

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Re-submittal

Form C-101
May 27, 2004

Submit to appropriate District Office

JAN 02 2008

☐ AMENDED REPORT

OCD-ARTESIA

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address BEPCO, L P P. O. Box 2760 Midland, Texas 79702		OGRID Number 001801
Property Code E-5550 1776	Property Name Big Eddy Unit	Well No 168
Proposed Pool 1 Fenton Draw (Morrow)		Proposed Pool 2

Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	16	21S	28E		660	South	1980	East	Eddy

Proposed 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

Additional Well Information

Work Type Code N	Well Type Code G	Cable/Rotary Rotary	Lease Type Code S	Ground Level Elevation 3255'
Multiple No	Proposed Depth 12,400'	Formation Morrow	Contractor JW Drilling	Spud Date 04/01/08
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit: Liner Synthetic <input checked="" type="checkbox"/> 12 mils thick Clay <input type="checkbox"/> Pit Volume 20000bbls Drilling Method: Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				
Closed-Loop System <input type="checkbox"/>				

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48#/ft	+/- 522'	550 sx	Surface
12-1/4"	9-5/8"	36'/ft	+/- 2,550'	1300 sx	Surface
8-3/4"	5-1/2"	17#/ft	+/- 12,400'	2500 sx	2,000'

Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone Describe the blowout prevention program, if any. Use additional sheets if necessary

This well is outside the Secretary's area.

**NOTIFY OCD OF SPUD &
TIME TO WITNESS
CEMENTING OF SURFACE &
INTERMEDIATE CASING**

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		OIL CONSERVATION DIVISION	
Printed name: Annette Childers <i>Annette Childers</i>		Approved by: BRYAN G. ARANT	
Title Administrative Assistant		Title DISTRICT II GEOLOGIST	
E-mail Address: machilders@basspet.com		Approval Date: JAN 02 2008	Expiration Date: JAN 02 2010
Date December 28, 2007	Phone: 432-683-2277	Conditions of Approval Attached <input checked="" type="checkbox"/>	

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

NAME OF WELL: BIG EDDY UNIT #168

LEGAL DESCRIPTION - SURFACE: 1980' FEL & 660' FSL, Section 16, T-21-S, R-28-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 3272' (est.)
GL 3255'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>	<u>ESTIMATED TOP SUB-SEA</u>	<u>BEARING</u>
T/Rustler	512'	+2,760'	Barren
B/Rustler	1,072'	+2,200'	Barren
T/Reef	1,372'	+1,900'	Barren
T/Delaware Mtn. Group	2,472'	+800'	Oil/Gas
T/1 st Delaware Sand	2,622'	+650'	Oil/Gas
T/Old Indian Draw	3,372'	-100'	Oil/Gas
T/Bone Spring	5,997'	-2,725'	Oil/Gas
T/Wolfcamp	9,502'	-6,230'	Oil/Gas
T/Strawn	10,632'	-7,360'	Oil/Gas
T/Atoka Sand	11,012'	-7,740'	Oil/Gas
T/Upper Morrow	11,530'	-8,258'	Oil/Gas
T/Middle Morrow	11,880'	-8,608'	Oil/Gas
T/Lower Morrow	12,182'	-8,910'	
TD	12,400'	-9,128'	

POINT 3: CASING PROGRAM

<u>TYPE</u>	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u>
20"	0' - 80'	Conductor	New
13-3/8", 48#, J55, STC	0' - 522'	Surface	New
9-5/8", 36#, N80, LTC	0' - 2,550'	Intermediate	New
5-1/2", 17#, P110, LTC	0' - 12,400'	Production	New

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

A BOP equivalent to Diagram 1 will be installed on the surface and intermediate casing. When the BOP is installed on the surface casing head, it will be tested to 70% of internal yield of casing or 1000 psig whichever is less. In addition, the BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. will be hydro-tested to 3,000 psi and 200 psi low by independent tester when installed on the intermediate casing spool.

The annular preventer will be tested to 2500 psi on intermediate casing. In addition to the rated working pressure test, a low pressure (200 psi) test will be performed. These tests will be done:

- 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

<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' - 522'	FW/Gel Spud	8.4 - 9.0	32-38	NC	NC	NC	9-10
522' - 2550'	FW/Gel	9.8 - 10.2	28-32	NC	NC	NC	9-10
2550' - 7000'	FW/Gel	8.3 - 8.6	28-32	NC	NC	NC	9-10
7000' - 9500'	FW/C-Brine	8.6 - 9.0	28-34	NC	NC	<100	9-10
9500' - 12400'	Brine/Polymer	9.5 - 11.0	30-36	6-10	6-10	<100	9-10

POINT 6: TECHNICAL STAGES OF OPERATION

A) TESTING

No DST's are planned, however any shows of significance will be tested.

