production Company, L.P.</b>			9 Elevation <b>6476</b>	

10 Surface Location

UL or Lot No <b>O</b>	Section <b>36</b>	Township <b>31 N</b>	Range <b>7 W</b>	Lot Idn	Feet from the <b>660</b>	North/South line <b>SOUTH</b>	Feet from the <b>1805</b>	East/West line <b>EAST</b>	County <b>Rio Arriba</b>
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11 Bottom Hole Location If Different From Surface

7 UL or lot no <b>I</b>	Section <b>36</b>	Township <b>31 N</b>	Range <b>7 W</b>	Lot Idn	Feet from the <b>1880</b>	North/South line <b>SOUTH</b>	Feet from the <b>760</b>	East/West line <b>EAST</b>	County <b>Rio Arriba</b>
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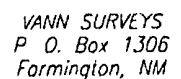
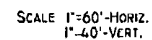
12 Dedicated Acres <b>5/2 - 320</b>	13 Joint or Infill	14 Consolidation Code	15 Order No
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16	5280(R)	36	5276(R)	Bottom Hole Location 1880' F/SL 760' F/EL	Azimuth - 40°35' 1606'	1805'	660'	5280(R)	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature <i>[Signature]</i> Printed Name <b>Melissa Castro</b> Title <b>SR Staff Operations Technician</b> Date <b>March 19, 2008</b>	
									18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief  Date of Survey <b>June 26, 2007</b> Signature and Seal of Professional Surveyor <b>GARY D. VANN</b> <b>NEW MEXICO</b> <b>REGISTERED PROFESSIONAL LAND SURVEYOR</b> <b>7016</b> Certificate Number	

(R) - GLO Record

Lat: 36.85058°  
Long: 107.51948° (83)



## **Hydrogeological Report for the NEBU 22M**

### **Geology:**

The stratigraphic sequence of Paleocene and Eocene rocks in the eastern part of the San Juan basin is the Nacimiento and Animas formation overlain by the San Jose Formation. The San Jose Formation of Eocene age was defined by Simpson (1948a, b). It occurs in New Mexico and Colorado and its outcrop forms the land surface over much of the central basin area. It overlies the Nacimiento Formation in the area generally south of the State line (Fassett, 1974. P229). The Basal contact of the San Jose varies with location in the basin. This contact is a disconformity along the basin margins, and it is an angular unconformity along the Nacimiento uplift; the contact is conformable in the central basin. The Nacimiento is a sequence of varicolored beds of sandstone and mudrock that attains a thickness of as much as 120 m thick (Baltz, 1967).

The Animas Formation occupies a stratigraphic position similar to that of the OJO Alamo and Nacimiento Formations. The Animas strata comprise a general fining upward sequence of volcanoclastic conglomerates and sandstones, with arkosic conglomerates and sandstones near the top. The upper member of the Animas has been shown to interfinger with the Nacimiento in its eastern (Dane, 1946) and western (Barnes et al., 1954) outcrop belts. Subsurface correlation of these formations has not been carried out in any detail because of the difficulty of recognizing their contact on Electric logs (Fassett and Hinds, 1971:33).

The nature of the contact between the lower Eocene San Jose Formation and the Nacimiento formation north of latitude 36 degrees 45'N has been described as conformable (Barnes et al., 1954, Stone et al., 1983 25-26), Whereas at latitude 36 it has been shown to be unconformable (Baltz, 1967; Lucas et al., 1981) Contact relationships between the San Jose and Animas Formations in the northernmost San Juan Basin have been shown to be intertonguing (Smith, 1988). The San Jose formation was deposited in various fluvial type environments. In general the unit consists of an interbedded sequence of sandstone siltstone and variegated shale, the sandstones are buff to yellow and rusty-colored crossbedded very fine to coarse grained arkose, which are locally conglomeratic and contain abundant silicified wood. The thickness of the San Jose Nacimiento and Animas Formations is ranges from zero to more than 3,500 feet in the east central part of the structural basin. The bottom of the Nacimiento and Animas Formations decreases from a maximum altitude of more than 8 000 feet above sea level along the northeastern basin rim to less than 4,000 feet above sea level in the east central part of the basin.

### **Hydraulic Properties:**

The San Jose, Nacimiento, and Animas Formations are a source of water for public-supply, commercial, private-domestic, and livestock use in areas where drilling depths and pumping levels are economically feasible and where water quality is suitable. Water in the San Jose Nacimiento and Animas Formations occurs under both water table and

artesian conditions. Recharge to the aquifer is from infiltration of precipitation and stream flow on outcrops and from vertical upward leakage of water from underlying units. Transmissivity data for the San Jose Nacimiento and Animas Formations are minimal-Values of 40 and 120 feet squared per day were determined from two aquifer tests (Stone and others 1983 table 5). The reported or measured discharge from 79 water wells completed in the San Jose, Nacimiento, and Animas Formations ranges from 1 to 61 gallons per minute and the median is 6 gallons per minute. The specific capacity of 12 of these wells ranges from 0.03 to 2.30 gallons per minute per foot of drawdown and the median is 0.23 gallon per minute per foot of drawdown. Water quality data described in this section are from the NWIS data base and were collected during 1938. 84 Well records were checked to assure to the extent possible that a particular sample represents water only from the San Jose Nacimiento and Animas Formations and not a mixture of water from other aquifers. Locally however these formations may have substantial differences in the concentration of some water quality constituents due in part to differences in rock characteristics as described in the Geology section.

