HIGH CAVEKARST SECRETARY'S POTASH OCD-ARTESIA

AT5-07-338

Month Year

Form 3160-3
(April 2004)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. ~~NMNM 068545~~ LC068545

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
NMNM 71016X

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Poker Lake Unit #265 1796

2. Name of Operator
BEPCO, L. P. 1801

9. API Well No.
30-015-35619

3a. Address **P. O. Box 2760**
Midland, TX 79702

3b. Phone No. *(include area code)*
432-683-2277

10. Field and Pool, or Exploratory
Nash Draw (Dela, BS, Avalon Sd)

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **SWSW, UL M, 660' FSL, 660' FWL, Lat N32.241028, Lon W103.927583**
At proposed prod. zone **Same** CARLSBAD CONTROLLED WATER BASIN

11. Sec., T. R. M. or Blk. and Survey or Area
Sec 6, T24S, R30E, MER NMP

14. Distance in miles and direction from nearest town or post office*
14 Miles East of Malaga, NM

12. County or Parish
Eddy County

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
660'	**1843.32**	**40**
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file
1120'	**7620' MD**	**NM 2204**
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3166' GL	**05/15/2007**	**12 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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name *(Printed/Typed)*	Date
Annette Childers	**Annette Childers**	3-1-2007

Title: **Administrative Assistant**

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Linda S.C. Rundell	/s/ Linda S.C. Rundell	MAY 11 2007
Title: STATE DIRECTOR	Office: NM STATE 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 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

SEE ATTACHED FOR CONDITIONS OF APPROVAL

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

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

DISTRICT IV
1220 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, New Mexico 87505

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	47545	Nash Draw (Dela, BS, Avalon Sd)

Property Code	Property Name	Well Number
068545	POKER LAKE UNIT	265

OGRID No.	Operator Name	Elevation
001801	BEPCO, L.P.	3166'

Surface Location

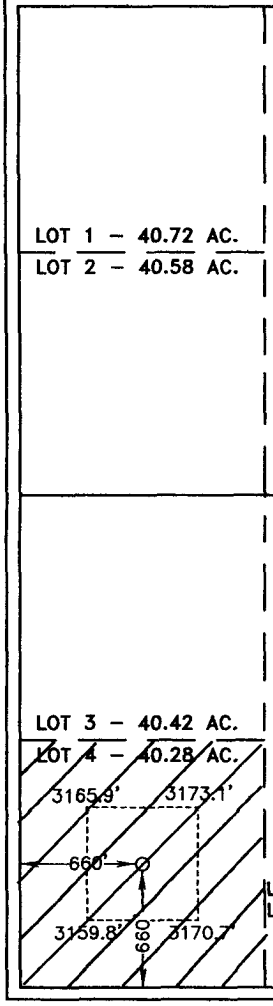
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 4	6	24 S	30 E		660	SOUTH	660	WEST	EDDY

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	Joint or Infill	Consolidation Code	Order No.
40	N		

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, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Gary E. Gerhard 3/1/07
Signature Date

Gary E. Gerhard
Printed Name

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 supervison, and that the same is true and correct to the best of my belief.

