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

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 Modification to an existing permit Closure plan only submitted for an existing permitted or non-permitted 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 423A		
U/L or Qtr/Qtr _ I / NE SE _ Section _ 8 _ Township _ 30N _ Range _ 7W _ County: _ Rio Arriba Center of Proposed Design: Latitude36.82439 _ Longitude107.58879 _ NAD: ☐ 1927 ☐ 1983 _ Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment		
Z Pit: Subsection F or G of 19.15.17.11 NMAC Temporary: ☑ Drilling ☐ Workover ☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☑ Lined ☐ Unlined Liner type: Thickness20mil ☑ LLDPE ☐ HDPE ☐ PVC ☐ Other ☐ String-Reinforced Liner Seams: ☑ Welded ☐ Factory ☐ Other Volume:11,848bbl Dimensions: L_130'x W_60'x D_12'		
Closed-loop System: Subsection H of 19.15.17.11 NMAC Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) Drying Pad Above Ground Steel Tanks Haul-off Bins Other Drying Pad Unlined Liner type: Thickness mil LLDPE HDPE PVC Other CEIVE CEIVE		
Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume:		
5. Alternative Method:		

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

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specifySteel Mesh Fence with single strand barbed wire	hospital,
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) Screen Netting Other Monthly inspections (If netting or screening is not physically feasible)	
8. Signs: Subsection C of 19.15.17.11 NMAC ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers ☐ Signed in compliance with 19.15.3.103 NMAC	
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 of consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
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 accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying above-grade tanks associated with a closed-loop system.	priate district oproval.
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 significant watercourse or 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 (Please complete Boxes 14 through 18, if applicable) - 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:
12. 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 (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations (only 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 (Please complete Boxes 14 through 18, if applicable) - 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:
Previously Approved Operating and Maintenance Plan API Number: (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)
13.
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 H₂S, 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
14. Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative
Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only)
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)
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 G of 19.15.17.13 NMAC

16. Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Instructions: Please indentify the facility or facilities for the disposal of liquids, drillifacilities are required.	Tanks or Haul-off Bins Only: (19.15.17.13.D) ing fluids and drill cuttings. Use attachment if mo	NMAC) ore than two
•	oosal Facility Permit Number:	
	posal Facility Permit Number:	
Will any of the proposed closed-loop system operations and associated activities occur of Yes (If yes, please provide the information below) \(\bigcap \) No	on or in areas that will not be used for future service	ce and operations?
Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection G	19.15.17.13 NMAC	
tr. Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closus or ovided below. Requests regarding changes to certain siting criteria may require aductions of environmental Bure of the Santa Fe Environmental Bure demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guited.	ministrative approval from the appropriate distric eau office for consideration of approval. Justific	ct office or may be
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 to the state of the State Engineer - iWATERS database search; USGS; Data obtained to the state of		☐ 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 obta		☐ 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 to the state of the State Engineer - iWATERS database search; USGS; Data obtained to the state of the State Engineer - iWATERS database search; USGS; Data obtained to the state of the State Engineer - iWATERS database search; USGS; Data obtained to the state of the State Engineer - iWATERS database search; USGS; Data obtained to the state Engineer - iWATERS database search; USGS; Data obtained to the state Engineer - iWATERS database search; USGS; Data obtained to the state Engineer - iWATERS database search; USGS; Data obtained to the state Engineer - iWATERS database search; USGS; Data obtained to the state Engineer - iWATERS database search; USGS; Data obtained to the state Engineer - iWATERS database search; USGS; Data obtained to the state Engineer - iWATERS database search; USGS; Data obtained to the state Engineer - iWATERS database search; USGS; Data obtained to the state Engineer - iWATERS database search; USGS; Data obtained to the state of the	ained from nearby wells	⊠ Yes □ No □ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significal lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	ant watercourse or lakebed, sinkhole, or playa	Yes 🛛 No
Within 300 feet from a permanent residence, school, hospital, institution, or church in ex- Visual inspection (certification) of the proposed site; Aerial photo; Satellite ima		☐ Yes ☑ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less that watering purposes, or within 1000 horizontal feet of any other fresh water well or spring NM Office of the State Engineer - iWATERS database; Visual inspection (certi	g, in existence at the time of initial application.	☐ Yes ☑ No
Within incorporated municipal boundaries or within a defined municipal fresh water we adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval ob		☐ Yes ☑ No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual ins		☐ Yes 🛛 No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and		☐ Yes 🛛 No
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & N Society; Topographic map 	Mineral Resources; USGS; NM Geological	☐ Yes ☑ No
Within a 100-year floodplain. - FEMA map]	☐ Yes 🛛 No
18. On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the folio	lowing items must be attached to the closure plan	ı. Please indicate,
by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirem Proof of Surface Owner Notice - based upon the appropriate requirements of Subscription Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - Protocols and Procedures - based upon the appropriate requirements of 19.15.17. Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subscription Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill c Soil Cover Design - based upon the appropriate requirements of Subsection H of Re-vegetation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection G	nents of 19.15.17.10 NMAC section F of 19.15.17.13 NMAC based upon the appropriate requirements of 19.15 13 NMAC nents of Subsection F of 19.15.17.13 NMAC section F of 19.15.17.13 NMAC 19.15.17.13 NMAC	.17.11 NMAC

