

OCD-ARTESIA

Month - Year
MAY 3 2007
OCD - ARTESIA, NMUNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTSECRETARY'S POTASH
NMLC 069144AFORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

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. NM 69284X	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Lease Name and Well No. BIG EDDY UNIT 164 11774'	
2. Name of Operator BEPCO, L.P. 1801		9. API Well No. 30-015-35592	
3a. Address P O Box 2760 Midland, TX 79702		10. Field and Pool, or Exploratory QUAHADA RIDGE (MORROW)	
3b. Phone No. (include area code) (432) 683-2277		11. Sec., T. R. M. or Blk. and Survey or Area Sec 27, T21S, R29E, NMP BLM	
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface NWSE 1650' FSL, 1650' FEL, 32.447667 N LAT, 103.96925 W LON At proposed prod. zone SAME CARLSBAD CONTROLLED WATER BASIN		12. County or Parish Eddy	
14. Distance in miles and direction from nearest town or post office* 15 MILES EAST OF CARLSBAD NM		13. State NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	990'	16. No. of acres in lease	17. Spacing Unit dedicated to this well
		1620.86	320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	2479'	19. Proposed Depth	20. BLM/BIA Bond No. on file
		13,500'	NM 2204
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	3457' GL	22. Approximate date work will start*	23. Estimated duration
		07/01/2007	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 <i>Annette Childers</i>	Name (Printed/Typed) Annette Childers	Date 02/13/2007
Title Administrative Assistant		
Approved by (Signature) <i>R. Berkhardt</i>	Name (Printed/Typed)	Date APR 25 2007
Title STATE DIRECTOR 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
ATTACHEDSEE ATTACHED FOR
CONDITIONS OF APPROVALIf earthen pits are used in
association with the drilling of this
well, an OCD pit permit must be
obtained prior to pit construction.

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

Form C-102
Revised October 12, 2005

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

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 83240	Pool Name QUAHADA RIDGE (MORROW)
Property Code 061944	Property Name BIG EDDY UNIT		Well Number 164
OGRID No. 001801	Operator Name BEPCO, L.P.		Elevation 3457'

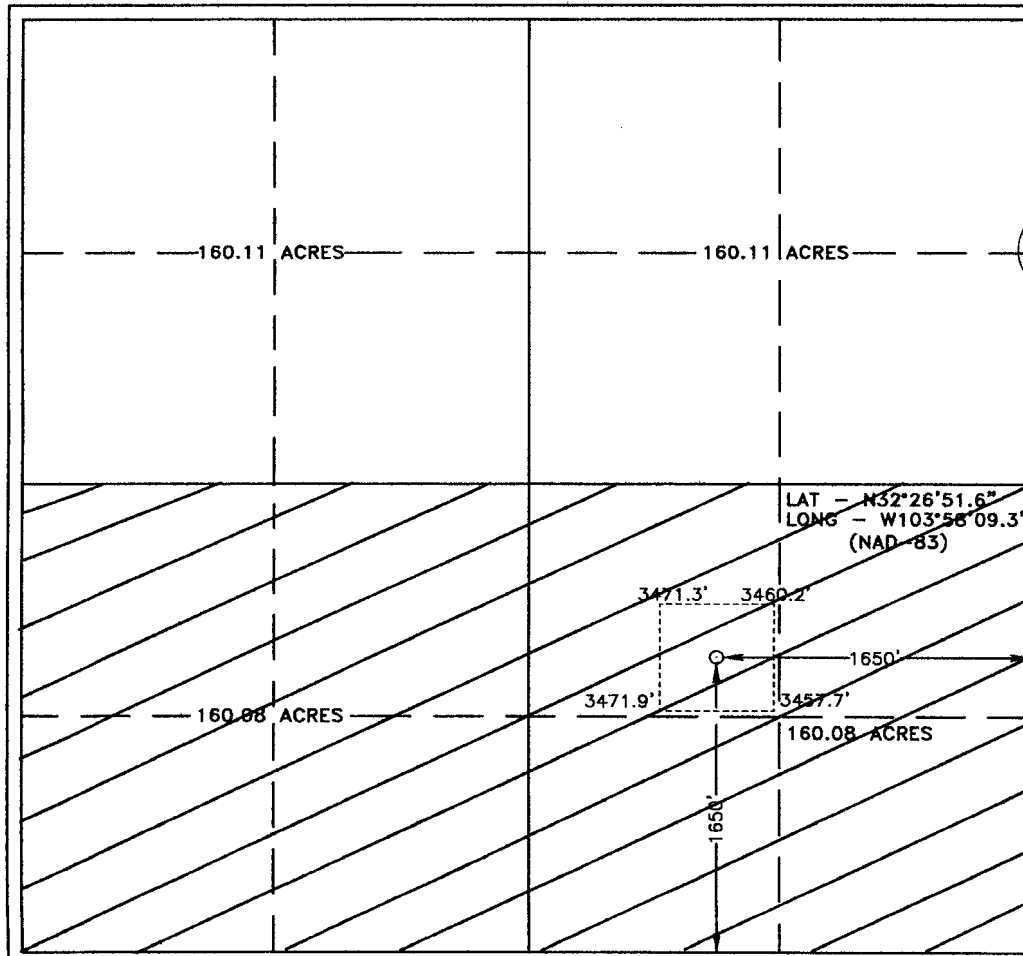
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	27	21 S	29 E		1650	SOUTH	1650	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 320	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