**Reference:**

USGS Hydrologic investigations atlas HA-720-A plate 1,2  
Lucas, Spencer G and Smith, Larry N. 1991, Stratigraphy, Sedimentology and Paleontology of the Lower Eocene San Jose Formation in the central portion of the San Juan basin, Northwestern New Mexico, New Mexico Bureau of Mines & Mineral Resources Bulletin 126. 6-7p.



## **Siting Requirements for NEBU 22M**

The NEBU 22M is not located in an unstable area per topographic map attached.

There is no continuously flowing watercourse near the proposed location.

The proposed well location is neither near any private and/or public buildings nor any private and/or public water sources.

The proposed well location is not located within any incorporated municipal boundaries nor municipal fresh water well field.

There are no wetlands located near the proposed well location as per the wetlands map attached.

Per the NM Bureau of Geology and Mineral Resources map attached there are no locations of any mines, mills or quarries near the proposed well location.

The FEMA floodplain map attached indicates the proposed well location is defined as outside of the 500 Year Flood Plain.

There will be no excavated material placed within 300 feet of a flowing watercourse or within 200 feet of any other defined water course.

***New Mexico Office of the State Engineer***  
**POD Reports and Downloads**

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Township: 31N | Range: 07W | Sections: 36,,25,,26,,35

NAD27 X: | Y: | Zone: | ☐ Search Radius:

County: | ☐ Basin: | ☐ Number: Suffix:

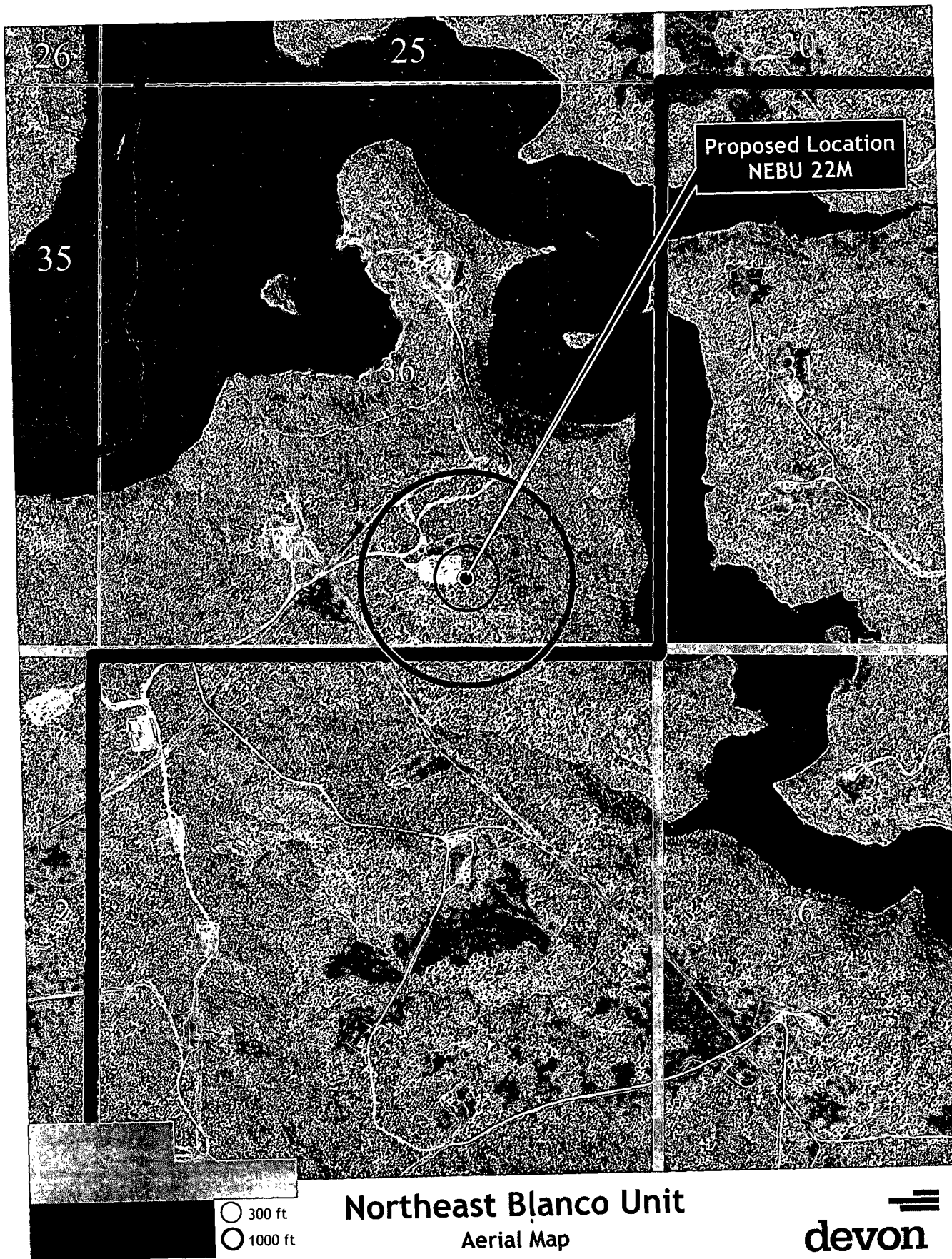
Owner Name: (First)  (Last)  ☐ Non-Domestic ☐ Domestic  
☒ All