JANUARY 19, 2006
Date Surveyed

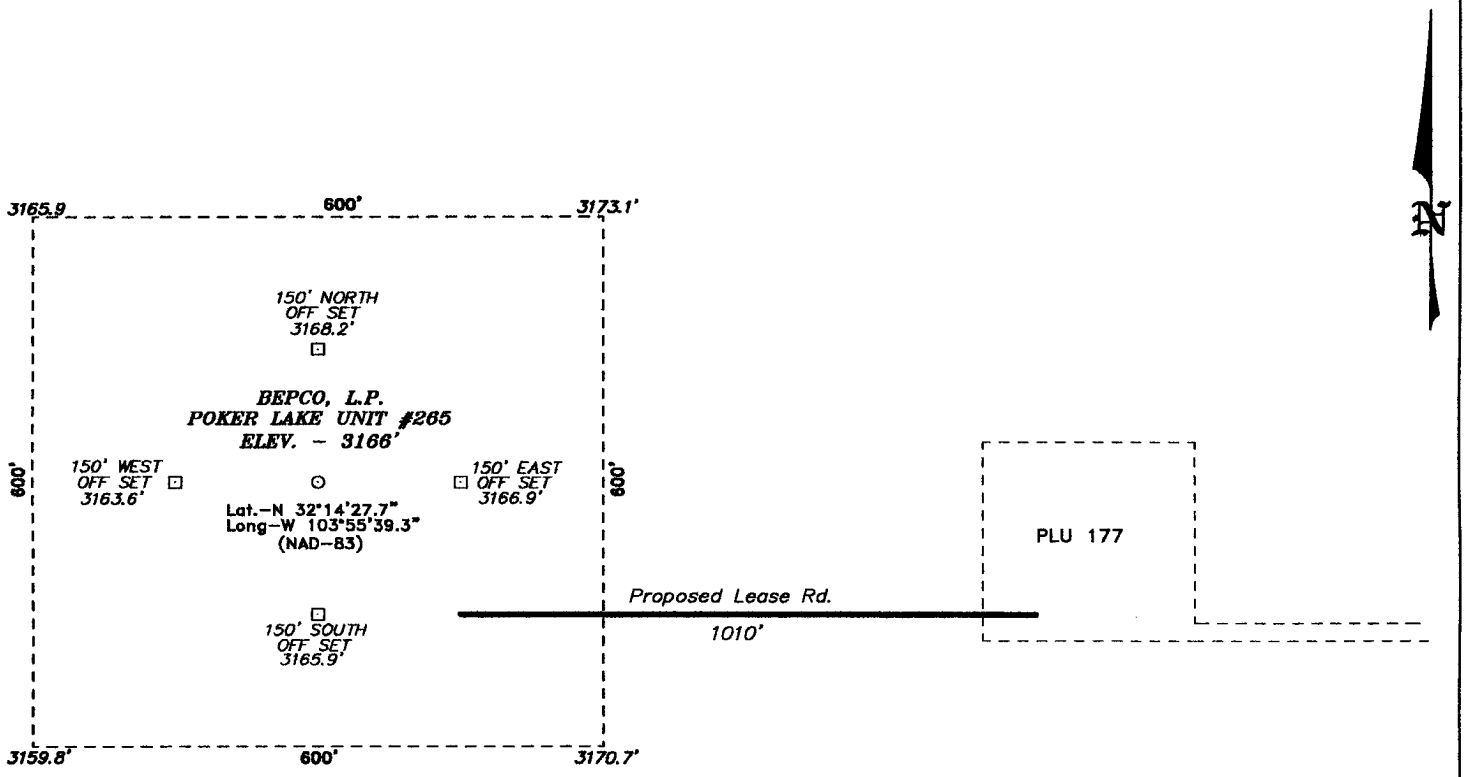
Signature & Seal of Professional Surveyor

GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL SURVEYOR

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

SECTION 6, TOWNSHIP 24 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, **NEW MEXICO.**



200 0 200 400 FEET

SCALE: 1" = 200'

DIRECTIONS TO LOCATION:

FROM THE INTERSECTION OF STATE HWY 128 AND CO. RD. 793 (RAWHIDE ROAD), GO SOUTH 7.3 MILES TO LEASE ROAD, THEN WEST ON LEASE ROAD FOR 0.2 MILES TO POKER LAKE 177 AND BEGIN PROPOSED LEASE ROAD.

BASIN SURVEYS P.O. BOX 1786 – HOBBS, NEW MEXICO

W.O. Number: 6078	Drawn By: K. GOAD		
Date: 01-24-2006	Disk: KJG – 6078A.DWG	Survey Date: 01-19-2006	Sheet 1 of 1 Sheets

BEPCO, L.P.

REF: POKER LAKE UNIT #265 / WELL PAD AND TOPO

THE POKER LAKE UNIT No. 265 LOCATED 660' FROM THE SOUTH LINE AND 660' FROM THE WEST LINE OF SECTION 6, TOWNSHIP 24 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

EIGHT POINT DRILLING PROGRAM
BEPCO L.P.

NAME OF WELL: Poker Lake Unit #265

LEGAL DESCRIPTION - SURFACE: 660' FSL & 660' FWL, Section 6, T-24-S, R-30-E, Eddy County, New Mexico.