B) LOGGING

GR-CNL/LDT-HRLA from TD to intermediate casing.
GR-CNL intermediate casing 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>FT³/SX</u>
SURFACE 0' - 522' (100% excess) (Circ to Surface)	550	522	Premium Plus + 2% CaCl ₂ + 1/4 #/sk Flocele	6.32	14.80	1.34
INTERMEDIATE Lead: 0' - 2050' (100% excess) (Circ to Surface)	525	2050	Interfil C + 0.25 #/sk Flocele + 1 #/sk Salt.	14.11	11.90	2.45
Tail: 2050' - 2550' (100% excess)	250	500	Premium Plus + 2% CaCl ₂	6.34	14.80	1.34
DV Tool @ 9000'						
1 st Stage Lead: 9000' - 12,400' (50% excess)	815	3400	Super H w/5 #/sk Gilsonite + 0.5% Halad 344 + 0.4% CFR-3 + 0.1% HR-7	7.73	13.20	1.60
2 nd Stage Lead: 2008' - 5000' (50% excess)	550	2992	Interfill C + 0.25 #/sk Flocele + 1 #/sk Salt	10.95	12.50	2.11
Tail: 5000' - 9000' (50% excess)	1000	4000	Premium Plus + 2% CaCl ₂	7.73	13.20	1.60

E) DIRECTIONAL DRILLING

No directional services anticipated.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout the Delaware, Bone Spring & Wolfcamp sections. The Atoka may be abnormally pressured with expected BHP of 6300 psi (max) or an equivalent mud weight of 11.0 ppg. The Morrow expected BHP is 6400 (max) or an equivalent mud weight of 10.5 ppg @ TD. Due to the tight nature of the reservoir rock (high pressure, low volume), the well will be drilled under balanced utilizing a rotating head. The expected BHT at TD is 230°F. 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

