

HIGH CAVE KARST
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RESUBMITTAL

SEP 04 2007

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007

OCD-ARTESIA

Lease Serial No.
LC-061783-B

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		6 If Indian, Allottee or Tribe Name
1b Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7 If Unit or CA Agreement, Name and No
2 Name of Operator Devon Energy Production Company, LP		8 Lease Name and Well No Mann 3 Federal 2 23715
3a Address 20 North Broadway Oklahoma City, Oklahoma 73102-8260		9 API Well No 30-015-3577
3b. Phone No. (include area code) 405-552-8198		10. Field and Pool, or Exploratory Red Lake; Glorieta-Yeso
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface NWSW Lot L 1575 FSL 330 FWL At proposed prod. zone NWSW Lot L 1575 FSL 330 FWL		11. Sec., T R M or Blk and Survey or Area Sec. 3 18S 27E, Unit L
14. Distance in miles and direction from nearest town or post office* Approximately 7 miles southeast of Artesia, New Mexico		12 County or Parish Eddy County
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig, unit line, if any)		13 State NM
16. No. of acres in lease 80 acres	17 Spacing Unit dedicated to this well 40 acres per N. Adams 7/25/07 ME	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 4000 MD	20 BLM/BIA Bond No on file C01104 CR 7/25/07
21 Elevations (Show whether DF, KDB, RT, GL, etc) 3557' GL	22 Approximate date work will start* 08/25/2007	23 Estimated duration 45 days

24 Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, shall be attached to this form.

- | | |
|---|--|
| 1 Well plat certified by a registered surveyor | 4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) |
| 2 A Drilling Plan | 5 Operator certification |
| 3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office) | 6 Such other site specific information and/or plans as may be required by the authorized officer |

25 Signature 	Name (Printed/Typed) Norvella Adams	Date 07/20/2007
Title Sr. Staff Engineering Technician		

Approved by (Signature) Steve Caffey	Name (Printed/Typed)	Date 8-28-07
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

Conditions of approval, if any, are attached

APPROVAL FOR TWO YEARS

Title 18 USC Section 10
States any false, fictitious

*(Instructions on page 2

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

and willfully to make to any department or agency of the United States

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Instruction on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 96834	Pool Name Red Lake; Glorieta- Yeso, NE
Property Code	Property Name MANN "3" FEDERAL	Well Number 2
OGRID No. 6137	Operator Name DEVON ENERGY CORP.	Elevation 3557'