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.

Signature

Stephen M. Martinez

Printed Name

2/13/07
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.

JANUARY 05 2007

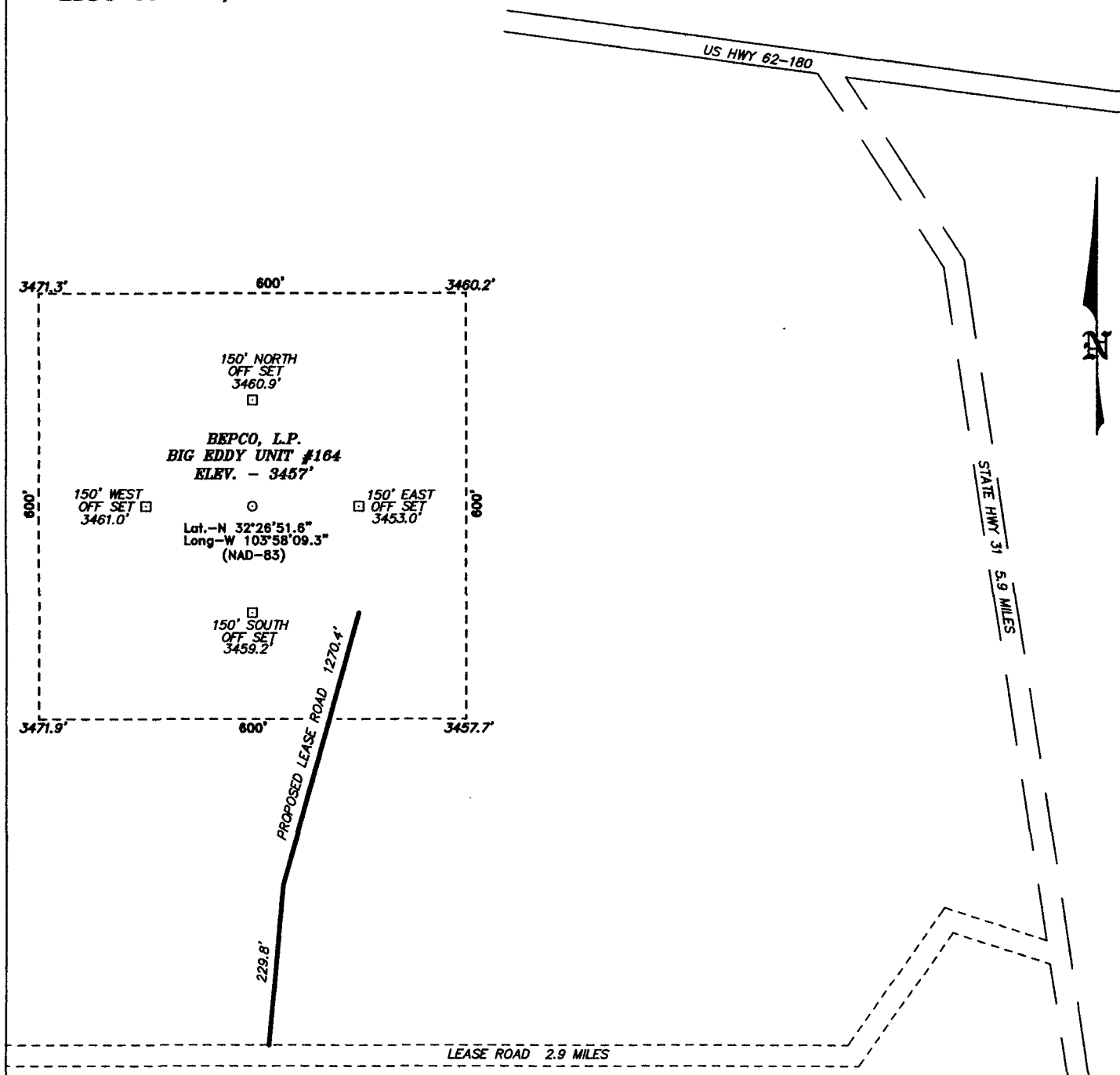
Date Surveyed
Signature of Surveyor
Professional Surveyor