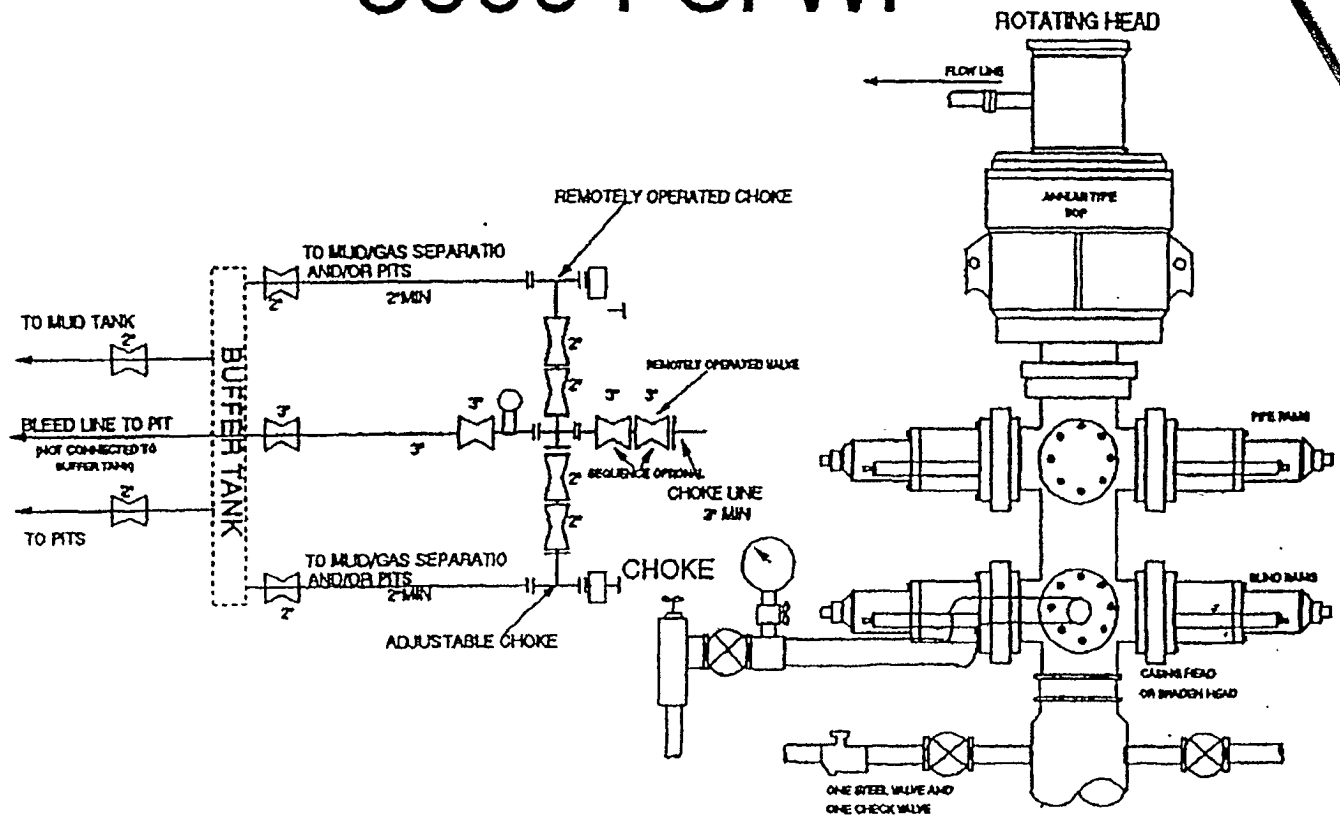
35 days drilling operations

15 days completion operations

SMM

December 28, 2007

5000 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.

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State of New Mexico
Energy, Minerals and Natural Resources Department

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



WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 71640	Pool Name L. Bass; (Morrow)
Property Code	Property Name BIG EDDY UNIT	Well Number 168
OGRID No. 001801	Operator Name BEPCO, L.P.	Elevation 3255'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	16	21 S	28 E		660	SOUTH	1980	EAST	EDDY

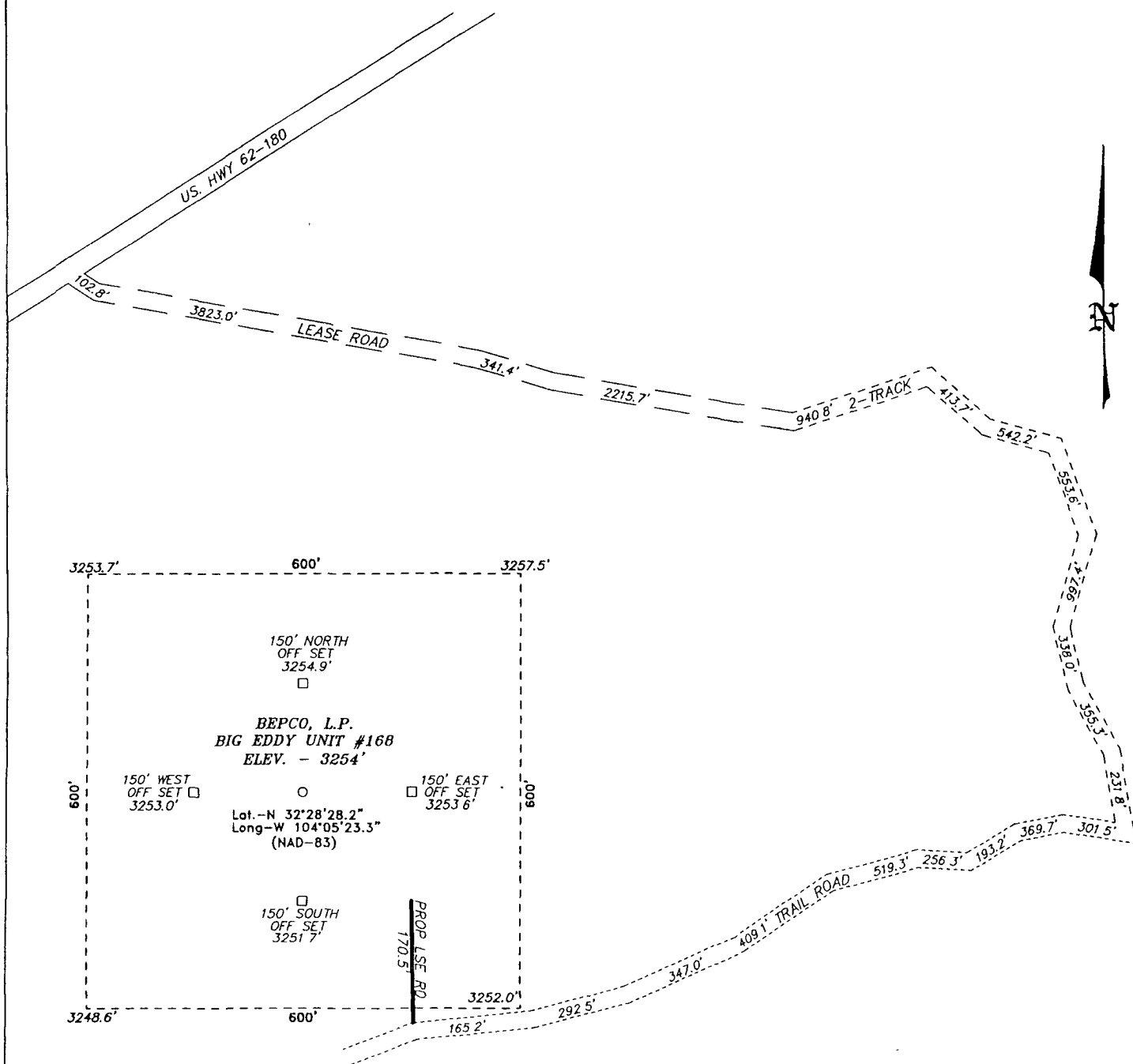
Bottom Hole Location If Different From Surface