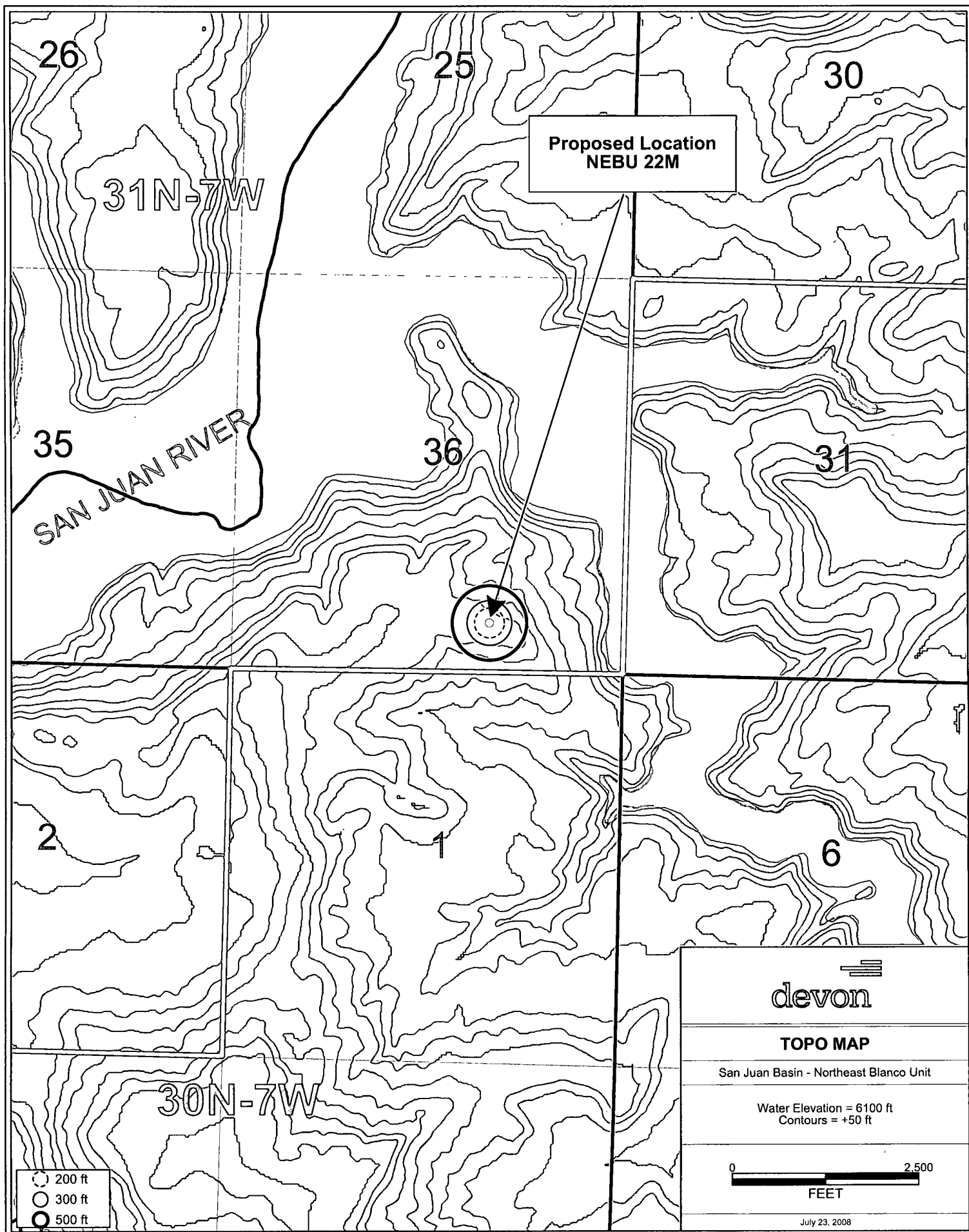
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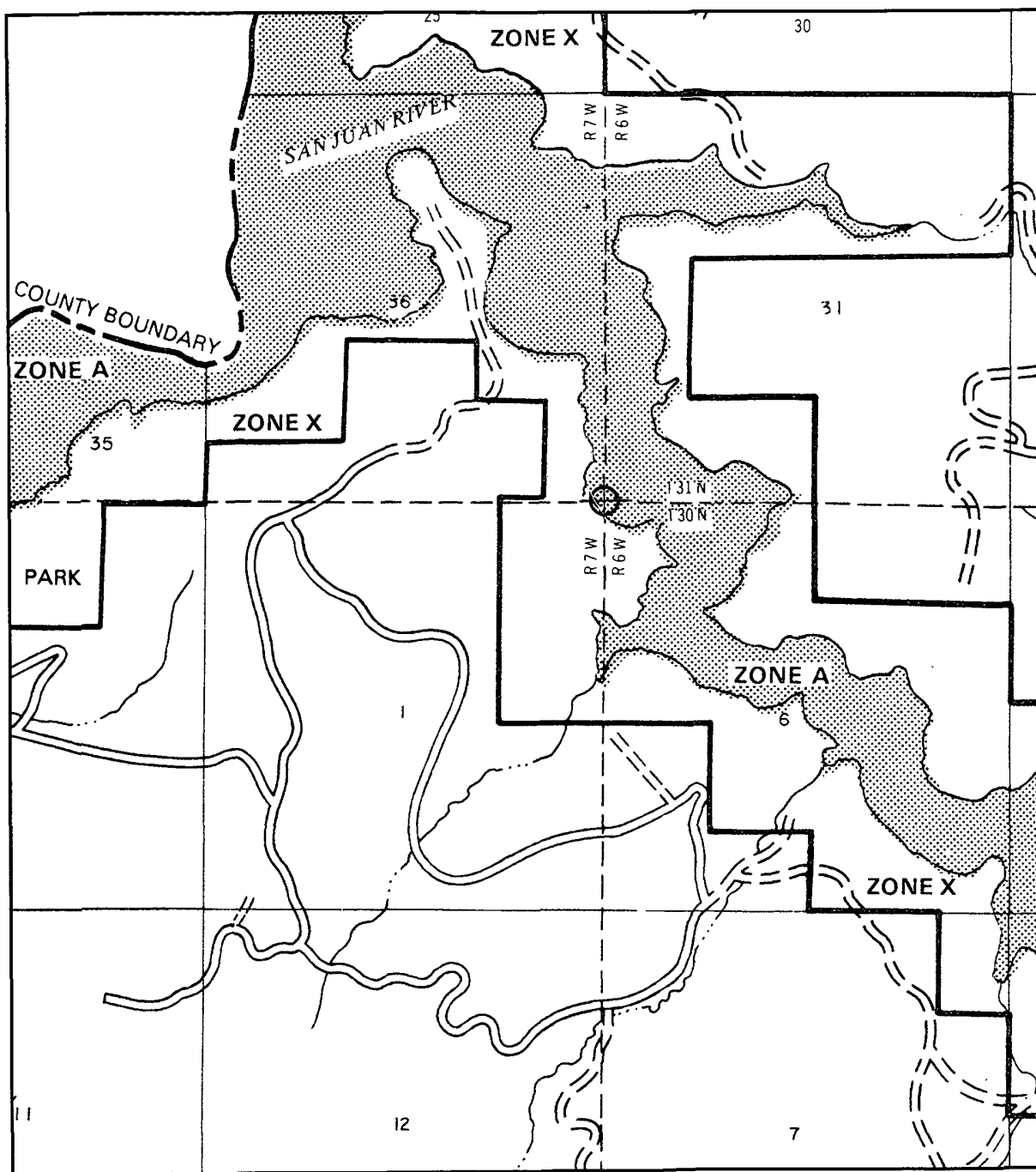
AVERAGE DEPTH OF WATER REPORT 07/23/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg

No Records found, try again





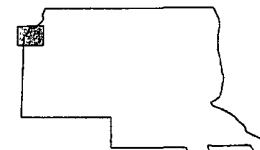


NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
FLOOD INSURANCE RATE MAP

RIO ARRIBA COUNTY,  
NEW MEXICO  
UNINCORPORATED AREAS

PANEL 200 OF 1325  
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

COMMUNITY-PANEL NUMBER

350049 0200 B

EFFECTIVE DATE:

JANUARY 5, 1989



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

# NEBU 22M Wetlands Map



## Legend

- Interstate Major Roads
- Other Road
- Interstate
- State highway
- US highway
- Roads
- Cities
- USGS Quad Index 24K Lower 48 Wetland Polygons
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- Lower 48 Available Wetland Data**
- Non-Digital
- Digital
- No Data
- Scan
- NHD Streams
- Counties 100K
- States 100K
- South America
- North America



Scale: 1:30,289

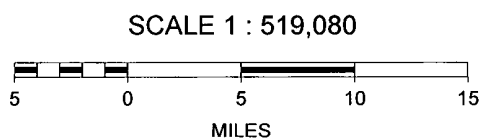
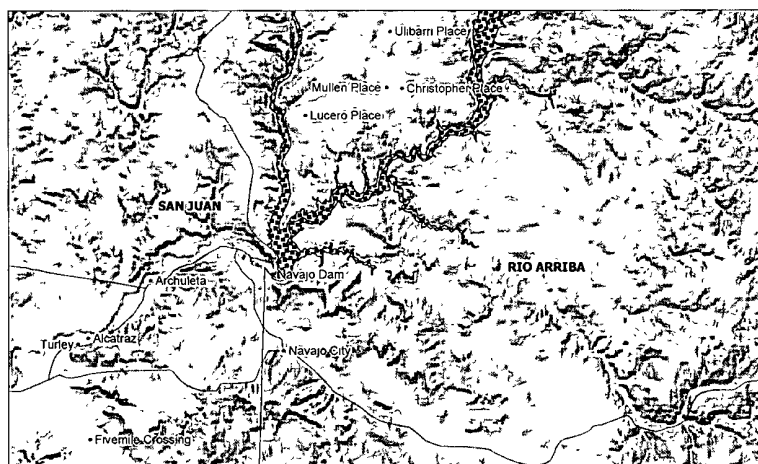


Map center: 36° 51' 35" N, 107° 31' 16" W

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

# NEBU 22M Mines, Mills and Quarries Web Map

Mines, Mills & Quarries Commodity Groups	
△	Aggregate & Stone Mines
◆	Coal Mines
★	Industrial Minerals Mines
▼	Industrial Minerals Mills
▣	Metal Mines and Mill Concentrate
■	Potash Mines & Refineries
⌘	Smelters & Refinery Ops.
✦	Uranium Mines
⦿	Uranium Mills



