

ATS-07-339

SECRETARY'S POTASH
HIGH CAVE KARST
OCD-ARTESIA

Form 3160-3



RESUBMITTAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

Month - Year

11/14/2007

OCD - ARTESIA, NM

Lease Serial No.
NMLC 068430

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7. If Unit or CA Agreement, Name and No. NMNM 71016X	
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		8. Lease Name and Well No. Poker Lake Unit #229 1796	
2. Name of Operator BEPCO, L. P. 1801 CARLSBAD CONTROLLED WATER BASIN		9. Well No. 30-015-35609	
3a. Address P. O. Box 2760 Midland, TX 79702		3b. Phone No. (include area code) 432-683-2277	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface SWNE, UL G, 2180' FNL, 2260' FEL, Lat N32.248583, Lon W103.901750 At proposed prod. zone Same		10. Field and Pool, or Exploratory Nash Draw (Dela, BS, Avalon Sd)	
14. Distance in miles and direction from nearest town or post office* 14 Miles East of Malaga, NM		11. Sec., T. R. M. or Blk. and Survey or Area Sec 5, T24S, R30E, MER NMP	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 2180'		16. No. of acres in lease 2479.76	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1537'		17. Spacing Unit dedicated to this well 40	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3273' GL		20. BLM/BIA Bond No. on file NM 2204	
22. Approximate date work will start* 08/15/2007		23. Estimated duration 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. | 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 <i>Annette Childers</i>	Name (Printed/Typed) Annette Childers	Date 3-1-2007
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Title
Administrative Assistant

Approved by (Signature) /s/ Linda S. C. Rundell	Name (Printed/Typed) /s/ Linda S. C. Rundell	Date MAY 09 2007
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Title STATE DIRECTOR	Office NM STATE OFFICE
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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)

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.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Additional Operator Remarks:

Surface casing to be set into the Rustler below all fresh water sands.
Production casing will be cemented using Zone Seal cement.
Drilling Procedure, BOP Diagram, Anticipated tops and surface plans attached.

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

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

DISTRICT II
811 South First, Artesia, NM 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87506

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

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

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 47545	Pool Name NASH DRAW DELAWARE
Property Code 001796	Property Name POKER LAKE UNIT	Well Number 229
OGRID No. 001801	Operator Name BASS ENTERPRISES PRODUCTION COMPANY	Elevation 3273'

Surface Location

UL or lot No. G	Section 5	Township 24 S	Range 30 E	Lot Idn	Feet from the 2180	North/South line NORTH	Feet from the 2260	East/West line EAST	County EDDY
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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 4 59.98 AC.	LOT 3 39.96 AC.	LOT 2 39.92 AC.	LOT 1 39.90 AC.
<p>80 ACRES GLO</p> <p>160 AC GLO</p>			

OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

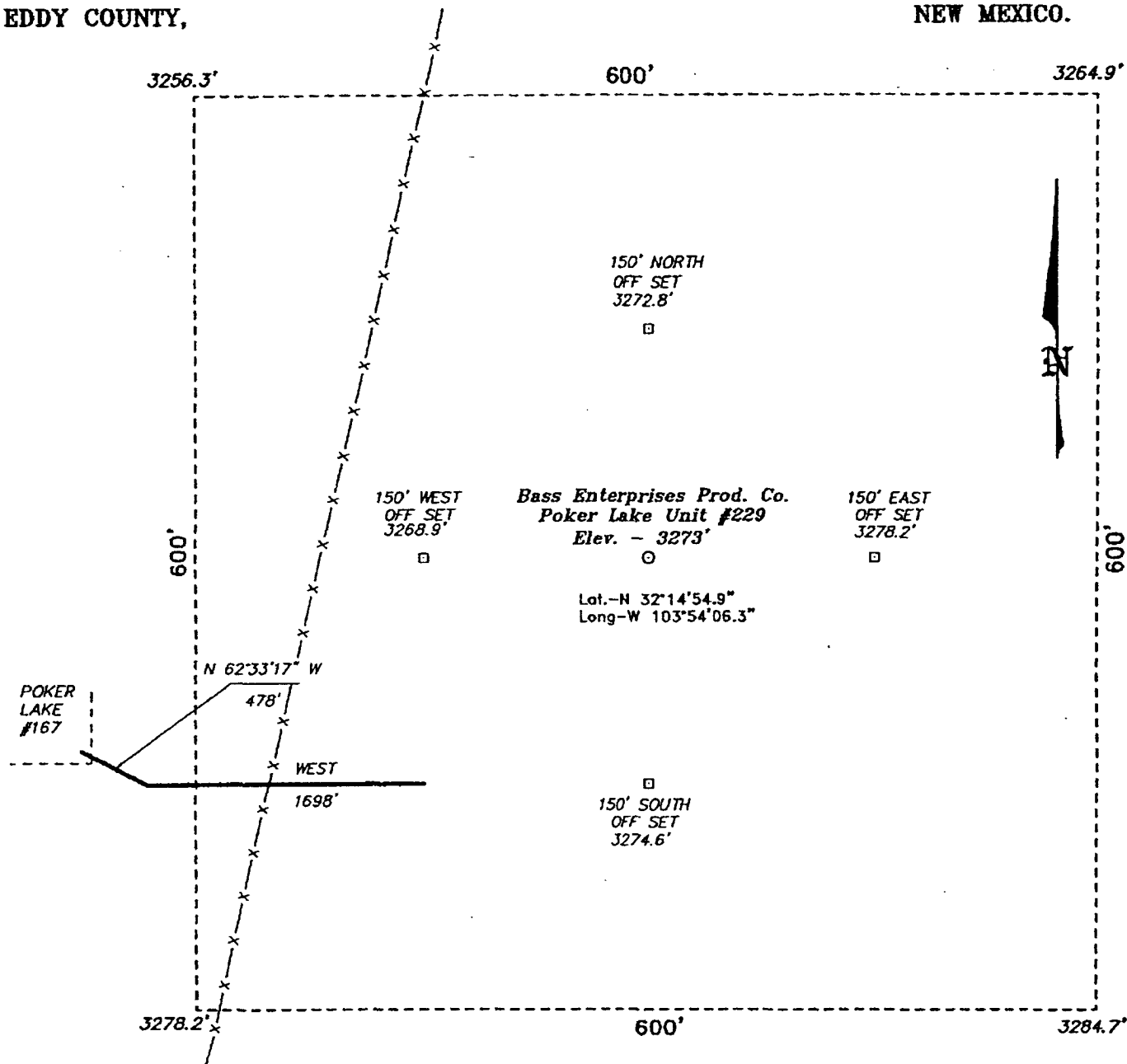
William R. Dannels
Signature
W.R. DANNELS
Printed Name
DIVISION DRILLING SUPT.
Title
3/5/05
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.

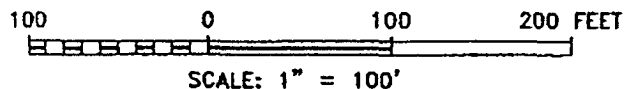
December 09, 2004
Date Surveyed
Signature *Gary L. Jones*
Professional Surveyor
NEW MEXICO
7977
O. No. 4925
Certificate No. Gary L. Jones 7977
JLP
BASIC SURVEY

SECTION 5, TOWNSHIP 24 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF STATE HWY 128 & CO. RD. 793, GO SOUTH AND WEST ON CO. RD. 793 APPROX. 4.0 MILES TO A LEASE ROAD; THENCE SOUTH ON LEASE ROAD APPROX. 4 MILES TO A POINT ON THE PLU #156 WELL PAD; THENCE EAST 1158 FEET TO THE PLU #157 WELL PAD. THEN EAST 820' TO THE PLU #176, AND THE PROPOSED ROAD TO THE PLU #229



BASS ENTERPRISES PRODUCTION CO.

REF: Poker Lake Unit No. 229 / Well Pad Topo

THE POKER LAKE UNIT No. 229 LOCATED 2180' FROM
THE NORTH LINE AND 2260' FROM THE EAST LINE OF
SECTION 5, TOWNSHIP 24 SOUTH, RANGE 30 EAST.