Operator Application Certification: I hereby certify that the information submitted with this application is true, accur	. ate and complete to the best of my knowledge and belief.
Name (Print):Melisa Castro	Title:Senior Staff Operations Technician
Signature:	Date: August 23, 2008
e-mail address:melisa.castro@dvn.com	Telephone:(405) 552-7917
OCD Approval: Permit Application (including closure plan) Closure P	lan (only) OCD Conditions (see attachment)
OCD Representative Signature: Brand Sell	Approval Date: 10-7-08
Title: Enuiro/spec	OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection Instructions: Operators are required to obtain an approved closure plan prior to The closure report is required to be submitted to the division within 60 days of to section of the form until an approved closure plan has been obtained and the closure.	to implementing any closure activities and submitting the closure report. the completion of the closure activities. Please do not complete this
	Closure Completion Date:
22. Closure Method: ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alterna ☐ If different from approved plan, please explain.	ative Closure Method
23. Closure Report Regarding Waste Removal Closure For Closed-loop Systems Instructions: Please indentify the facility or facilities for where the liquids, dril two facilities were utilized.	
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed on or Yes (If yes, please demonstrate compliance to the items below) No	in areas that will not be used for future service and operations?
Required for impacted areas which will not be used for future service and operate Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	ions:
24. Closure Report Attachment Checklist: Instructions: Each of the following it	ems 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 (surface owner and division) Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) 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 Longit	NAD: □1007 □ 1002
On-site Closure Location: LatitudeLongit	nude NAD:
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure is belief. I also certify that the closure complies with all applicable closure requiren	
Name (Print):Melisa Castro	
Signature:	Date:
e-mail address:melisa.castro@dvn.com	Telephone:(405) 552-7917

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

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised February 21, 1994 Instructions on back

OIL CONSERVATION DIVISION Submittee-Appropriate District Office PO Box 2088

Santa Fe, NM 87504-2088 1000 Rio Brazos Rd , Aztec, NM 87410 Fee Lease - 3 Copies District IV APR 02 2008 ☐ AMENDED REPORT PO Box 2088, Santa Fc, NM 87504-2088 Bureau of Land Management
WELL LOCATION AND ACREAGE DEDICATION February API Numbe 7/429 6 Well Number #423A 19641 **NEBU** OGRID No Operator Name Elevation 4137 Devon Energy Production Company, L.P. 6285 Surface Location North/South line East/West line County UL or Lot No Section Township Range Lot Idn Feet from the Feet from the Rio Arriba I 8 30 N 7 W 1610 **SOUTH** 905 EAST "Bottom Hole Location If Different From Surface UL or lot no Section Range Lot Idn East/West line County Township Feet from the Feet from the North/South line Rio Arriba 8 7 W 1940 SOUTH 1130 EAST 30 N 12 Dedicated Acres Joint or Infill Consolidation Code 15 Order No 320 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 "OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief 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 Bottom Hole Location correct to the best of my belief 1940' F/SL 1130' F/EL <u>June 5, 2007</u> Date of Survey Signature and Seal of Professional Survey Azımuth - 325°43 399 905' -1016 1610' 7016 Certificate Number