POINT 1: ESTIMATED FORMATION TOPS

(See No. 2 Below)

POINT 2: WATER, OIL, GAS AND/OR MINERAL BEARING FORMATIONS

Anticipated Formation Tops: KB 3183' GL 3166'

FORMATION	ESTIMATED TOP FROM KB	ESTIMATED SUBSEA TOP	BEARING
T/Salt	733'	+2450'	Barren
T/Lamar	3438'	- 255'	Oil/Gas
T/Ramsey	3474'	- 291'	Oil/Gas
TD	7620'	-4437'	

POINT 3: CASING PROGRAM

TYPE	INTERVALS	HOLE SIZE	PURPOSE	CONDITION
16"	0'- 40'	20"	Conductor	Contractor Discretion
8-5/8", 32#, J-55, LT&C	0'- 723'	12-1/4"	Surface	New
5-1/2", 15.5#, J-55, LT&C	0' -6260'	7-7/8"	Production	New
5-1/2", 17#, J-55, LT&C	6260' -7620'	7-7/8"	Production	New

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

A BOPE equivalent to requirements of Onshore Oil & Gas Order No. 2 – 2000 psi system (Diagram 1) will be nippled up on the surface casing head. The BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. when installed on the surface casing head will be hydro-tested to 70% of internal yield pressure of casing or 1000 psig whichever is less with the rig pump. In addition to the high pressure test, a low pressure (200 psig) test will be required. These tests will be performed:

a) Upon installation
b) After any component changes
c) Fifteen days after a previous test
d) As required by well conditions

A function test to insure that the preventers are operating correctly will be performed on each trip.

Surface casing to be set into the Rustler below all fresh water sands.
Production casing will be cemented using DC LiteCrete system with TOC 500' above all production pay zones.
Drilling procedure, BOP diagram, anticipated tops and surface plans attached. See Cont

This well is located inside the Secretary's Potash area and outside the R-111 Potash area. There are no potash leases within 1 mile of the location.

POINT 5: MUD PROGRAM

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0' - 723'	FW Spud Mud	8.5 - 9.2	38-70	NC	NC	NC	10.0
723' - 5600'	Brine Water	9.8 -10.2	28-30	NC	NC	NC	9.5 - 10.5
5600' - TD	BW/Diesel	8.8 - 9.0	32-40	8	2	<25 cc	9.5 - 10.0

NOTE: May increase vis for logging purposes only.

POINT 6: TECHNICAL STAGES OF OPERATION

A) TESTING

None anticipated.

B) LOGGING

GR-CNL-LDT-AIT from TD to base of Salt (+/- 3300').
GR-CNL-CAL from base of Salt to surface.

C) CONVENTIONAL CORING

None anticipated.

D) CEMENT

INTERVAL	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT^3/SX	WL
SURFACE:							
Lead: 0 – 423' (100% excess circ to surface)	220	423'	35:65 Class C Poz + 3% S1 + 0.25 pps D29 + 6% D20	10.7	12.6	2.05	<100
Tail: 423' – 723' (100% excess circ to surface)	200	300'	Class C + 2% S1 ($CaCl_2$)	6.3	14.8	1.34	<100
PRODUCTION:							
Lead 2938' – 6620' (50% excess)	390	3682'	LiteCrete 39/61 (D961/ D124) + 2% bwob D153 + 0.05 gpsb D604AM + 0.03 gpsb M45 + 2 pps D24 + 0.04 gpsb D801	10.7	10.2	2.47	<150
Tail 6620' – 7620' (50% excess)	135	1000'	LiteCrete 39/61 (D961/ D124) + 2% bwob D153 + 0.05 gpsb D604AM + 0.03 gpsb M45 + 2 pps D24 + 0.04 gpsb D801	8.69	10.5	2.10	<150

See COA

E) DIRECTIONAL DRILLING

No directional services anticipated.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Delaware section. A BHP of 3402 psi (max) or MWE of 8.7 ppg is expected. Lost circulation may exist in the Delaware Section from 3438-7200'. No H_2S is anticipated.

POINT 8: OTHER PERTINENT INFORMATION

A) Auxiliary Equipment

Upper and lower kelly cocks. Full opening stab in valve on the rig floor.

