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OCD-ARTESIA



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NMNM 065705B</b>
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		6. If Indian, Allottee or Tribe Name
2. Name of Operator <b>BEPCO, L. P. 1801 CARLSBAD CONTROLLED WATER BASIN</b>		7. If Unit or CA Agreement, Name and No. <b>NMNM 71016X</b>
3a. Address <b>P. O. Box 2760 Midland, TX 79702</b>		8. Lease Name and Well No. <b>1796 Poker Lake Unit #268</b>
3b. Phone No. (include area code) <b>432-683-2277</b>		9. API Well No. <b>30-015-35490</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>SESE, UL P, 660' FSL &amp; 430' FEL, Lat N32.12469. Lon W 103.91328</b> At proposed prod. zone <b>Same</b>		10. Field and Pool, or Exploratory <b>Corral Canyon (Delaware)</b>
14. Distance in miles and direction from nearest town or post office* <b>14 miles East of Malaga, NM</b>		11. Sec., T. R. M. or Blk. and Survey or Area <b>Sec 18, T25S, R30E, Mer NMP</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>430'</b>	16. No. of acres in lease <b>401</b>	17. Spacing Unit dedicated to this well <b>40.00</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>1339'</b>	19. Proposed Depth <b>7880' MD</b>	20. BLM/BIA Bond No. on file <b>NM 2204</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>3200' GL</b>	22. Approximate date work will start* <b>03/15/2007</b>	23. Estimated duration <b>12 days</b>

24. Attachments

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

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

25. Signature <i>Annette Childers</i>	Name (Printed Typed) <b>Annette Childers</b>	Date <b>1-17-07</b>
Title <b>Administrative Assistant</b>		

Approved by (Signature) <i>Don Peterson</i>	Name (Printed Typed) <b>Don Peterson</b>	Date <b>MAR 22 2007</b>
Title <b>ACTING FIELD MANAGER</b>		Office <b>CARLSBAD FIELD OFFICE</b>

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.

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED**

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

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

Surface casing to be set into the Rustler below all fresh water sands.

Production casing will be cemented using DS Litecrete cement with TOC 500' above uppermost pay zone.

Drilling procedure, BOP diagram, anticipated tops and surface plans attached.

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

## DISTRICT I

1626 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 13360	Pool Name Corral Canyon (Delaware)
Property Code 065705	Property Name POKER LAKE UNIT		Well Number 268
OGRID No. 001801	Operator Name BEPCO, L.P.		Elevation 3200'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	18	25 S	30 E		660	SOUTH	430	EAST	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 N	Consolidation Code		Order No.				