(R) - BLM Record

 $C \cdot C$ 6300

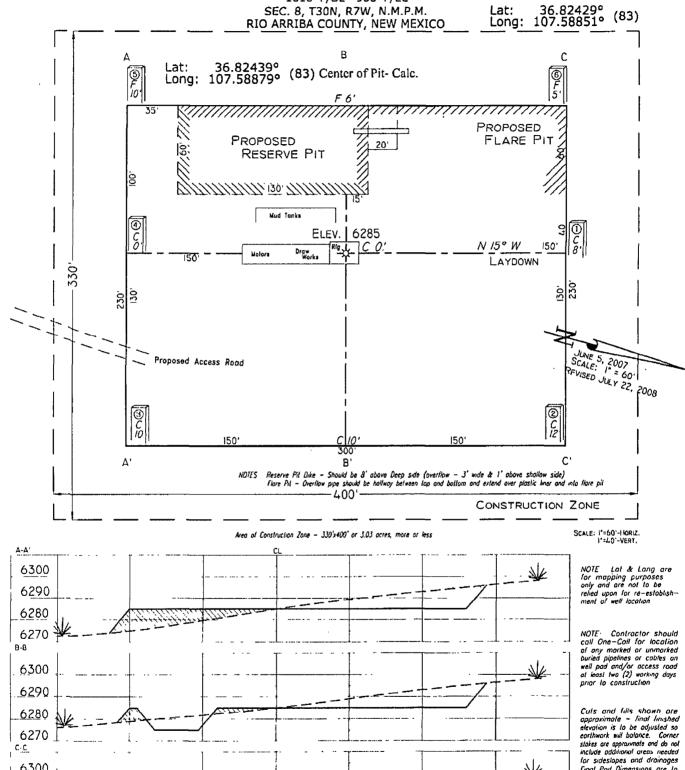
6290

6280

6270

PAD LAYOUT PLAN & PROFILE DEVON ENERGY PRODUCTION COMPANY, L.P. Nebu # 423A

1610' F/SL 905' F/EL SEC. 8, T30N, R7W, N.M.P.M.



07/23/2008 10:37AM (GMT-05:00)

Final Pad Dimensions are to be verified by Contractor

VANN SURVEYS

P. O. Box 1306

Farminglon, NM

Hydrogeological Report for the NEBU 423A

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 over lies 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 stratigraghic position similar to that of the OJO Alamo and Nacimiento Formations. The Animas strata comprise a general fining upward sequence of volcaniclastic 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) ourcrop 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 (Fasset 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 intertounguing (Smith, 1988). The San Jose formation was deposited in various fluvial type environments. In general the unit consists of an interbeded 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, Nacimienito, and Animas Formations are a source of water for publicsupply, 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.

Sitting Requirements for NEBU 423A

The NEBU 423A 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 or 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.