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

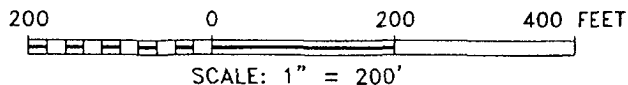
<p>160.65 ACRES</p> <p>160.52 ACRES</p>		<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the 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> Signature Date 12/6/06</p> <p>Gary E. Gerhard Printed Name</p>
<p>160.58 ACRES</p> <p>160.43 ACRES</p> <p>3253.7' 3257.5'</p> <p>3248.6' 3552.0'</p> <p>1980'</p> <p>LAT - N32°28'28.2" LONG - W104°05'23.3" (NAD-83)</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>OCTOBER 02, 2006</p> <p>Date Surveyed</p> <p>Signature & Seal of Professional Surveyor</p> <p>7977</p> <p>W.O. No. 6598</p> <p>Certification No. Gary E. Jones 7977</p>		<p>REGISTERED PROFESSIONAL SURVEYOR</p> <p>GARY E. JONES</p>

SECTION 16, TOWNSHIP 21 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM MILE MARKER #45 OF US. HWY 62-180,
PROCEED WEST 0.7 MILE TO LEASE ROAD, ON LEASE
ROAD PROCEED 1.2 MILE SOUTHEAST TO BEGINNING OF
TWO TRACK, ON TWO TRACK PROCEED 0.9 MILE
SOUTHEAST WINDING SOUTH TO TRAIL ROAD, ON TRAIL
ROAD PROCEED WEST 0.5 MILE TO PROPOSED
LOCATION.



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

W.O. Number. 6599	Drawn By: J. SMALL
Date 10-03-2006	Disk: 6599W JMS

BEPCO, L.P.