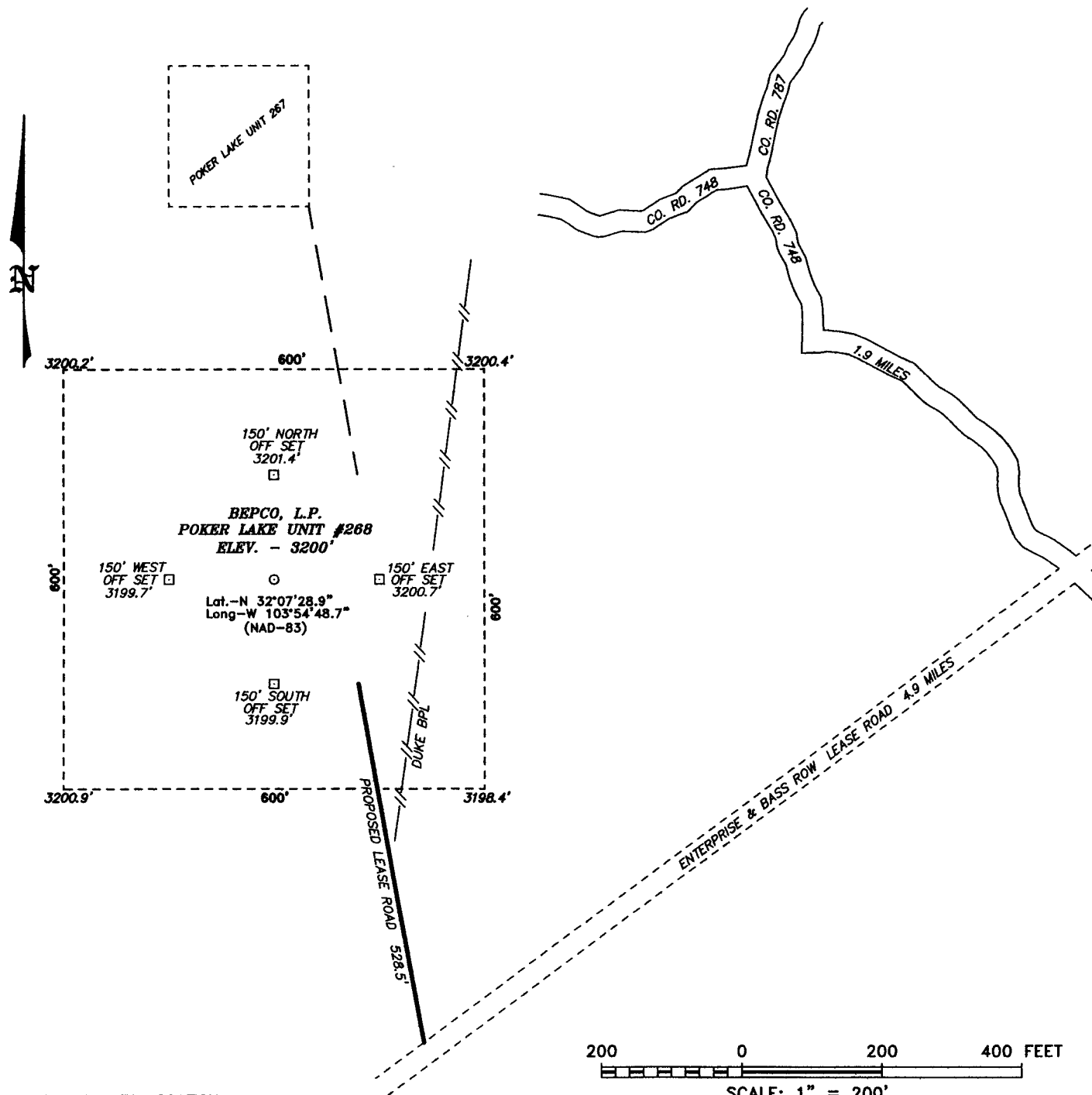
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

LOT 1 40.91 ACRES					<p><b>OPERATOR CERTIFICATION</b></p> <p>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.</p> <p><i>Gary E. Gerhard</i> 1/17/07 Signature Date</p> <p>Gary E. Gerhard Printed Name</p> <p><b>SURVEYOR CERTIFICATION</b></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>DECEMBER 27 2006 Date Surveyed</p> <p>Signature of Gary L. Jones Professional Surveyor</p> <p>Certificate No. Gary L. Jones 7977</p> <p><b>BASIN SURVEYS</b></p>
LOT 2 40.90 ACRES	—81.77 ACRES—	—163.44 ACRES—			
LOT 3 40.89 ACRES					
LOT 4 40.88 ACRES	—81.74 ACRES—	—163.37 ACRES—			

LAT - N32°07'28.9"  
LONG - W103°54'48.7"  
(NAD-83)

3200.2' 3200.4'  
430'  
3200.9' 3198.4'

SECTION 18, TOWNSHIP 25 SOUTH, RANGE 30 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF CO. RD. 787 (TWIN WELL)  
AND CO. RD. 748 (MCDONALD), PROCEED SOUTHEAST  
ON CO. RD. 748 FOR APPROX. 1.9 MILE TO  
ENTERPRISE AND BASS ROW; THENCE SOUTHWEST 4.9  
MILE TO PROPOSED LEASE ROAD.

**BASIN SURVEYS** P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 17547 Drawn By: J. SMALL

Date: 12-28-2006 Disk: 17547W JMS

**BEPCO, L.P.**

REF: POKER LAKE UNIT #268 / WELL PAD AND TOPO

THE POKER LAKE UNIT #268 LOCATED 660' FROM

THE SOUTH LINE AND 430' FROM THE EAST LINE OF

SECTION 18, TOWNSHIP 25 SOUTH, RANGE 30 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 12-27-2006 Sheet 1 of 1 Sheets

**EIGHT POINT DRILLING PROGRAM  
BEPCO L.P.**

**NAME OF WELL: Poker Lake Unit #268**

LEGAL DESCRIPTION - SURFACE: 660' FSL & 430' FEL, Section 18, T-25-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 3217' (est)      GL 3200'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>	<u>ESTIMATED SUBSEA TOP</u>	<u>BEARING</u>
T/Salt	967'	+2250'	Barren
T/Lamar	3603'	- 386'	Oil/Gas
T/Ramsey	3637'	- 420'	Oil/Gas
TD	7880'	-4663'	