**Castro, Melisa**

---

**From:** Martinez, Pete [PMartinez@slo.state.nm.us]  
**Sent:** Wednesday, July 23, 2008 5:15 PM  
**To:** Castro, Melisa  
**Cc:** Mariano, Michael; Dawson, Scott  
**Subject:** RE: NEBU 22M Temporary Pit Closure Notification

Ms. Castro, this will acknowledge receipt of your notice of pit closure on the NEBU 22M API # 30-039-30504.  
Pete Martinez  
Oil, Gas & Minerals Division  
(505) 827-5791

**From:** Dawson, Scott  
**Sent:** Wednesday, July 23, 2008 2:01 PM  
**To:** Martinez, Pete  
**Subject:** RE: NEBU 22M Temporary Pit Closure Notification

Pete would get this since it is in an oil and gas Unit - I'll send it on to him.

Thanks,

S----

---

**From:** Mariano, Michael  
**Sent:** Wednesday, July 23, 2008 1:39 PM  
**To:** Dawson, Scott  
**Subject:** FW: NEBU 22M Temporary Pit Closure Notification

Scott,  
Who should get this type of e-mail?  
MM

---

**From:** Castro, Melisa [mailto:Melisa.Castro@devon.com]  
**Sent:** Wednesday, July 23, 2008 1:31 PM  
**To:** Mariano, Michael  
**Subject:** NEBU 22M Temporary Pit Closure Notification

Devon Energy Corporation  
20 North Broadway  
Oklahoma City, OK 73102-8260

405 552 7917 Phone  
www.devonenergy.com

July 23, 2008

IN RE: NEBU 22M  
API # 30-039-30504  
SW SE 660' FSL & 1,805' FEL  
Sec. 36, T31N, R7W  
Rio Arriba County, New Mexico

7/24/2008



VIA EMAIL

Dear Mr. Mariano,

This submittal is pursuant to Rule 19.15.17.13 requiring operators to notify the surface owners of an on-site burial of a temporary pit. Devon Energy Production Company, L.P. is hereby providing written documentation of our intention to close the temporary pit associated with the aforementioned location by means of in place on-site burial.

Please feel free to contact me with any questions or require further information. My contact information is listed below.

Respectfully,

Melisa S. Castro  
Devon Energy Production Company, L.P.  
Senior Staff Operations Technician  
405-323-3184 - Cell.  
405-323-1357 - Fax  
[Melisa.Castro@devon.com](mailto:Melisa.Castro@devon.com)

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**Confidentiality Warning:** This message and any attachments are intended only for the use of the intended recipient(s), are confidential, and may be privileged. If you are not the intended recipient, you are hereby notified that any review, retransmission, conversion to hard copy, copying, circulation or other use of all or any portion of this message and any attachments is strictly prohibited. If you are not the intended recipient, please notify the sender immediately by return e-mail, and delete this message and any attachments from your system.

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7/24/2008

**Devon Energy Production Company, L.P.**  
**San Juan Basin**  
**Temporary Pit Design and Construction Plan**

In accordance with Rule 19.15.17.11 NMAC the following information describes the design and construction of temporary pits on Devon Energy Production Company, L.P. locations. This is Devon Energy's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

**General Plan**

- 1) Devon will design and construct a temporary pit to contain liquids and solids as well as prevent contamination of fresh water and protect public health and the environment.
- 2) Prior to constructing the pit, topsoil will be stockpiled in the construction zone for later use in restoration.
- 3) Devon will post a well sign, in compliance with 19.15.3.103 NMAC, on the well site prior to construction of the temporary pit. The sign will list the Operator on record as the operator, the location of the well site by unit letter, section, township, range, and emergency telephone numbers.
- 4) Devon will construct all new fences utilizing 48" steel mesh field-fence (hogwire) on the bottom with a single strand of barbed wire on top. T-posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T-post. Temporary pits will be fenced at all times excluding drilling or workover operations, when the front side of the fence will be temporarily removed for operational purposes.
- 5) Devon shall construct the pit so that the slopes are no steeper than two horizontal feet to one vertical foot.
- 6) Pit walls will be walked down by a crawler type tractor following construction.
- 7) All temporary pits will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.
- 8) Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.
- 9) All liners will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep.
- 10) Devon will minimize liner seams and orient them up and down, not across a slope. Factory seams will be used when possible. Devon will ensure all field seams are welded by qualified personnel. Field seams will be overlapped four to six inches and will be oriented parallel to the line of maximum slope. Devon will minimize the number of field seams in corners and irregularly shaped areas.
- 11) The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
- 12) The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some areas.
- 13) The volume of the pit shall not exceed 10 acre-feet, including freeboard.
- 14) Temporary blow pits will be constructed to allow gravity flow to discharge into lined drill pit.
- 15) Devon will not allow freestanding liquids to remain on the unlined portion of a temporary blow pit.