B) Anticipated Starting Date

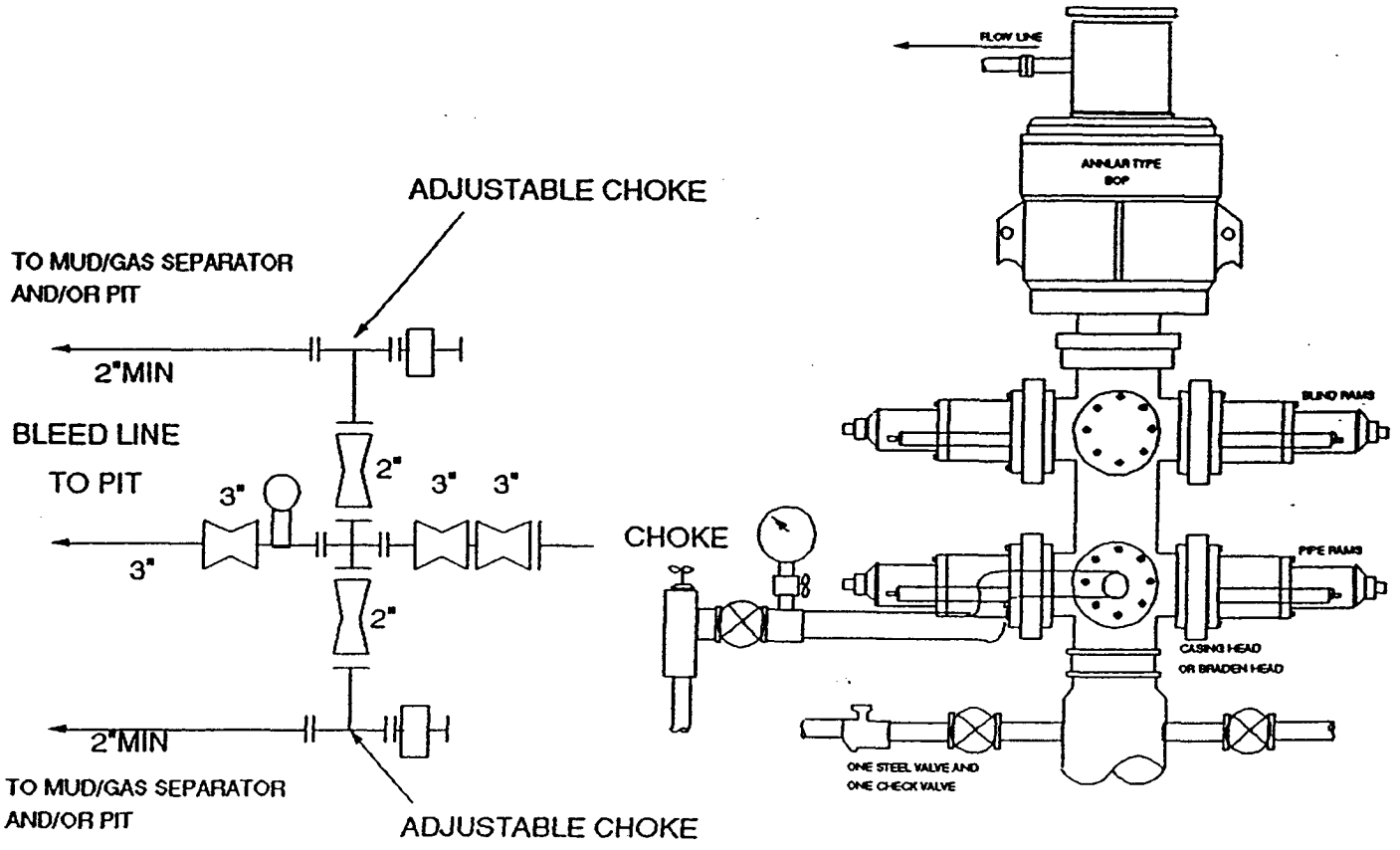
Upon approval

12 days drilling operations

14 days completion operations

GEG/cnt
January 25, 2007

3000 PSI WP



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

A. One double gate blowout preventer with lower rams for pipe and upper rams blind, all hydraulically controlled.

B. Opening on preventers between rams to be flanged, studded or clamped and at least two inches in diameter.

C. All connections from operating manifold to preventers to be all steel hose or tube a minimum of one inch in diameter.

D. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate (close, open, and re-close) the preventers.