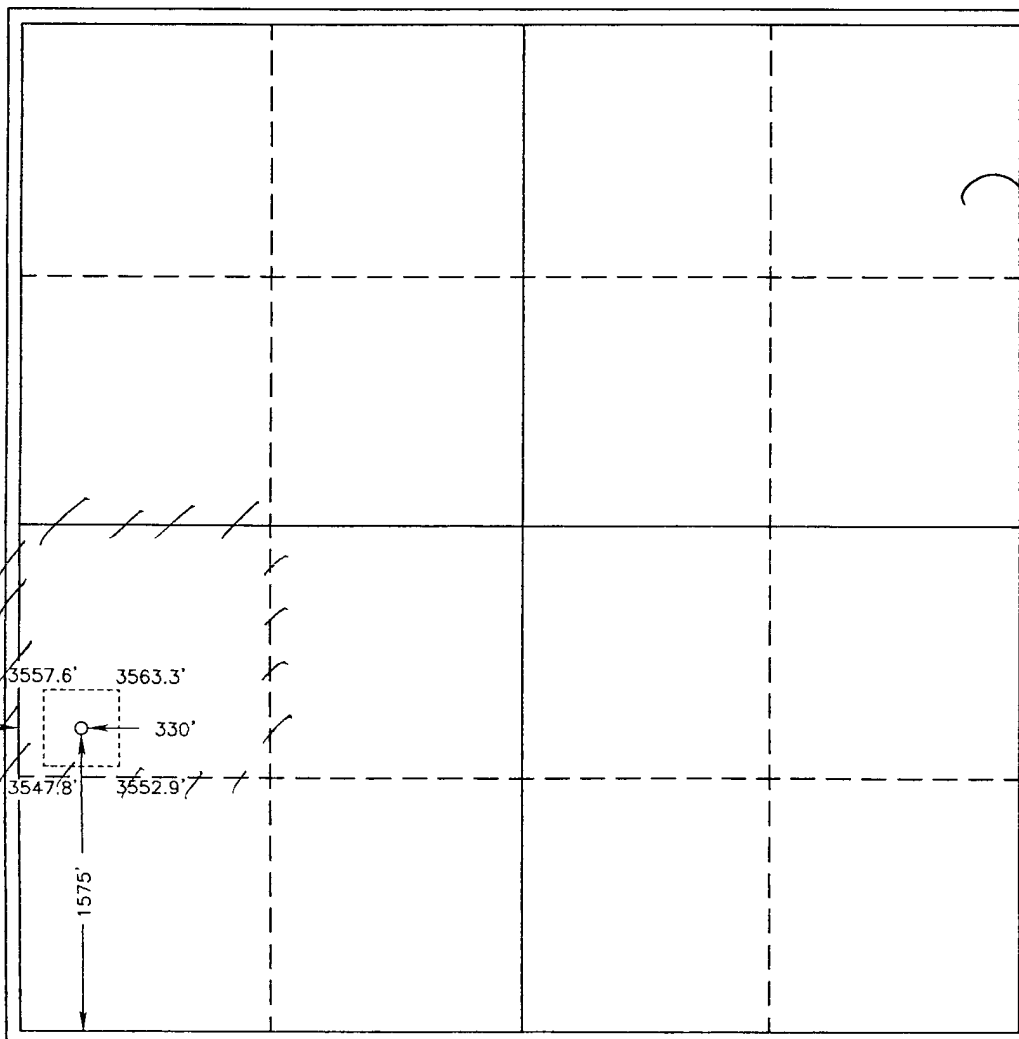
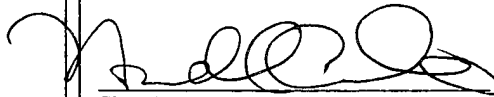
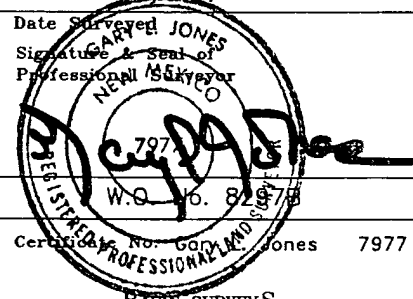
Surface Location

UL or lot No. L	Section 3	Township 18 S	Range 27 E	Lot Idn	Feet from the 1575	North/South line SOUTH	Feet from the 330	East/West line WEST	County EDDY
--------------------	--------------	------------------	---------------	---------	-----------------------	---------------------------	----------------------	------------------------	----------------

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

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

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p> Signature Norvella Adams Printed Name Sr. Staff Eng. Technician Title July 20, 2007 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>July 24, 1998 Date Surveyed Signature & Seal of Professional Surveyor  W.O. No. 82978 Certified by Gary Jones 7977 BASIN SURVEYS</p>
---	---

DRILLING PROGRAM

Devon Energy Production Company, LP

Mann 3 Federal 2

Surface Location: 1575' FSL & 330' FWL, Unit L, Sec 3 T18S R27E, Eddy, NM

Bottom Hole Location: 1575' FSL & 330' FWL, Unit L, Sec 3 T18S R27E, Eddy, NM

1. Geologic Name of Surface Formation

- a. Permian

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

a. Queen	740'	
b. Grayburg	1340'	Oil & Gas
c. San Andres	1560'	Oil & Gas
d. Glorieta	2995'	Oil & Gas
e. Yeso	3130'	Oil & Gas
f. Total Depth	4000'	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 8 5/8" casing at 1150' and circulating cement back to surface. The Yeso intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement back to surface.

3. Casing Program:

<u>Hole Size</u>	<u>Hole Interval</u>	<u>OD Csg</u>	<u>Casing Interval</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
12 1/4"	0' - 1150'	8 5/8"	0' - 1150'	24#	ST&C	J-55
7 7/8"	0' - 4000'	5 1/2"	0' - 4000'	15.5#	ST&C	J-55

Design Parameter Factors:

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
8 5/8"	2.61	2.57	8.84
5 1/2"	2.05	2.44	3.26

4. Cement Program: (Note yields; and dv tool depths if multiple stages)

- a. 8 5/8" Surface Cement to surface Lead with 475 sx 35:65 Poz C + 2% CaCl₂ + 1/4 lbs/sx Celloflake, and 6% Bentonite; 12.80 ppg, 1.83 cf/sx, 9.76 gps. Tail with 250 sx Class C + 2% CaCl₂ + 1/4 lbs/sx Celloflake; 14.8 ppg, 1.35 cf/sx, 6.35 gps. TOC 0.