**POINT 3: CASING PROGRAM**

<u>TYPE</u>	<u>INTERVALS</u>	<u>Hole Size</u>	<u>PURPOSE</u>	<u>CONDITION</u>
16"	0'- 60'	20"	Conductor	Contractor Discretion
8-5/8", 32#, J-55, LT&C	0'- 957'	12-1/4"	Surface	New
5-1/2", 15.5#, J-55, LT&C	0' -6630'	7-7/8"	Production	New
5-1/2", 17#, J-55, LT&C	6630' -7880'	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 – 3000 psi system (Diagram 2) will be nipped 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.

**POINT 5: MUD PROGRAM**

<u>DEPTH</u>	<u>MUD TYPE</u>	<u>WEIGHT</u>	<u>FV</u>	<u>PV</u>	<u>YP</u>	<u>FL</u>	<u>Ph</u>
0' - 967'	FW Spud Mud	8.5 - 9.2	38-70	NC	NC	NC	10.0
967' - 5400'	Brine Water	9.8 -10.2	28-30	NC	NC	NC	9.5 - 10.5
5400' - TD	BW/Diesel	8.8 - 9.0	32-40	8	2	<100 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**

<u>INTERVAL</u>	<u>AMOUNT SXS</u>	<u>FT OF FILL</u>	<u>TYPE</u>	<u>GALS/SX</u>	<u>PPG</u>	<u>FT<sup>3</sup>/SX</u>
<b>SURFACE:</b>						
Lead: 0 - 667' (100% excess circ to surface)	325	667	35:65 Class C Poz + 3% S1 + 0/25 pps D29 + 6% D20	10.7	12.6	2.05
Tail: 667' - 967' (100% excess circ to surface)	210	300	Class C + 2% S1 (CaCl <sub>2</sub> )	6.3	14.8	1.34
<b>PRODUCTION:</b>						
Lead 3134' - 6000' (50% excess)	310	2866	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
Tail 6000' - 7880' (50% excess)	250	1880	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

**E) DIRECTIONAL DRILLING**

No directional services anticipated.

**POINT 7: ANTICIPATED RESERVOIR CONDITIONS**

Normal pressures are anticipated throughout Delaware section. A BHP of 3520 psi (max) or MWE of 8.7 ppg is expected. Lost circulation may exist in the Delaware Section from 3634-7400'. No H<sub>2</sub>S 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 10, 2007

## **MULTI-POINT SURFACE USE PLAN**

**NAME OF WELL: Poker Lake Unit #268**

**LEGAL DESCRIPTION - SURFACE:** 660 FSL & 430' FEL, Section 18, T-25-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 miles to lease road, then east for 0.25 mile, then south 0.9 miles, then east 0.3 mile, then southeasterly for 5 miles, then westerly for 1.2 miles to Intersection of County Road 746 (McDonald Road) and County Road 787 (Twin Wells Road). From junction of County Road 746 and County Road 787 go southeast for 1.9 miles on County Road 746 to Enterprise ROW, and then go 4.9 miles southwest to proposed road.

C) Existing Road Maintenance or Improvement Plan:

See Exhibit B and Survey Plats.

### **POINT 2: NEW PLANNED ACCESS ROUTE**

A) Route Location:

Approximately 527' 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

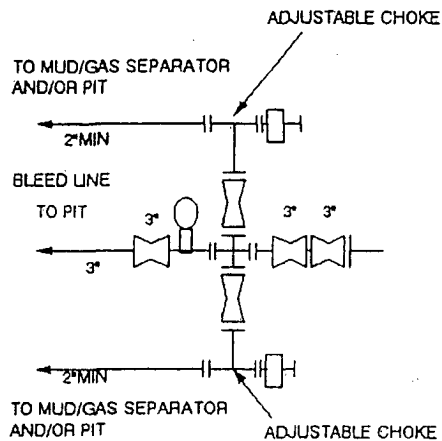
If required, culverts and cattle guards will be set per BLM Specs.