**Devon Energy Production Company, L.P.**  
**San Juan Basin**  
**Temporary Pit Maintenance and Operating Plan**

In accordance with Rule 19.15.17 NMAC the following information describes the maintenance and operation of temporary pits on Devon Energy Production Company, L.P. locations. This is Devon Energy's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

**General Plan**

- 1) Devon will operate and maintain a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
- 2) Devon will conserve drilling fluids by transferring liquids to pits ahead of the rigs whenever possible. All other drilling fluids will be disposed at Basin Disposal Inc., permit # NM-01-005.
- 3) Devon will not discharge or store any hazardous waste in any temporary pit.
- 4) If any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then Devon shall notify the Aztec Division office by phone or email within 48 hours of the discovery and repair the damage or replace the liner.
- 5) If a leak develops below the liquid's level, Devon shall remove all liquids above the damaged liner within 48 hours and repair or replace the liner. Devon shall notify the Aztec Division office by phone or email within 48 hours of the discovery for leaks less than 25 barrels Devon shall notify the Aztec Division office as required pursuant to Subsection B of 19.15.3.116 NMAC shall be reported within twenty-four (24) hours of discovery of leaks greater than 25 barrels. In addition, immediate verbal notification pursuant to Subsection B, Paragraph (1), and Subparagraph (d) of 19.15.3.116 NMAC shall be reported to the division's Environmental Bureau Chief.
- 6) The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
- 7) The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
- 8) Devon shall immediately remove any visible layer of oil from the surface of the temporary pit after cessation of a drilling or workover operation. Oil absorbent booms will be utilized to contain and remove oil from the pit's surface. An oil absorbent boom will be stored on-site until closure of the pit.
- 9) Only fluids generated during the drilling or workover process may be discharged into a temporary pit.
- 10) Devon will maintain the temporary pit free of miscellaneous solid waste or debris.
- 11) During drilling or workover operations, Devon will inspect the temporary pit at least once daily to ensure compliance with this plan. Inspections will be logged and logs maintained for review. Devon will file this log with the Aztec Division office upon closure of the pit.
- 12) After drilling or workover operations, Devon will inspect the temporary pit weekly so long as liquids remain in the temporary pit. A log of the inspections will be stored at Devon's office and will be filed with the Aztec Division office upon closure of the pit.
- 13) Devon shall maintain at least two feet of freeboard for a temporary pit.
- 14) Devon shall remove all free liquids from a temporary pit within 30 days from the date the operator releases the drilling rig.
- 15) Devon shall remove all free liquids from a cavitation pit within 48 hours after completing cavitation. Devon may request additional time to remove liquids from the Aztec Division office if it is not feasible to remove liquids within 48 hours.

# **Devon Energy Production Company, L.P.**

## **San Juan Basin**

### **Temporary Pit Closure Plan**

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of temporary pits on Devon Energy Production Company, L.P. locations. This is Devon Energy's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of pit closure. Closure report will be filed on C-144 and incorporate the following:

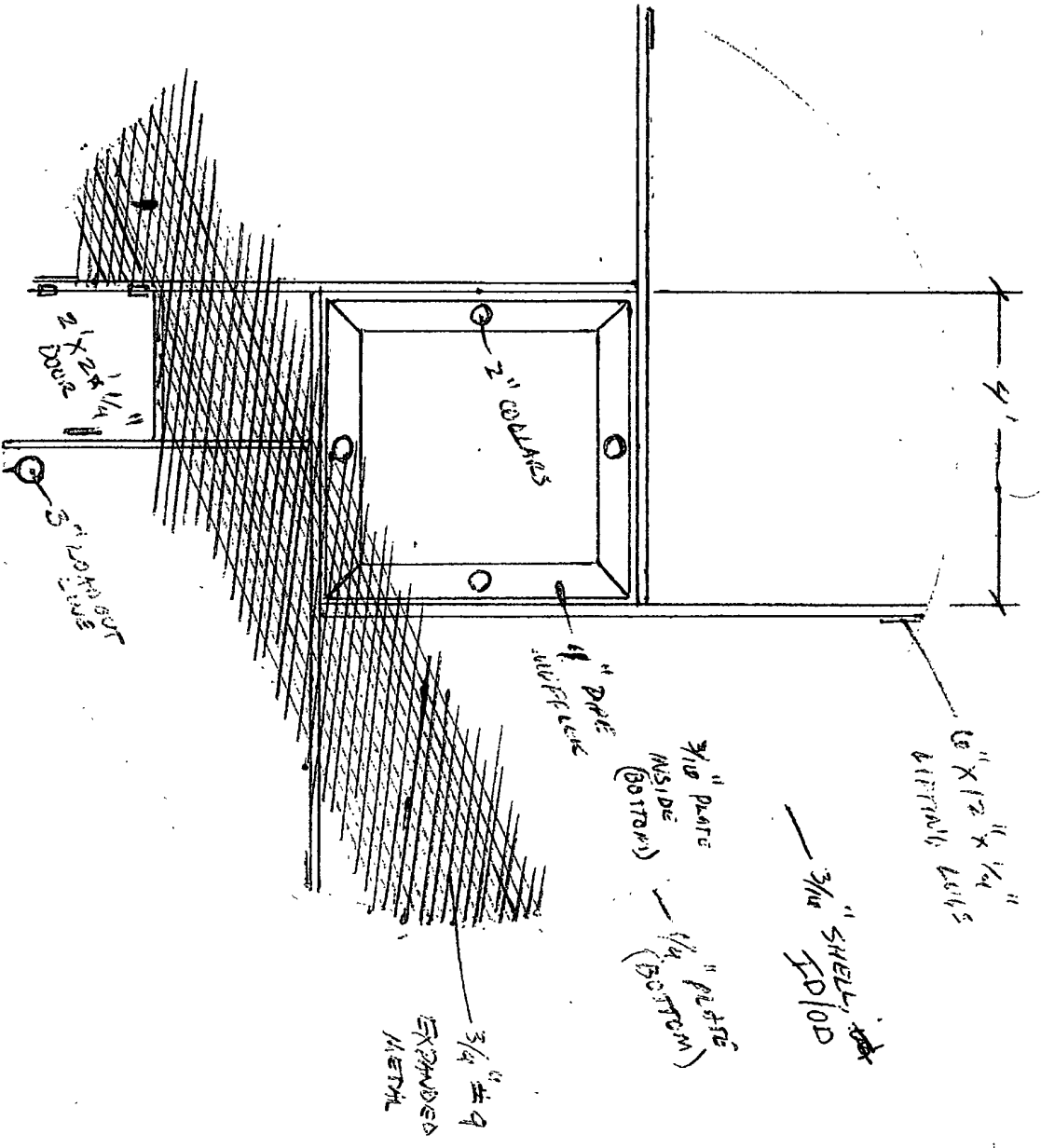
- Details on Capping and Covering, where applicable
- Plot Plan (Pit Diagram)
- Inspection Logs
- Sampling Results
- C-105
- Copy of Deed Notice will be filed with the appropriate County Clerk