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

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

W.O. Number: 4925

Drawn By: K. GOAD

Date: 12/20/04

Disk: JLP #1 - 4925A.DWG

Survey Date: 12/09/04

Sheet 1 of 1 Sheets

**EIGHT POINT DRILLING PROGRAM
BASS ENTERPRISES PRODUCTION CO.**

NAME OF WELL: Poker Lake Unit #229

LEGAL DESCRIPTION - SURFACE: 2180' FNL & 2260' FEL, Section 5, 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 3293' (est) GL 3273'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>	<u>ESTIMATED SUBSEA TOP</u>	<u>BEARING</u>
T/Rustler	Not present	Not present	Barren
T/Salt	578'	+2715'	Barren
T/Ramsey Sand	3638'	-345'	Oil/Gas
T/Lwr Brushy Canyon "8" A	7201'	-3908'	Oil/Gas
T/Bone Spring	7468'	-4175'	Oil/Gas
TD	7800'	-4507'	

POINT 3: CASING PROGRAM

<u>TYPE</u>	<u>Hole size</u>	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u>
16" 30#		0' - 40'	Conductor	Contractor Discretion
8-5/8" 28#, J-55, LT&C	13/4	0' - 525'	Surface	New
5-1/2" 15.5#, J-55, LT&C	7/8	0' - 6300'	Production	New
5-1/2" 17#, J-55, LT&C		6300' - 7800'	Production	New

WITNESS

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

A BOP equivalent to Diagram 1 will be nipped up on the surface casing head. The BOP stack choke, kill lines, kelly cocks, inside BOP, etc. will be hydro-tested to 70% of internal yield pressure of casing. In addition to the high pressure test, a low pressure (200 psi) 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

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0' - 525'	FW Spud Mud	8.5 - 9.2	70-38	NC	NC	NC	10.0
525' - 5600'	Brine Water	9.8 -10.2	28-30	NC	NC	NC	9.5-10.5
5600' - TD'	Brine Water/Diesel	8.8 - 9.0	32-40	8	2	<25 cc	9.5 - 10.0

*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 (+/- 3370').
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	COMPRESSIVE Nitrogen Strength	
SURFACE:								
Lead 0 - 225' (100% excess circ to surface)	100	225	Permian Basin Critical Zone + 1/2# Flocele	10.4	12.8	1.90		
Tail 225'-525' (100% excess circ to surface)	200	300	Prem Plus + 2% CaCl ₂ + 1/2# Flocele	6.33	14.8	1.35		
PRODUCTION:								
Base Slurry w/nitrogen 3138-7800' + (50% excess)	775	4662	Premium Plus + 2% Zone Sealant 2000	6.32	9.1-14.5	2.3-1.39	300/600 scf/bbl	1200

COA Surface Cave Karst

E) DIRECTIONAL DRILLING

No directional services anticipated.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Delaware section. A BHP of 3285 psi (max) or MWE of 8.7 ppg is expected. Lost circulation may exist in the Delaware Section from 3638- 7468'. No H₂S 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/cdg