Certificate No. Gary L. Jones 7977

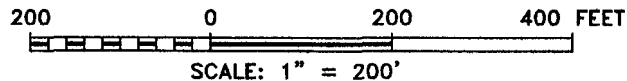
BASIN SURVEYS

SECTION 27, TOWNSHIP 21 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF US HWY 62-180 AND STATE HWY 31, PROCEED SOUTH ON STATE HWY 31 FOR APPROX 5.9 MILES TO LEASE ROAD, ON LEASE ROAD PROCEED WEST APPROX 2.9 MILES TO PROPOSED LEASE ROAD.



BEPCO, L.P.

REF: BIG EDDY UNIT #164 / WELL PAD AND TOPO

THE BIG EDDY UNIT No. 164 LOCATED 1650'
FROM THE SOUTH LINE AND 1650' FROM THE EAST LINE OF
SECTION 27, TOWNSHIP 21 SOUTH, RANGE 29 EAST,

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

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

W.O. Number: 17459

Drawn By: J. SMALL

Date: 01-08-2007

Disk: 17459W JMS

Survey Date: 01-05-2007

Sheet 1 of 1 Sheets

Surface casing is to be set into the Rustler below all fresh water sands. Production casing will be cemented using Halliburton Premium Plus with TOC 500' above upper-most pay zones. Drilling procedure, BOP diagram, anticipated tops and surface plans are attached.

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

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

NAME OF WELL: BIG EDDY UNIT #164

LEGAL DESCRIPTION - SURFACE: 1650' FSL & 1650' FEL, Section 27, T21S, R29E, 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 3478' (est)
GL 3457'

FORMATION	ESTIMATED SUBSEA TOP	ESTIMATED TOP FROM KB	BEARING
T/Rustler	3,095'	383'	Barren
T/Salt	2,830'	648'	Barren
B/Salt	575'	2,903'	Barren
T/Lamar Lime	160'	3,318'	Barren
T/Bell Canyon Sand	75'	3,403'	Oil/Gas
T/Old Indian Draw Sand	-753'	4,231'	Oil/Gas
T/Bone Spring Lime	-3,565'	7,043'	Oil/Gas
T/Wolfcamp	-6,825'	10,303'	Oil/Gas
T/Strawn	-8,029'	11,507'	Oil/Gas
T/Atoka	-8,296'	11,774'	Oil/Gas
T/Upper Morrow	-9,025'	12,503'	Oil/Gas
T/Middle Morrow	-9,310'	12,788'	Oil/Gas
T/Lower Morrow	-9,650'	13,128'	Oil/Gas
TD	-10,022'	13,500'	

POINT 3: CASING PROGRAM

<u>TYPE</u>	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u>
20"	0' - 64'	Conductor	Contractor Discretion
13-3/8", 48#, H-40, STC	0' - 638'	Surface	New
9-5/8", 36#, J-55, LTC	0' - 3,350'	Intermediate	New
5-1/2", 17#, HCP-110, LTC	0' - 13,500'	Production Casing	New

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

A rotating head will be nipped up on the surface casing. The rotating head will not be hydro-tested.