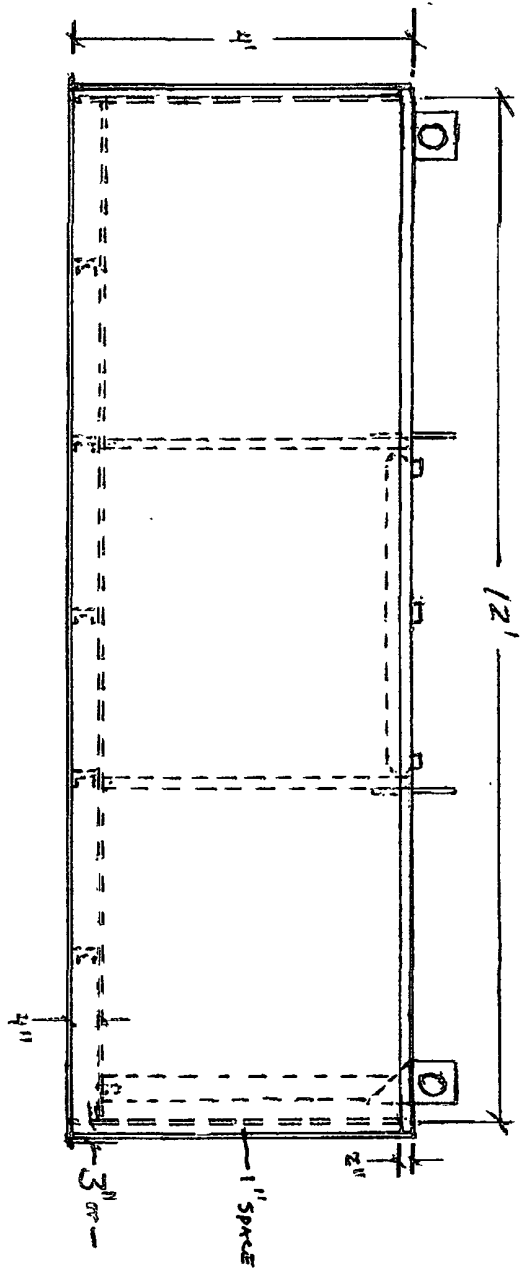
#### **General Plan**

- 1) All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division-approved facility or recycled, reused, or reclaimed in a manner that the Aztec Division office approves.
- 2) The preferred method of closure for all temporary pits will be on-site, in-place burial, assuming that all criteria listed in sub-section (B) of 19.15.17.13 are met.
- 3) The surface owner shall be notified of Devon's proposed closure plan using a means that provides proof of notice i.e., Certified Mail, return receipt requested or email when applicable.
- 4) Within 6 months of the Rig Off status occurring Devon will ensure that temporary pits are closed, re-contoured, and reseeded.
- 5) Notice of Closure will be given to the Aztec Division office between 72 hours and one week of closure via email, or verbally. The notification of closure will include the following:
  - Operators Name
  - Location by Unit Letter, Section, Township, and range. Well name and API number
- 6) Liner of temporary pit shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "ALL" of the liner i.e., edges of liner entrenched or buried. All excessive liner will be disposed of at a licensed disposal facility.
- 7) Pit contents shall be mixed with non-waste containing, earthen material in order to achieve appropriate solidification. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed as safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
- 8) A five point composite sample will be taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., Dig and Haul. Disposal facility to be utilized should this method be required will be Envirotech, Permit No. NM01-0011.

Components	Test Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	500 or Background

- 9) Upon completion of solidification and testing, the pit area will be backfilled with compacted, non-waste containing, earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
- 10) Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Rep-shaping will include drainage control, ponding prevention, and erosion prevention. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
- 11) Notification will be sent to OCD when the reclaimed area is seeded.
- 12) Devon shall seed the disturbed areas during the first growing season after the operator closes the pit. Seeding will be accomplished via broadcast or drilling when topography permits. BLM of Forest Service stipulated seed mixes will be used on all Federal Lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.
- 13) Devon shall mark the center of an on-site burial with a steel plate. The steel marker shall not be less than four inches in diameter and shall be cemented in a three-foot deep hole at a minimum. The marker will be flush with the ground for safety as well as easy access on the well pad. The marker will include a threaded collar to be used for future abandonment. On the top of the marker a steel 12" plate will mark the on-site burial of the temporary pit. The plate itself will be easily removable where a 4' riser can then be installed into the top of the collar and welded marking the pits location once all wells on the pad have been abandoned. The operator name, lease name and well number with location, including the unit letter, section, township and range, and that the plate designates an on-site burial location shall be stamped or otherwise permanently engraved into the metal of the steel plate.
- 14) A C-105 shall be used to report the exact location of the on-site burial with the Aztec Division office.
- 15) A deed notice identifying the exact location of the on-site burial with the appropriate county clerk where the on-site burial occurs.