- b. 5 1/2" Production Cement to surface Lead with 180 sx 35:65 Poz C + 5% NaCl + 1/4 lbs/sx Celloflake + 6%Bentonie; 12.7 ppg, 1.94 cf/sx, 10.51 gps. Tail with 510 sx 60:40 Poz C + 5% NaCl + 0.75% BA-10 + 1/4 lbs/sx Celloflake + 0.4% Sodium Metasilicate + 4% MPA-1; 13.8 ppg, 1,37 cf/sx, 6.33 gps. TOC 0.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach the surface. All casing is new and API approved.

5. Pressure Control Equipment:

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (2M system) double ram type (2000 psi WP) preventor and a bag-type (Hydril) preventor (2000 psi WP) and rotating head. Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. The BOP will be installed on the 8 5/8" surface casing and utilized continuously until total depth is reached. **All BOP's and associated equipment will be tested to 1000 psi high and 250 psi low with the rig pump.** Prior to drilling out the 8 5/8" casing shoe, the BOP's and Hydril will be tested as per BLM Drilling Operations Order #2.

Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily driller's log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 2000 psi WP rating.

6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' – 1150'	8.5 – 9.4	32-34	NC	Fresh Water
1150' – 2800'	10.0	28	NC	Cut Brine
2800' – 4000'	10.0– 10.2	30-32	12	Cut Brine

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- Hydrogen Sulfide detection equipment will be in operation after drilling out the 8 5/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 8 5/8" shoe until total depth is reached.

8. Logging, Coring, and Testing Program:

- Drill stem tests will be based on geological sample shows.

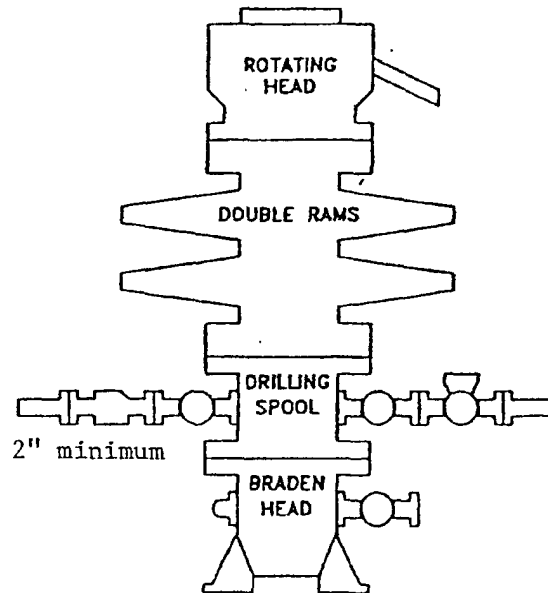
- b. If a drill stem test is anticipated; a procedure, equipment to be used and safety measures will be provided via sundry notice to the BLM.
- c. The open hole electrical logging program will be:
 - i. Total Depth to Intermediate Casing Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
 - ii. Total Depth to Surface Compensated Neutron with Gamma Ray
 - iii. No coring program is planned
 - iv. Additional testing will be initiated subsequent to setting the 5 ½” production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

9. Potential Hazards:

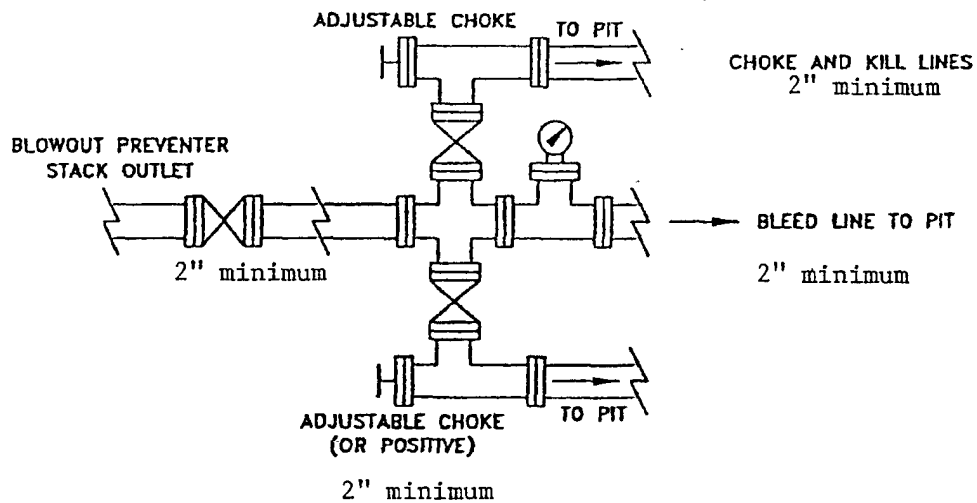
- a. No abnormal pressures or temperatures are expected. A H2S contingency plan will be provided. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 800 psi and Estimated BHT 90°.