A BOP equivalent to Diagram 1 will be nipped up on the first and second intermediate casings. The BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. will be hydro-tested to 5,000 psi on the first intermediate and the second intermediate casing. The annular will be tested to 2500 psi. In addition to the rated working pressure test, a low pressure (250 psi) test will be required. These tests will be performed:

- a) Upon installation
- b) After any component changes
- c) Twenty-one 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. See the attached Diagram 1 for the minimum criteria for the choke manifold.

POINT 5: MUD PROGRAM

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0' - 648'	FW	8.6 - 9.0	55-60	NC	NC	NC	9.5 - 10.0
648' - 3,350'	FW BRINE ^{4/25/01} _{U3}	8.6 - 9.2	28-29	NC	NC	NC	9.5 - 10.5
3,350' - 10,000'	FW BRINE	8.4 - 8.6	28-30	4	2	NC	9.5 - 10.5
10,000' - 11,500'	CBW	9.0 - 9.5	28-30	6	4	NC	9.6 - 10.0
11,500' - 12,400'	CBW/Polymer	9.5 - 11.2	34-38	6-10	8-12	<20	9.5-10
12,400' - TD'	CBW/Polymer	9.5 - 11.2	34-38	6-10	8-12	<10	9.5-10

POINT 6: TECHNICAL STAGES OF OPERATION

A) TESTING

Drill stem tests may be performed on significant shows in zones of interest, but none are planned at this time.

B) LOGGING

Run #1:

GR-CNL-LDT-LLD-CAL run from 13,500' to intermediate casing, GR-CNL to surface.

C) CORING

No cores are anticipated.

D) CEMENT

<u>INTERVAL</u>	<u>AMOUNT SX</u>	<u>FT OF FILL</u>	<u>TYPE</u>	<u>GALS/SX</u>	<u>PPG</u>	<u>FT³/SX</u>
SURFACE	(100% excess)					
Lead						
0' - 338'	250	338	Light Premium Plus + 0.125 lbm/sk Poly-E-Flake	10.30	12.80	1.89
Tail						
338' - 638'	310	300	Premium Plus + 2% CaCl ₂ + 0.125 lbm/sk Pol-E-flake	6.32	14.80	1.34
INTERMEDIATE	(100% Excess)					
Lead						
0 - 2,850'	600	2850	Interfill C + 0.125 lbm/sk Pol-E-Flake	16.43	11.50	2.76
Tail						
2,850' - 3,350'	250	500	Premium Plus Cement +.2% CaCl ₂	6.34	14.80	1.34
PRODUCTION	(50% Excess - Two stage w/DV tool @ 6,500' and circulate cement to 2,800')					
1 st Stage						
Lead						
6,500' - 11,500'	770	5000	Interfill H + 0.25 lbm/sk Flocele+5 lbm/sk Gilsonite + 0.5 % Halad®-9	13.63	11.90	2.47
Tail						
11,500' - 13,500'	455	2000	Super H + 0.5% Halad 344 + 0.4% CFR3 + 5 pps Gilsonite + 1 pps Salt + 0.2% HR7	8.23	13.00	1.67
2 nd Stage						
Lead						
2,800' - 6,500'	575	3700	Interfill H + .125 pps Pol-e-flake + 0.5% Halad 9	14.08	11.90	2.46
Tail						
5,500' - 6,500'	225	1000	Super H + 0.5% Halad 344 + 0.4% CFR3 + 5 pps Gilsonite + 1 pps Salt + 0.2% HR7	8.23	13.00	1.67

E) DIRECTIONAL DRILLING

No directional services anticipated. A straight hole will be drilled to 13,500' TD.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout the Delaware and Bone Spring. The Wolfcamp and Strawn sections will have pressures in the 5,000 – 6,000 psi range (10.0 - 10.5 ppg). Due to the tight nature of the Atoka reservoir rock (high pressure, low volume), the maximum BHP could be as high as 7,000 psi (11.2 ppg). The well will be drilled under balanced utilizing a rotating head. The Morrow will be normally pressured. The expected BHT at TD is 200°F. No H₂S is anticipated.