E. All connections to and from preventers to have a pressure rating equivalent to that of the BOP's.

F. Manual controls to be installed before drilling cement plug.

G. Valve to control flow through drill pipe to be located on rig floor.

H. All chokes will be adjustable. Choke spool may be used between rams.

DIAGRAM 1

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: Poker Lake Unit #265

LEGAL DESCRIPTION - SURFACE: 660 FSL & 660' FWL, Section 6, T-24-S, R-30-E, Eddy County, New Mexico.

POINT 1: EXISTING ROADS

A) Proposed Well Site Location:

See Exhibit A and Survey Plats

B) Existing Roads:

From Carlsbad, New Mexico, go 8 miles south on Highway 285 to Highway 31. Turn north and go 7 miles on Highway 31. Turn east on Highway 128 and go 4 miles to Rawhide Road (located between mile markers 4 and 5). Go south for 7.3 miles to lease road. Go west 0.2 miles to PLU #177. Go west 1/4 mile to location.

C) Existing Road Maintenance or Improvement Plan:

See Exhibit B and Survey Plats.

POINT 2: NEW PLANNED ACCESS ROUTE

A) Route Location:

Approximately 1010' of new road is required.

B) Width

12'

C) Maximum Grade

Grade to match existing topography or as per BLM requirements.

D) Turnout Ditches

Spaced per BLM requirements.

E) Culverts, Cattle Guards, and Surfacing Equipment

If required, culverts and cattle guards will be set per BLM Specs.

POINT 3: LOCATION OF EXISTING WELLS

Exhibit A indicates existing wells within the surrounding area.

POINT 4: LOCATION OF EXISTING OR PROPOSED FACILITIES

A) Existing facilities are located within one mile which are owned or controlled by lessee/operator:

Closest Oil/Gas production facilities are located at Poker Lake Unit #158 wellsites. Poker Lake Unit #158 is located approximately 5200' southeast of proposed well.

B) New Facilities in the Event of Production:

Existing production facilities will be used via flowlines to the Poker Lake Unit #158 battery. Additional separators/heaters will be added as necessary. A new flowline consisting of 2-7/8" steel pipe will be laid within 50' of the center line of the access road and existing roads which have previously been Arch cleared. An electric line consisting of 12,470 volts, 3 phase will be installed. The electric line will follow the lease road and connect with the existing power line that services the Poker Lake Unit #177 (See Exhibit C).

C) Rehabilitation of Disturbed Areas Unnecessary for Production:

Following flowline construction, those access areas required for continued production will be graded to provide drainage and minimize erosion. The areas unnecessary for use will be graded to blend in with the surrounding topography (see Point 10)

POINT 5: LOCATION AND TYPE OF WATER SUPPLY

A) Location and Type of Water Supply

Fresh water will be hauled from Johnson Station 50 miles east of Carlsbad, New Mexico or other commercial facilities. Brine water will be hauled from commercial facilities.

B) Water Transportation System

Water hauling to the location will be over the existing and proposed roads.

POINT 6: SOURCE OF CONSTRUCTION MATERIALS

A) Materials

Onsite caliche will be used if available. Additional caliche will be hauled from BLM approved pits.

B) Land Ownership

Federally Owned.

C) Materials Foreign to the Site

If additional caliche is required it will be hauled from temporary caliche pit located In NESE, Sec 19, T24S, R30E (PLU #217).

D) Access Roads

See Exhibit B.

Conditions of Approval
Cave and Karst

EA#: NM-520-07-0558
Lease #: LC-068545
BEPCO, L.P.
Poker Lake Unit #265

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 bit drops of four feet or more and circulation losses greater then 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 of 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: **BEPCO, L.P.**
Well Name & No. **265-Poker Lake Unit**
Location: **660'FSL, 660'FWL, SEC6, T24S, R30E, Eddy County, NM**
Lease: **LC 068545**

I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 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 no Hydrogen Sulfide has been reported in the area, it is always a possible 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 **above the salt, at least 25 feet into the Rustler Anhydrite at approximately 723 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.

B. The minimum required fill of cement behind the **5-1/2** inch production casing is **cement shall extend upward a minimum of 200 feet above the base of the surface casing string.**

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 I 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.

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 4 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 in accordance with API RP 53. 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.

IV. HAZARDS:

1. Our geologist has indicated that there is high potential for Cave / Karst features.
2. Our geologist has indicated that there is potential for lost circulation in the Delaware and Bone Spring formations.

Engineering may be contacted at 505-706-2779 for variances if necessary.

FWright 3/16/07