**Devon Energy Production Company, L.P.**  
**San Juan Basin**  
**Below Grade Tank Design and Construction Plan**

In accordance with Rule 19.15.17 NMAC the following information describes the design and construction of below grade tanks on Devon Energy Production Company, L.P. locations. This is Devon Energy's standard procedure for all below grade tanks (BGT). A separate plan will be submitted for any BGT which does not conform to this plan.

**General Plan**

- 1) Devon will design and construct a BGT to contain liquids to prevent contamination of fresh water and protect public health and the environment.
- 2) Devon will use the general location sign posted on location. If no general sign is posted a separate sign at the location of the BGT will be provided.
- 3) Devon shall construct fencing around the BGT using 4 foot hog wire fencing topped with a pipe top rail. A six foot chain link fence topped with three strands of barbed wire will be used if the well location is within 1000 feet of a permanent residence, school, hospital, institution or church.
- 4) Devon will construct an expanded metal covering on the top of the BGT.
- 5) Devon shall ensure that a BGT is constructed of materials resistant to the BGT's particular contents and resistant to damage from sunlight.
- 6) Devon shall have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the tank bottom.
- 7) Devon shall construct a BGT to prevent overflow and the collection of surface water run-on.
- 8) Devon will construct and use BGT's having double walls. The BGT side walls will be open with a plug for visual inspection for leaks. The bottom shall be elevated with the use of gravel to raise the BGT above the underlying ground surface to prevent damage to the bottom of the BGT.
- 9) The general specification for design and construction are attached in the Devon document.



**Devon Energy Production Company, L.P.**  
**San Juan Basin**  
**Below Grade Tank Maintenance and Operating Plan**

In accordance with Rule 19.15.17 NMAC the following information describes the maintenance and operation of below grade tanks on Devon Energy Production Company, L.P. locations. This is Devon Energy's standard procedure for all below grade tanks. A separate plan will be submitted for any BGT which does not conform to this plan.

**General Plan**

- 1) Devon will operate and maintain a BGT to contain liquids and solids as well as prevent contamination of fresh water to protect public health and the environment.
- 2) Devon shall not allow a BGT to overflow or allow surface water run-on to enter the BGT.
- 3) Devon shall continuously remove any visible or measurable layer of oil from the fluid surface of a BGT in an effort to prevent significant accumulation of oil overtime.
- 4) Devon shall inspect the BGT at least once a month and maintain a written record of each inspection for five years.
- 5) Devon shall maintain adequate freeboard to prevent overtopping of the BGT.

**Devon Energy Production Company, L.P.**  
**San Juan Basin**  
**Below Grade Tank Closure Plan**

In accordance with Rule 19.15.17.12 NMAC the following information describes the closure requirements of a below grade tank on Devon Energy Production Company, L.P. locations. This is Devon Energy's standard procedure for all below grade tanks (BGT). A separate plan will be submitted for any BGT which does not conform to this plan.

**General Plan**

- 1) Devon shall close a BGT within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.
- 2) Devon shall close a permitted BGT within 60 days of cessation of the BGT operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on C-144.
- 3) Devon shall remove liquids and sludge from a BGT prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility.
- 4) Devon shall remove the BGT and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.
- 5) If there is any on-site equipment associated with a BGT, then Devon shall remove the equipment, unless the equipment is required for some other purpose.
- 6) A five point composite sample will be taken of the pit from any area that is wet, discolored or showing other evidence of a release and tested for the following as well as notifying the Aztec District office of the results on form C-141. Should it be determined that a release has occurred Devon shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

Components	Test Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	100
Chlorides	EPA 300.1	250 or Background

- 7) Should contamination be confirmed by field sampling Devon will follow the "Guidelines For Remediation Of Leaks, Spills and Releases" NMOCD August 1993 when remediation contaminants identified.
- 8) If the sampling results demonstrate that there has been no release or that a release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then Devon shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division prescribed soil cover; re-contour and re-vegetate the site.
- 9) Notice of Closure will be given to the Aztec Division office between 72 hours and one week of closure via email, or verbally. The notification of closure will include the following:
  - Operator's Name
  - Location by Unit Letter, Section, Township, and Range. Well name and API number
- 10) All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the BGT. Closure report will be filed on C-144 and incorporate the following:

- Details on Capping and Covering, where applicable
  - Inspection Reports
  - Sampling Results
- 11) Re-contouring of the location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control to prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface fitting the natural landscape.
  - 12) Devon shall seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via broadcast or drilling when topography permits. BLM of Forest Service stipulated seed mixes will be used on all Federal Lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.
  - 13) A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
  - 14) The surface owner shall be notified of Devon's closing of the BGT as per the approved closure plan using certified mail with return receipt requested or via email.