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: BIG EDDY UNIT #164

LEGAL DESCRIPTION - SURFACE: 1650' FSL & 1650' FEL, Section 27, T21S, R29E, Eddy County, NM

POINT 1: EXISTING ROADS

- A) Proposed Well Site Location

See Exhibit "A".

- B) Existing Roads:

From the junction of State Highway 62-180 and State Highway 31, proceed south on State Highway 31 for approximately 5.9 miles to the lease road. Proceed west on the lease road approximately 2.9 miles to the proposed lease road.

- C) Existing Road Maintenance or Improve Plan:

See Exhibit "B"

POINT 2: NEW PLANNED ACCESS ROUTE

- A) Route Location:

See Exhibit "B". The new road will be 12' wide and approximately 1,500' long from existing lease road. The road will be constructed of watered and compacted caliche.

- B) Width

12' Wide.

- C) Maximum Grade

Not Applicable.

- D) Turnouts

As required by BLM stipulations

- E) Culverts, Cattle Guards, and Surfacing Equipment

None

POINT 3: LOCATION OF EXISTING WELLS

Exhibit "C" indicates existing wells within the surrounding area.

POINT 4: LOCATION OF EXSITING OR PROPOSED FACILITIES

- A) Existing facilities within one mile owned or controlled by lessee/operator (Exhibit "C"):

Bass production facilities are located at the Bass Big Eddy Unit #97 – SW/4, Sec. 35, T21S, R29E

BEP CO, L. P.