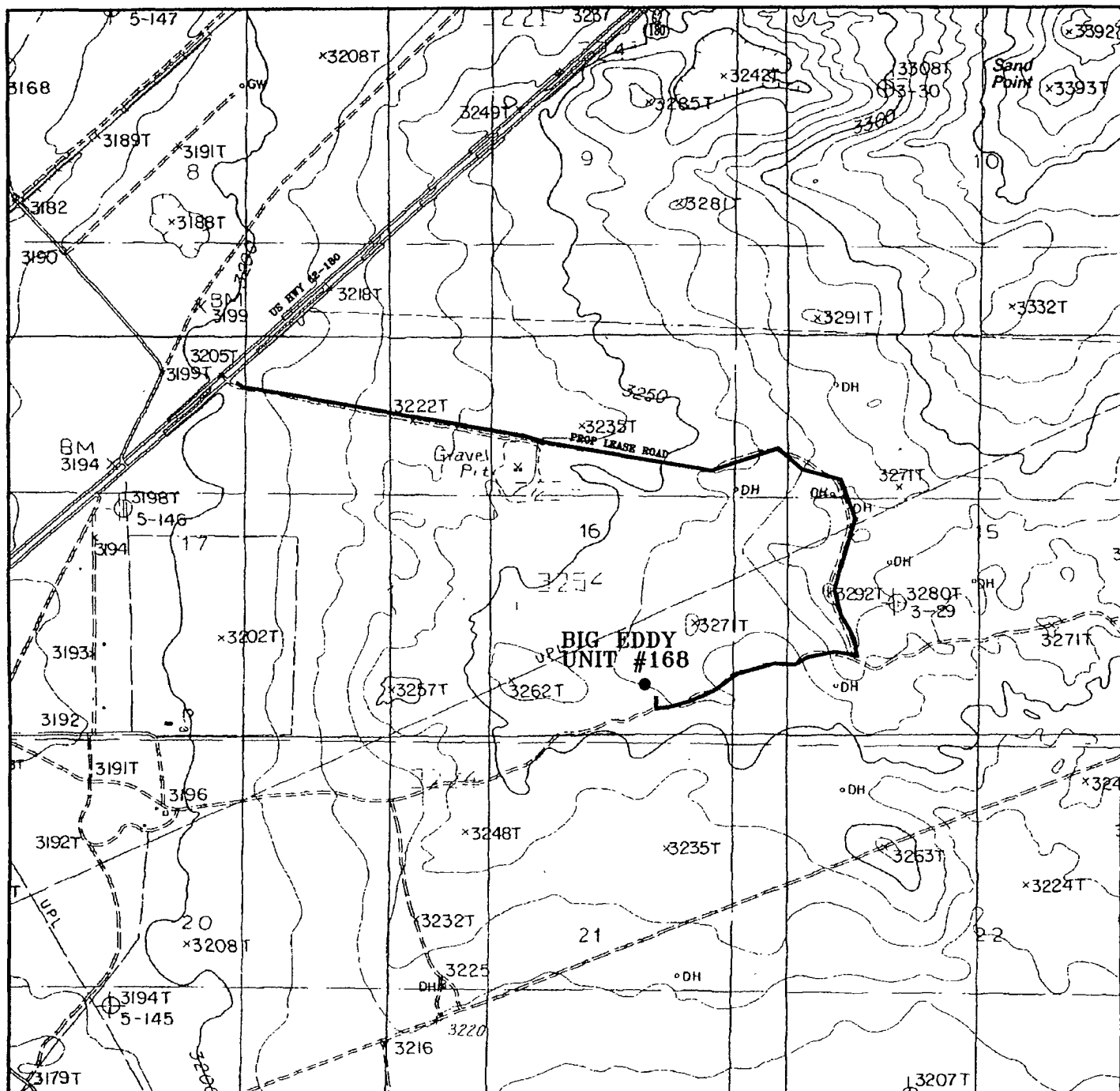
REF: BIG EDDY UNIT #168 / WELL PAD AND TOPO

THE BIG EDDY UNIT No. 168 LOCATED 660'

FROM THE SOUTH LINE AND 1980' FROM THE EAST LINE OF
SECTION 16, TOWNSHIP 21 SOUTH, RANGE 28 EAST,

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

Survey Date: 10-02-2006	Sheet 1 of 1 Sheets
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BIG EDDY UNIT #168

Located at 660' FSL and 1980' FEL
 Section 16, Township 21 South, Range 28 East,
 N.M.P.M., Eddy County, New Mexico.