10. Anticipated Starting Date and Duration of Operations:

- a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 7-10 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.



CHOKE MANIFOLD REQUIREMENT (2000 psi WP)



devon

WEST RED LAKE AREA

EDDY COUNTY, NEW MEXICO

SCHEMATIC
BLOWOUT PREVENTOR
(2000 PSI WORKING WP)

C:\PROJECTS\EXPANDED

WRLHQP

CB

8/98

SURFACE USE PLAN

Devon Energy Production Company, LP

Mann 3 Federal 2

Surface Location: 1575' FSL & 330' FWL, Unit L, Sec 3 T18S R27E, Eddy, NM

Bottom Hole Location: 1575' FSL & 330' FWL, Unit L, Sec 3 T18S R27E, Eddy, NM

1. Existing Roads:

- a. The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102. The well was staked by Basin Surveys.
- b. All roads into the location are depicted on Exhibit 3.
- c. Directions to Location: From Artesia go east on Highway 82 for 4.5 miles to Chalk Bluff Road. Turn south off Highway 82 onto Chalk Bluff Road and go approximately 4.2 miles. Turn east onto Little Diamond Road and go approximately 1.4 miles. Turn south and go 0.2 mile then back west into the location.

2. New or Reconstructed Access Roads:

- a. The well site layout, Form C-102 shows the existing trail road.
- b. The maximum width of the road will be 15'. It will be crowned and made of 6" of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.
- c. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location. The average grade will be approximately 1%.
- d. No cattle guards, grates or fence cuts will be required. No turnouts are planned.

3. Location of Existing Wells:

One Mile Radius Plat shows all existing and proposed wells within a one-mile radius of the proposed location. See attached plat.

4. Location of Existing and/or Proposed Production Facilities:

- a. In the event the well is found productive, the Mann tank battery would be utilized and the necessary production equipment will be installed at the well site. See Production Facilities Layout diagram.
- b. If necessary, the well will be operated by means of an electric prime mover. Electric power poles will be set along side of the access road.
- c. We intend to lay flowlines from the Mann 3 Federal 2 to the Mann tank battery. All flow lines will adhere to API standards.
- d. If the well is productive, rehabilitation plans are as follows:
 - i. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
 - ii. The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as possible to the original state.

5. Location and Types of Water Supply:

This location will be drilled using a combination of water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in the C-102. On occasion, water will be obtained from a pre-existing water well, running a pump directly to the drill rig. In these cases where a poly pipeline is used to transport water for drilling purposes, proper authorizations will be secured. If a poly pipeline is used, the size, distance, and map showing route will be provided to the BLM via sundry notice.

6. Construction Materials:

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. All roads will be constructed of 6" rolled and compacted caliche. Will use BLM recommended use of extra caliche from other locations close by for roads, if available.

7. Methods of Handling Waste Material:

- a. Drill cuttings will be disposed of in the reserve pits.
- b. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary landfill.
- c. The supplier, including broken sacks, will pick up salts remaining after completion of well.
- d. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- e. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for further drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approved disposal site. Later pits will be broken out to speed dry. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in a storage tank and sold.
- f. Disposal of fluids to be transported by the following companies:
 - i. American Production Service Inc, Odessa TX
 - ii. Gandy Corporation, Lovington NM
 - iii. I & W Inc, Loco Hill NM
 - iv. Jims Water Service of Co Inc, Denver CO

8. Ancillary Facilities: No campsite or other facilities will be constructed as a result of this well.

9. Well Site Layout

- a. Exhibit D shows the proposed well site layout with dimensions of the pad layout.
- b. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- c. Mud pits in the active circulating system will be steel pits & the reserve pit will be lined.
- d. If needed, the reserve pit is to be lined with polyethylene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.

- e. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased to preclude endangering wildlife.