5 M CHOKE MANIFOLD EQUIPMENT-CONFIGURATION MAY VARY

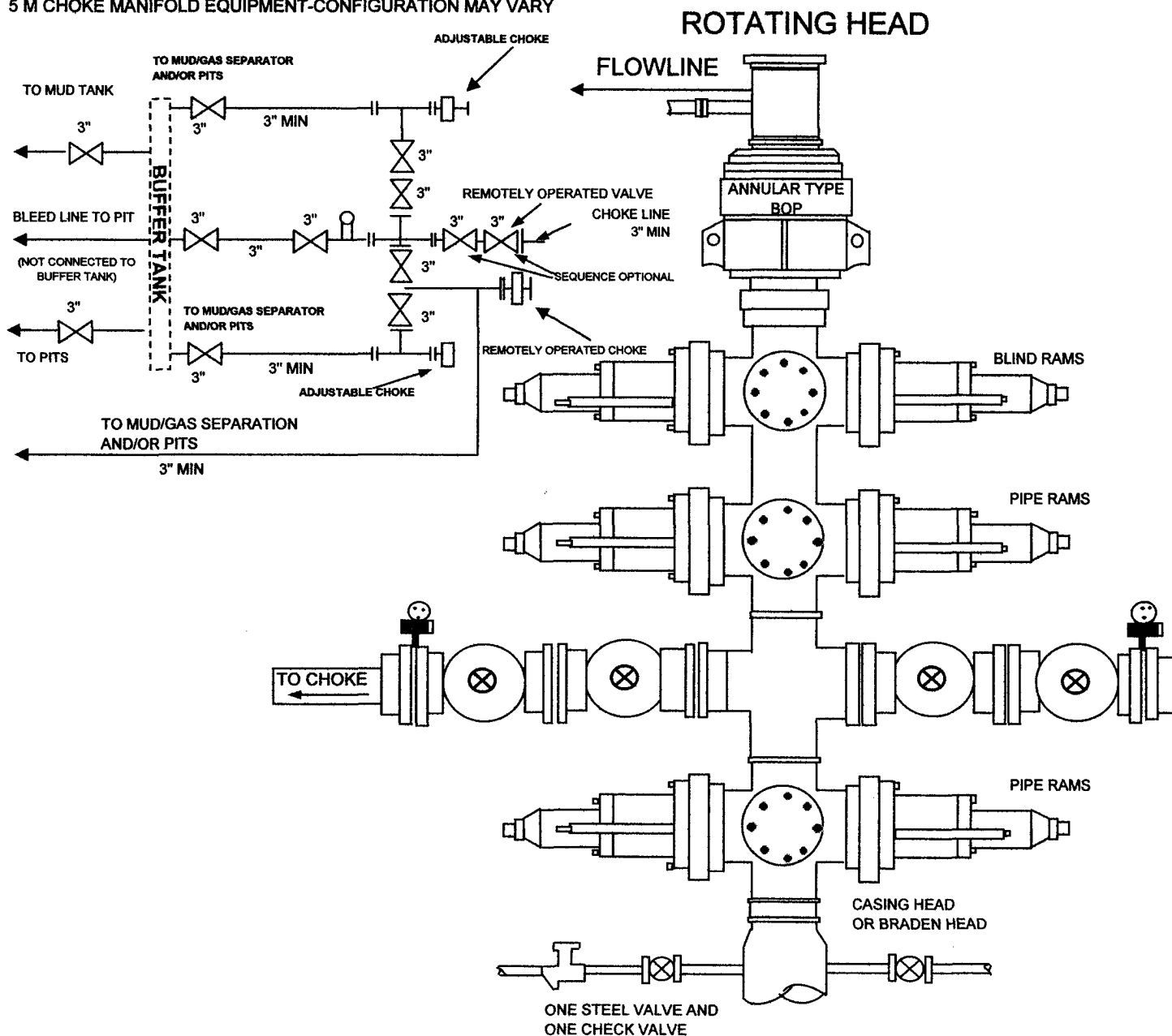
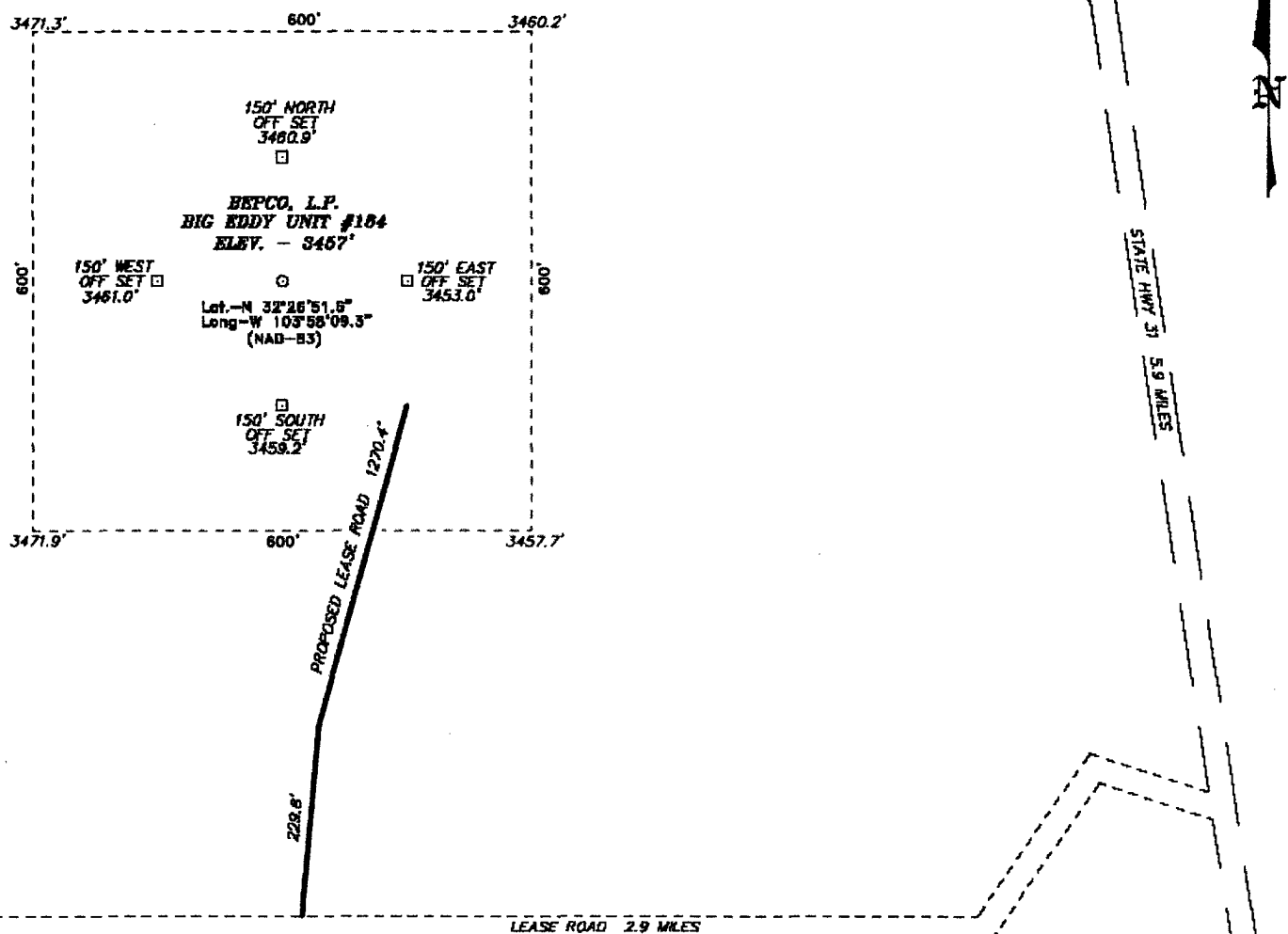