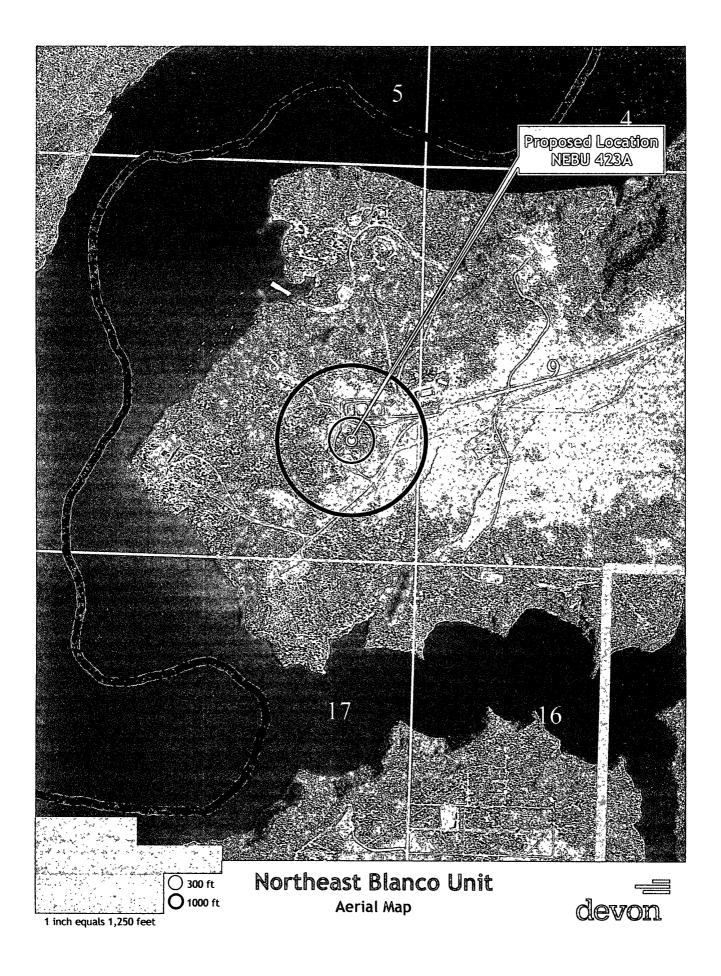
New Mexico Office of the State Engineer POD Reports and Downloads

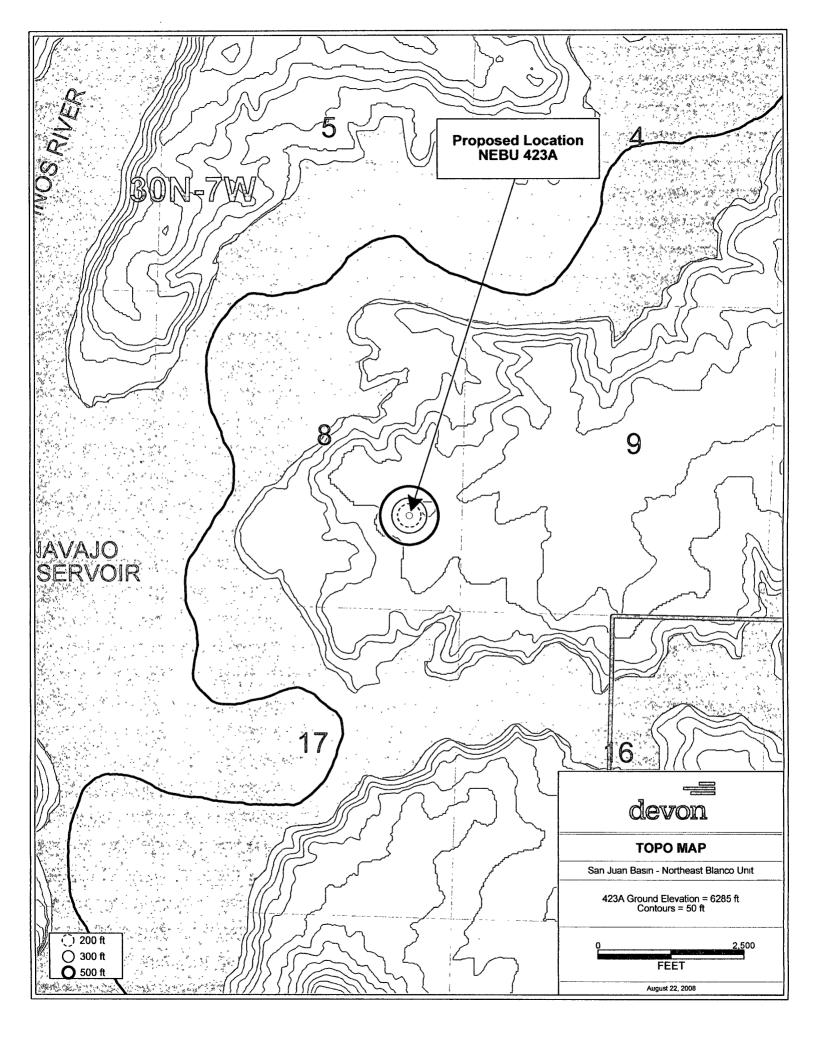
Township: 30N Range: 07W Sections: 4,5,6,7,8,9				1
NAD27 X:	Y:	Zone:	Search Radius:	
County:	Basin:		Number:	Suffix:
Owner Name: (First)		(Last) ② All	O Non-Domestic	○ Domestic
POE	0-/-Surface-Data-Rep	oort A Vater Column Rep	vg-Depth-to-Water-Report	
Clear Form iWATERS-Menu Help				