February 14, 2005

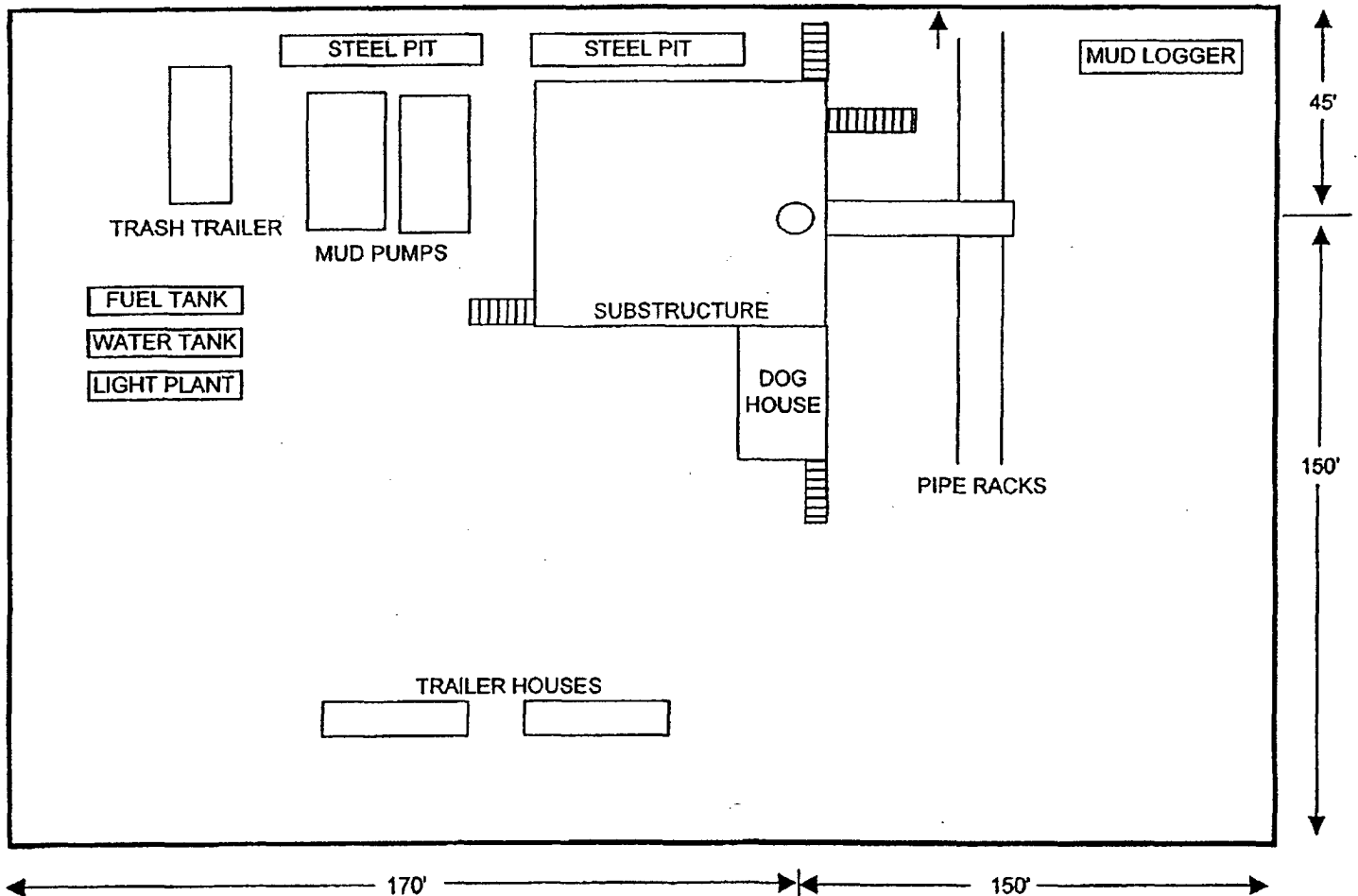
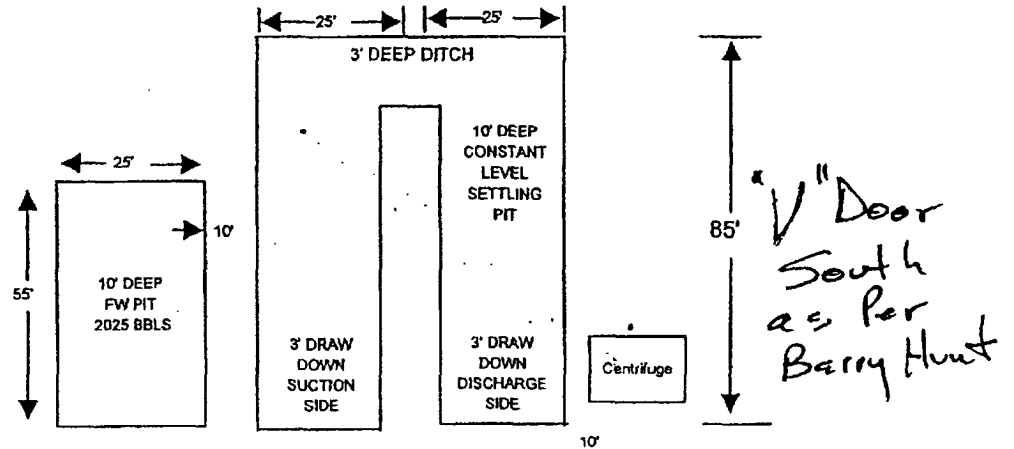
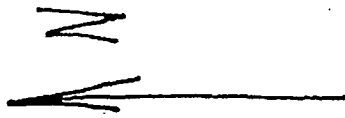
Bass Enterprises Production Company