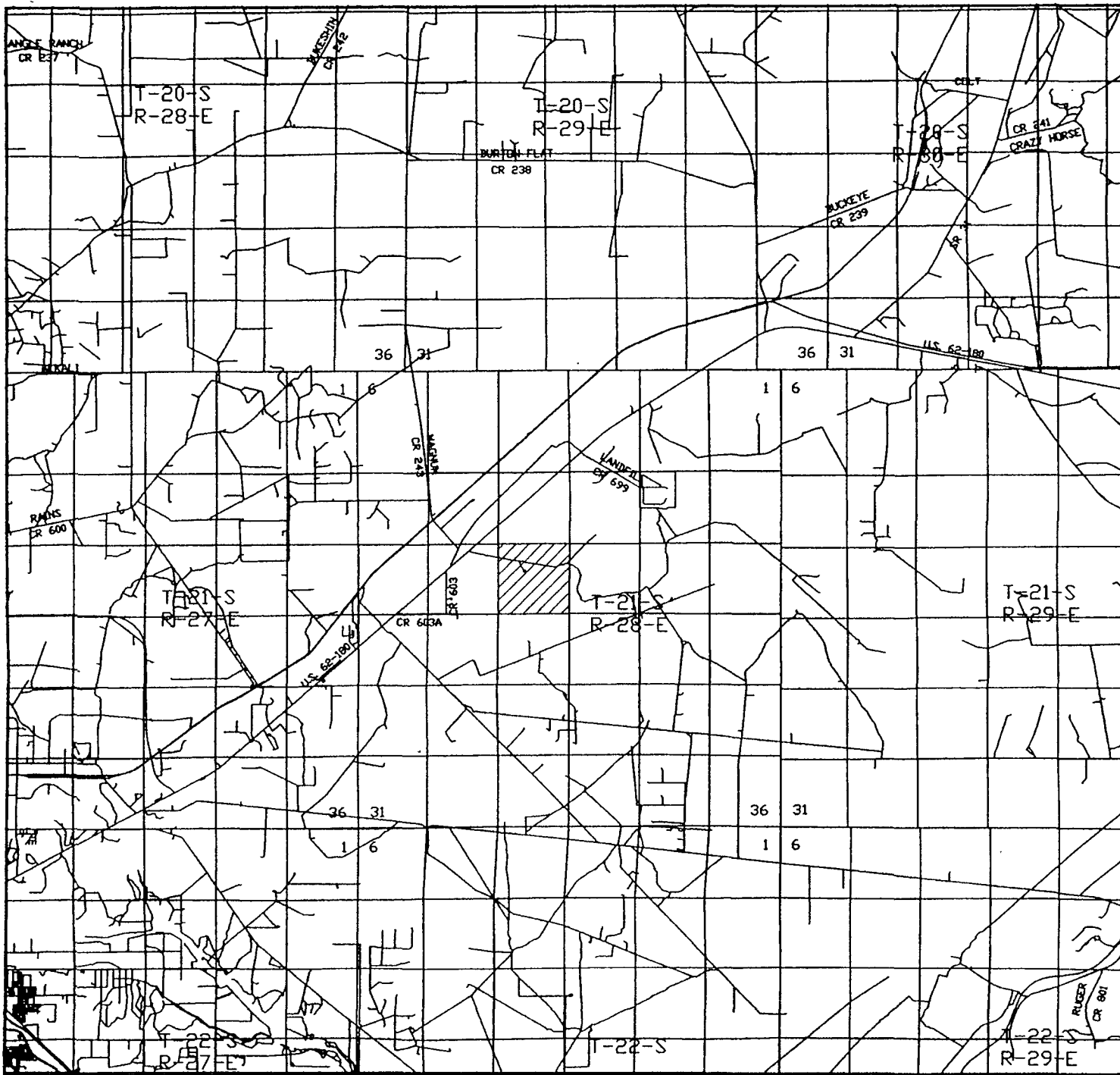
P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax

W.O. Number: JMS 6599T

Survey Date: 10-02-2006

Scale: 1" = 2000'

BEPCO, L.P



BIG EDDY UNIT #168

Located at 660' FSL and 1980' FEL
 Section 16, Township 21 South, Range 28 East,
 N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax

W.O. Number: JMS 6599T

Survey Date: 10-02-2006

Scale: 1" = 2 MILES

BEPCO, L.P



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

December 14, 2006

BEPCO, L.P.

P.O. Box 2760

Midland, TX 79702

Attn: Annette Childers or To Whom It May Concern:

Dear Annette Childers or To Whom It May Concern:

RE: BEPCO, L.P.: Application to drill (APD) for the Big Eddy Unit # 168
Located in Unit O of Section 16, Township 21 South, Range 28 East, Eddy County, New Mexico NMPM.

In reference to the above noted APD, the New Mexico Oil Conservation Division (NMOCD) will require (in part) that drilling mud samples from the flow line be sampled every 100' in order to determine chloride levels during the drilling of the Capitan Reef section of the well bore. Results are to be submitted to our office before drilling to total depth of the well bore.

Please call me if you have any questions about this matter.

Respectfully yours,

Bryan G. Arrant
NMOCD's District II Geologist
Artesia, New Mexico
505-748-1283 ext. 103

CC: well file