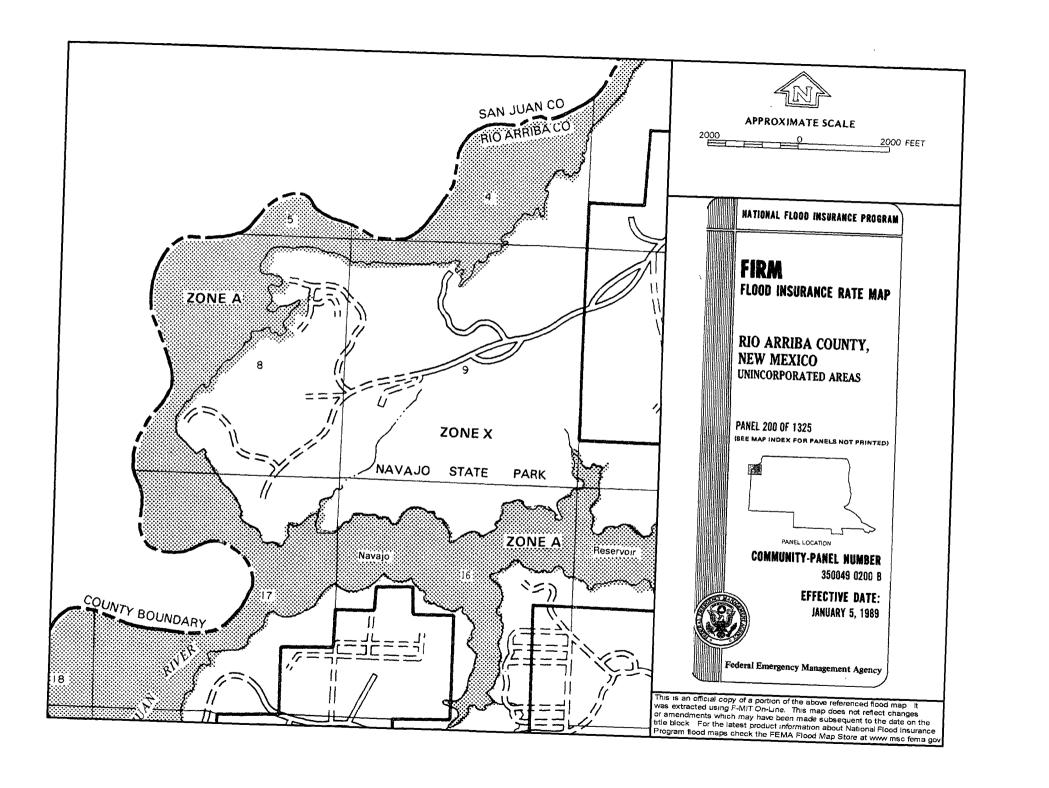
AVERAGE DEPTH OF WATER REPORT 08/20/2008