10. Plans for Surface Reclamation:

- a. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography. We will close the pits per OCD compliance regulations.
- b. The pit lining will be buried or hauled away in order to return the location and road to their pristine nature. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.
- c. The location and road will be rehabilitated as recommended by the BLM.
- d. If the well is a producer, the reserve pit fence will be torn down after the pit contents have dried. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.
- e. If the well is deemed commercially productive, the reserve pit will be restored as described in 10(A) within 120 days subsequent to the completion date. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

11. Surface Ownership (Use the appropriate A-C option; delete other two)

- a. The surface is owned by the US Government and is administered by the Bureau of Land Management. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas.
- b. The proposed road routes and the surface location will be restored as directed by the BLM.

12. Other Information:

- a. The area surrounding the well site is grassland. The topsoil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, sagebrush, yucca and miscellaneous weeds. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- b. There is no permanent or live water in the general proximity of the location.
- c. There are no dwellings within 2 miles of location.
- d. A Cultural Resources Examination will be completed by Southern New Mexico Archaeological Services, Inc. and forwarded to the BLM office in Carlsbad, New Mexico.

13. Bond Coverage:

Bond Coverage is Nationwide; Bond # is CO-1104

Operators Representative:

The Devon Energy Production Company, L.P. representatives responsible for ensuring compliance of the surface use plan are listed below.

Marcos Ortiz
Operations Engineer

Don Mayberry
Superintendent

Devon Energy Production Company, L.P.
20 North Broadway, Suite 1500
Oklahoma City, OK 73102-8260

Devon Energy Production Company, L.P.
Post Office Box 250
Artesia, NM 88211-0250

(405) 552-8152 (office)
(405) 317-0666 (Cellular)

(505) 748-3371 (office)
(505) 746-4945 (home)

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or Devon Energy Production Company, L.P. am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

I hereby also certify that I, or Devon Energy Production Company, L.P. have made a good faith effort to provide the surface owner with a copy of the Surface Use Plan of Operations and any Conditions of Approval that are attached to the APD.

Executed this 23th day of July, 2007.

Printed Name: Norvella Adams

Signed Name: 

Position Title: Sr. Staff Engineering Technician

Address: 20 North Broadway, OKC OK 73102

Telephone: (405) 552-8198

Field Representative (if not above signatory):

Address (if different from above):

Telephone (if different from above):

E-mail (optional): norvella.adams@dvn.com

Conditions of Approval Cave and Karst

EA#: NM-520-07-1144

Lease #: LC-061783B

**Devon Energy Production Company L.P.
Mann 3 Fed. #2 RESUBMITTAL**

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Berming:

Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:

Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. Use depth to the deepest expected fresh water as listed in the geologist report.

Casing:

All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a void (bit drops) of four feet or more and circulation losses greater than 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

Abandonment Cementing:

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

Record Keeping:

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence or absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Devon Energy Production Company, LP
Well Name & No. 2-Mann 3 Federal
Location: 1575' FSL, 0330' FWL, Sec. 3, T18S, R27E, Eddy County, NM
Lease: LC-061783-B

.....

I. DRILLING OPERATIONS REQUIREMENTS:

- A. The Bureau of Land Management (BLM) is to be notified a minimum of 2 hours in advance for a representative to witness:
1. Spudding well
 2. Setting and/or Cementing of all casing strings
 3. BOPE tests
- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
- B. **Although Hydrogen Sulfide (H₂S) has not been reported in this section, it has been reported in surrounding sections and is always a potential hazard.**
- C. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

II. CASING:

- A. The 8.625 inch surface casing shall be set at approximately 1150 feet and cemented to the surface.
1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 2. Wait on cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
 3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
 4. **If cement falls back, remedial action will be done prior to drilling out that string.**

**Possible lost circulation in the Grayburg and San Andres formations.
High cave/karst area.**

- B. The minimum required fill of cement behind the 5-1/2 inch production casing is **cement shall circulate to the surface.** If cement does not circulate see A.1 thru 4.
- C. If hardband drill pipe is rotated inside casing; returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

III. PRESSURE CONTROL:

- A.** All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec 17.
- B.** Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) PSI**.
- C.** The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.
 - 1. The tests shall be done by an independent service company.
 - 2. The results of the test shall be reported to the appropriate BLM office.
 - 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

Engineer on call phone (after hours): Carlsbad - 505-706-2779

WWI 082307