### **POINT 3: LOCATION OF EXISTING WELLS**

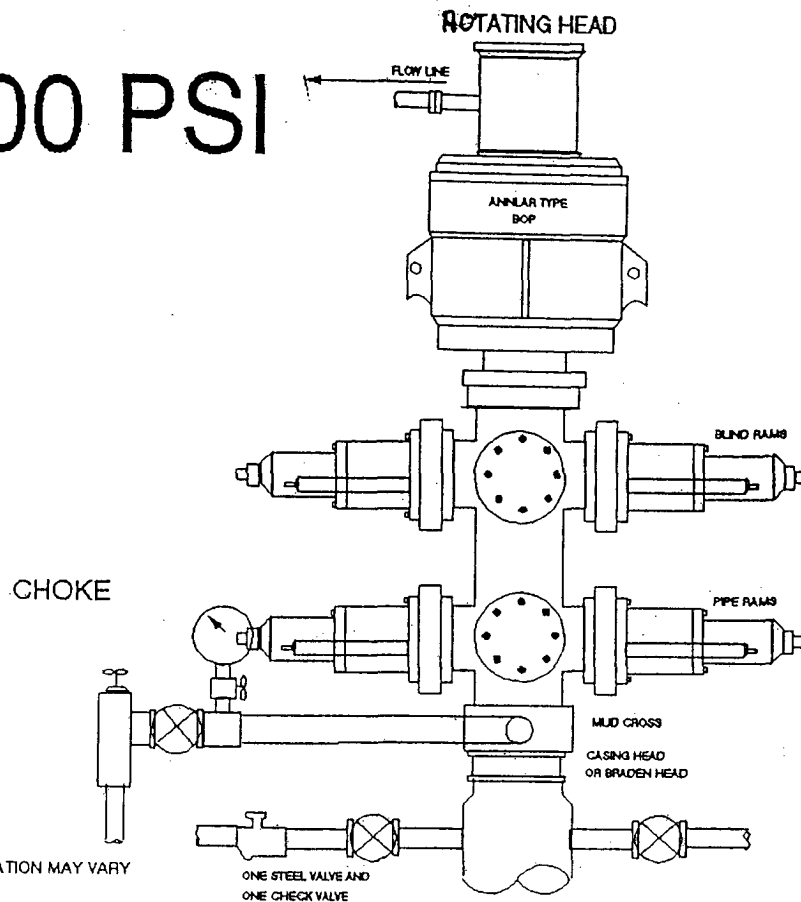
Exhibit A indicates existing wells within the surrounding area.



# 3000 PSI



3000 # PSI CHOKE MANIFOLDE EQUIPMENT - CONFIGURATION MAY VARY



## 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

## **Conditions of Approval Cave and Karst**

EA#: NM-080-07-0380

Lease #: LC-065705B

**Bass Enterprises Production Company  
Poker Lake Unit #268**

### **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. See geologist report for depth.

#### **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 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.

**Delayed Blasting:**

Any blasting will be a phased and time delayed.

**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

Well Name & No.      Poker Lake Unit # 268  
Operator's Name:      BEPCO, LP  
Location:              660' FSL, 330' FEL, SEC 18, T25S, R30E, Eddy County, NM  
Lease:                  LC-065705B

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:
  - A. Spudding
  - B. Cementing casing: 16 inch, 8 5/8 inch 5 1/2 inch
  - C. BOP tests
2. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan should be activated prior to drilling into the N/A Formation. A copy of the plan shall be posted at the drilling site.
3. 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.
4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing ( size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.
7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

### II. CASING:

1. The 8 5/8 inch surface casing shall be set ABOVE THE SALT, AT LEAST 25 feet INTO THE RUSTLER ANHYDRITE @ APPROXIMATELY 500 FEET, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
2. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall CIRCULATE TO THE SURFACE.
3. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

### **III. PRESSURE CONTROL:**

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 8 5/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
2. Minimum working pressure of the blowout preventer and related equipment (BOPE) is 2000 psi.
3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
  - A variance to test the 8 5/8 casing, BOP and BOPE to the reduced pressure of 1000 psi with the rig pumps is approved.
  - The tests shall be done by an independent service company.
  - The results of the test shall be reported to the appropriate BLM office.
  - Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
  - Testing must be done in a safe workman-like manner. Hard line connections shall be required.

### **IV. Hazards:**

1. Our geologist has identified this area as having a high potential for Karst and caves.
2. Our geologist has identified this area as having possible water flows in the Salado, Delaware and Bone Spring, as well as possible lost circulation zones in the Delaware and Bone Spring.

**Engineers can be reached at 505-706-2779 for any variances that might be necessary.**

**FWright 2/8/07**