Grey Wolf Rig 15

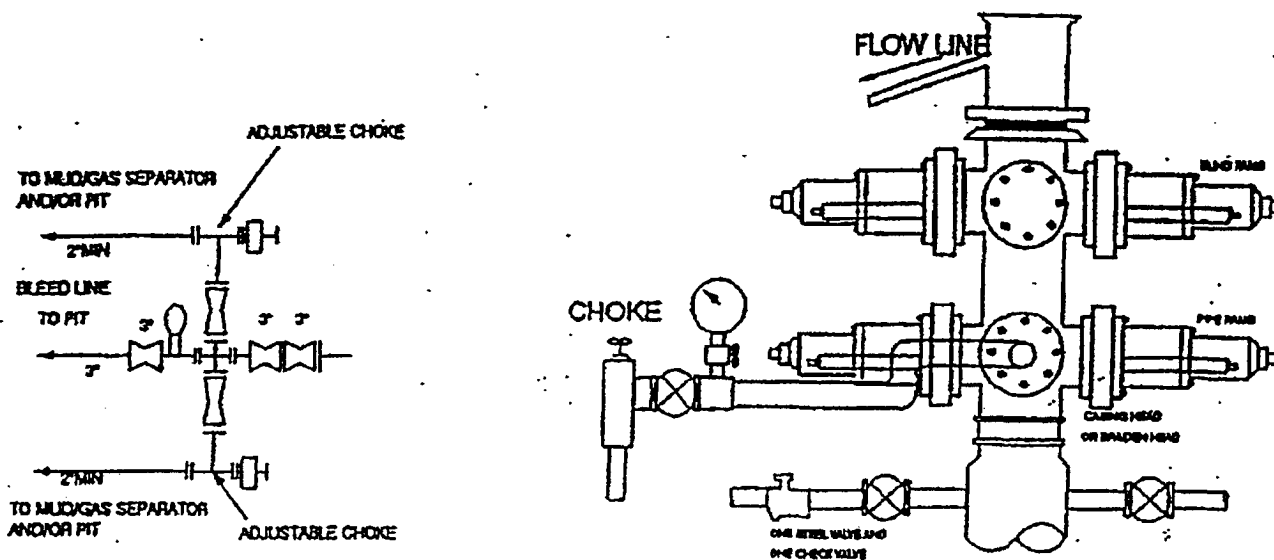
Well Pad

Reserve Pit Diagram

EXHIBIT "D"



2000 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 #229

LEGAL DESCRIPTION - SURFACE: 2180' FNL & 2260' FEL, Section 5, 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 Junction of State Highway 128 and County Road 793, go south and west on County Road #793 four (4) miles to lease road. Turn south on lease road 3.5 miles to lease road to the east. Turn east through Poker Lake Unit #152,153,167 well pads (0.8 miles) continue east past Poker Lake Unit #167 to Poker Lake Unit #189 pad and then ½ mile to Poker Lake Unit #229.

C) Existing Road Maintenance or Improvement Plan:

See Exhibits A, C and Survey Plats.

POINT 2: NEW PLANNED ACCESS ROUTE

A) Route Location:

Approximately 1698' of new road is required.

B) Width

12'

C) Maximum Grade

Grade as necessary to match surrounding 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. Pre-existing fence will be temporarily re-routed and placed back in its original position after drilling rig moves off.

POINT 3: LOCATION OF EXISTING WELLS

Exhibit B indicates existing wells within the surrounding area.

POINT 4: LOCATION OF EXISTING OR PROPOSED FACILITIES

Page 2

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

Oil/Gas production facilities are located at PLU #184 wellsite.

B) New Facilities in the Event of Production:

Existing production facilities at PLU #184 will be used via flowlines. Additional separators/treaters will be added as necessary. A new flowline consisting of 2-7/8" steel pipe, will be laid within 50' of the centerline of the access road and existing roads which have previously been Arch cleared. Three phase 12,470 volt power lines will like wise be extended to this well with poles placed within 50' of the centerline.

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

Exhibit A shows location of caliche source.

B) Land Ownership

Federally Owned.

C) Materials Foreign to the Site

No construction materials foreign to this area are anticipated for this drill site.

D) Access Roads

See Exhibits A and C.

POINT 7: METHODS FOR HANDLING WASTE MATERIAL

Page 3

A) Cuttings

Cuttings will be contained in the reserve pit.

B) Drilling Fluids

Drilling fluids will be contained in the reserve pit.

C) Produced Fluids

Water production will be contained in the reserve pit.

Hydrocarbon fluid or other fluids that may be produced during testing will be retained in test tanks. Prior to cleanup operations, any hydrocarbon material in the reserve pit will be removed by skimming or burning as the situation would dictate.

D) Sewage

Current laws and regulations pertaining to the disposal of human waste will be complied with.

E) Garbage

Portable containers will be utilized for garbage disposal during the drilling of this well.