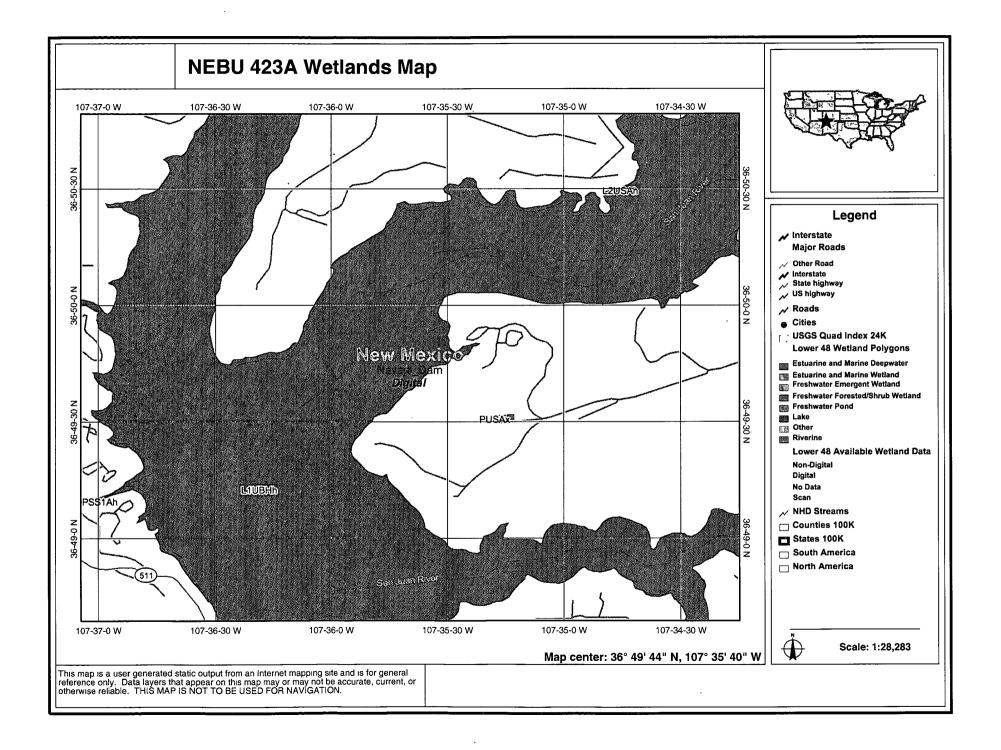
Bsn Tws Rng Sec Zone X Y Wells Min Max Avg

No Records found, try again

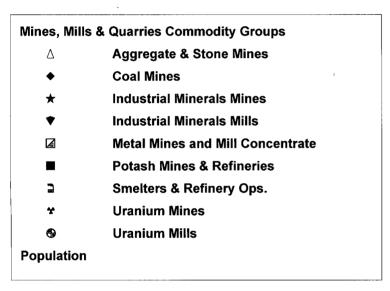


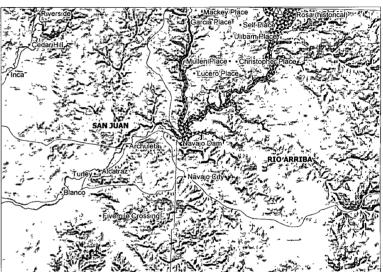


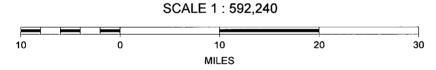




NEBU 423A Mines, Mills and Quarries Web Map









Castro, Melisa

From:

Castro, Melisa

Sent:

Wednesday, August 20, 2008 10:52 AM

To:

M Dombrowski - BOR SC

Subject:

NEBU 423A Temproary Pit Closure Notification

Attachments: Pit Closure Plan.doc

Devon Energy Corporation 20 North Broadway Oklahoma City, OK 73102-8260 405 552 7917 Phone www.devonenergy.com

August 20, 2008

IN RE: NEBU 423A

API # 30-039-30510

NE SE 1,610' FSL & 905' FEL

Sec. 8, T30N, R7W

Rio Arriba County, New Mexico

VIA EMAIL:

Dear Mr. Dombrowski,

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 herby 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
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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

- 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.
- 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.
- 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.
- 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.
- 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.
- 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 plate 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 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 and 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.