DIAGRAM 1

SECTION 27, TOWNSHIP 21 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Exhibit 'B'
Proposed Access Route



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF US HWY 62-180 AND STATE
HWY 31, PROCEED SOUTH ON STATE HWY 31 FOR
APPROX 5.9 MILES TO LEASE ROAD, ON LEASE ROAD
PROCEED WEST APPROX 2.9 MILES TO PROPOSED
LEASE ROAD.

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

W.O. Number: 17459

Drawn By: J. SMALL

Date: 01-08-2007

Disk: 17459W JMS

BEPCO, L.P.

REF: BIG EDDY UNIT #164 / WELL PAD AND TOPD

THE BIG EDDY UNIT No. 164 LOCATED 1650'

FROM THE SOUTH LINE AND 1650' FROM THE EAST LINE OF

SECTION 27, TOWNSHIP 21 SOUTH, RANGE 29 EAST,

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

Survey Date: 01-05-2007

Sheet 1 of 1 Sheets

Rig Layout Schematic



CONDITIONS OF APPROVAL - DRILLING

Operator's Name: BEPCO, L.P.
Well Name & No. 164 – BIG EDDY UNIT
Location: 1650' FSL & 1650' FEL – SEC 27 – T21S – R29E - EDDY
Lease: LC-069144A

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
- Chaves and Roosevelt Counties call the Roswell Field Office, 2909 West Second St., Roswell NM 88201. During office hours call (505) 627-0258. After office hours call (505) 200-7902
 - Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
 - Lea County call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612
- B. 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.
- C. Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface. The logs shall be run at a speed which allows the logs to be legible and no faster than manufactures of the logging tools recommended speed.
- D. If floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

II. CASING:

- A. The 13-3/8 inch surface casing shall be set at 640 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 9-5/8 inch intermediate casing is circulate cement to the surface. If cement does not circulate see A.1 thru 4.
- C. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall tie back 200 feet into the 9-5/8 inch intermediate casing.
- D. 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 and API RP 53.
- B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 2000 psi.
- C. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 inch intermediate casing shoe shall be 5000 psi.
- D. 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.
 - 5. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.