F) Cleanup of Well Site

Upon release of the drilling rig, the surface of the drilling pad will be graded to accommodate a completion rig if electric log analysis indicate potential productive zones. The reserve pit will be fenced and bird netted. The fence will be maintained until the pit is backfilled. Reasonable cleanup will be performed prior to the final restoration of the site.

POINT 8: ANCILLARY FACILITIES

None required.

POINT 9: WELL SITE LAYOUT

A) Rig Orientation and Layout

Exhibit "D" shows the dimensions of the well pad and reserve pits, and the location of major rig components. Only minor leveling of the well site will be required. No significant cuts or fills will be necessary.

B) Locations of Pits and Access Road

See Exhibits "A", "C" & "D".

C) Lining of the Pits

The reserve pit will be lined with plastic.

POINT 10: PLANS FOR RESTORATION OF THE SURFACE

A) Reserve Pit Cleanup

The pits will be fenced immediately after construction and shall be maintained until they are backfilled. Previous to backfill operations, any hydrocarbon material on the pits' surfaces shall be removed. The fluids and solids contained in the pits shall be backfilled with soil excavated from the site and soil adjacent to the reserve pits. The restored surface of the pits shall be contoured to prevent impoundment of surface water flow. Water-bars will be constructed as needed to prevent excessive erosion. Topsoil, as available, shall be placed over the restored surface in a uniform layer. The area will be seeded according to the Bureau of Land Management stipulations during the appropriate season following restoration.

B) Restoration Plans - Production Developed

The reserve pits will be backfilled and restored as described above under Item A. In addition, those areas not required for production will be graded to blend with the surrounding topography. Topsoil, as available, will be placed upon those areas and seeded. The portion of the site required for production will be graded to minimize erosion and provide access during inclement conditions. Following depletion and abandonment of the site, restoration procedures will be those that follow under Item C.

C) Restoration Plans - No Production Developed

The reserve pits will be restored as described above. With no production developed, the entire surface disturbed by construction of the well site will be restored. The site will be contoured to blend with the surrounding topography and provide drainage of surface water. The topsoil, as available, shall be replaced in a uniform layer and seeded according to the Bureau of Land Management's stipulations.

D) Rehabilitation's Timetable

Upon completion of drilling operations, the initial cleanup of the site will be performed as soon as weather and site conditions allow economic execution of the work.

POINT 11: OTHER INFORMATION

Page 5

A) Terrain

Relatively flat.

B) Soil

Caliche and sand.

C) Vegetation

Sparse, primarily grasses and mesquite with very little grass.

D) Surface Use

Primarily grazing.

E) Surface Water

There are no ponds, lakes, streams or rivers within several miles of the wellsite.

F) Water Wells

There are no water wells located within 1 mile radius of this location.

G) Residences and Buildings

None in the immediate vicinity.

H) Historical Sites

None observed.

I) Archeological Resources

An archeological survey will be obtained for this area. Before any construction begins, a full and complete archeological survey will be submitted to the Bureau of Land Management. Any location or construction conflicts will be resolved before construction begins.

J) Surface Ownership

The well site is on federally owned land.

K) Well signs will be posted at the drilling site.

L) Open Pits

All pits containing liquid or mud will be fenced and bird-netted.

POINT 12: OPERATOR'S FIELD REPRESENTATIVE

Page 6

(Field personnel responsible for compliance with development plan for surface use).

DRILLING

William R. Dannels
Box 2760
Midland, Texas 79702
(432) 683-2277

PRODUCTION

Mike Waygood
3104 East Green Street
Carlsbad, New Mexico 88220
(505) 887-7329

Kent A. Adams
Box 2760
Midland, Texas 79702
(432) 683-2277

POINT 13: CERTIFICATION

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Bass Enterprises Production Co. and it's contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

3/5/05

Date

William R. Dannels

William R. Dannels

GEG/cdg

Conditions of Approval Cave and Karst

EA#: NM-080-07-0552
Lease #: LC-068430, LC-068431
BEPCO, L.P.
Poker lake Unit #229,230

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 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 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. 229-Poker Lake Unit
Location: 2180FNL, 2260FEL, Section 5, T-24-S, R-30-E
Lease: NMLC 068430

.....

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 8-5/8 inch surface casing shall be set a minimum of 25 feet into the Rustler Anhydrite and above the salt at approximately 525 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 Delaware and Bone Spring 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 surface due to cave/karst**. 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 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.

Engineer on call: 505-706-2779

WWI 031507