ATS-08-374
EA-08-691

APR 23 2008
OCD-ARTESIA

OCD-ARTESIA

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. **NMLC 060613**

6 If Indian, Allotee or Tribe Name

1a Type of work ☑ DRILL ☐ REENTER

7 If Unit or CA Agreement, Name and No

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

8 Lease Name and Well No **Big Eddy Unit #214** 1774

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

9 API Well No. 30-015-36294

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

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

10 Field and Pool, or Exploratory **Carlsbad, East (Morrow)**

4 Location of Well *(Report location clearly and in accordance with any State requirements *)*

At surface **SWNW, 1330' FNL & 860' FWL**

At proposed prod zone

11 Sec., T R M or Blk and Survey or Area **Sec. 6, T22S, R 28E**

14 Distance in miles and direction from nearest town or post office* **12 miles East of Carlsbad, 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
860'	**1,156**	**320**
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
1305'	**12400'**	**NM 2204**
21 Elevations (Show whether DF, KDB, RT, GL, etc)	22 Approximate date work will start*	23 Estimated duration
GL 3127'	**05/05/2008**	**40 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 Annette Childers	Name *(Printed Typed)* **Annette Childers**	Date 2-11-2008
Title **Administrative Assistant**		

Approved by *(Signature)* /s/ Don Peterson	Name *(Printed/Typed)* /s/ Don Peterson	Date APR 21 2008
Title **FIELD MANAGER**	Office **CARLSBAD FIELD 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 TWO YEARS

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)

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

Carlsbad Controlled Water Basin

Approval Subject to General Requirements & Special Stipulations Attached

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
	73920	Carlsbad, East (Morrow) Field

Property Code	Property Name	Well Number
1776	BIG EDDY UNIT	214

OGRID No.	Operator Name	Elevation
001801	BEPCO, L.P.	3127'

Surface Location

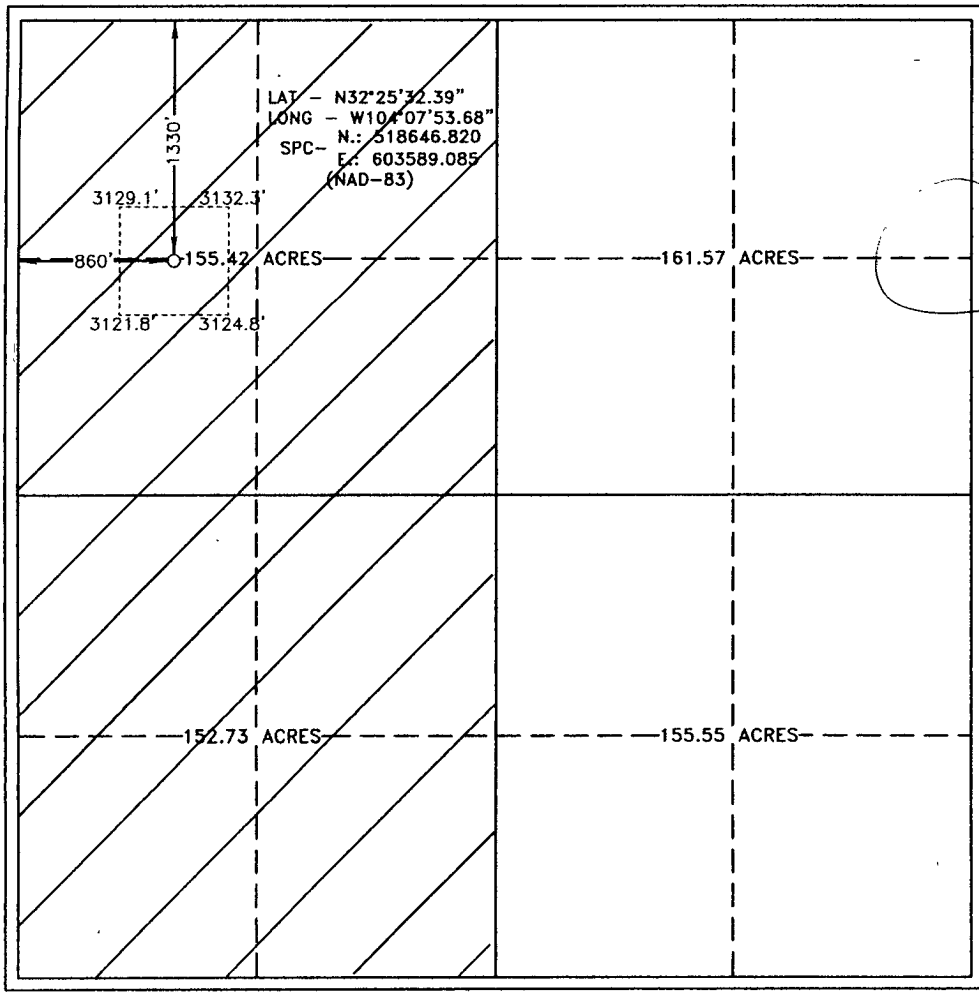
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	6	22 S	28 E		1330	NORTH	860	WEST	EDDY

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.
320	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.

2/8/08
Signature Date

Stephen Martinez
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 11, 2008
Date Surveyed

Signature & Seal of Professional Surveyor

GARY L. JONES NEW MEXICO 7977 REGISTERED PROFESSIONAL SURVEYOR

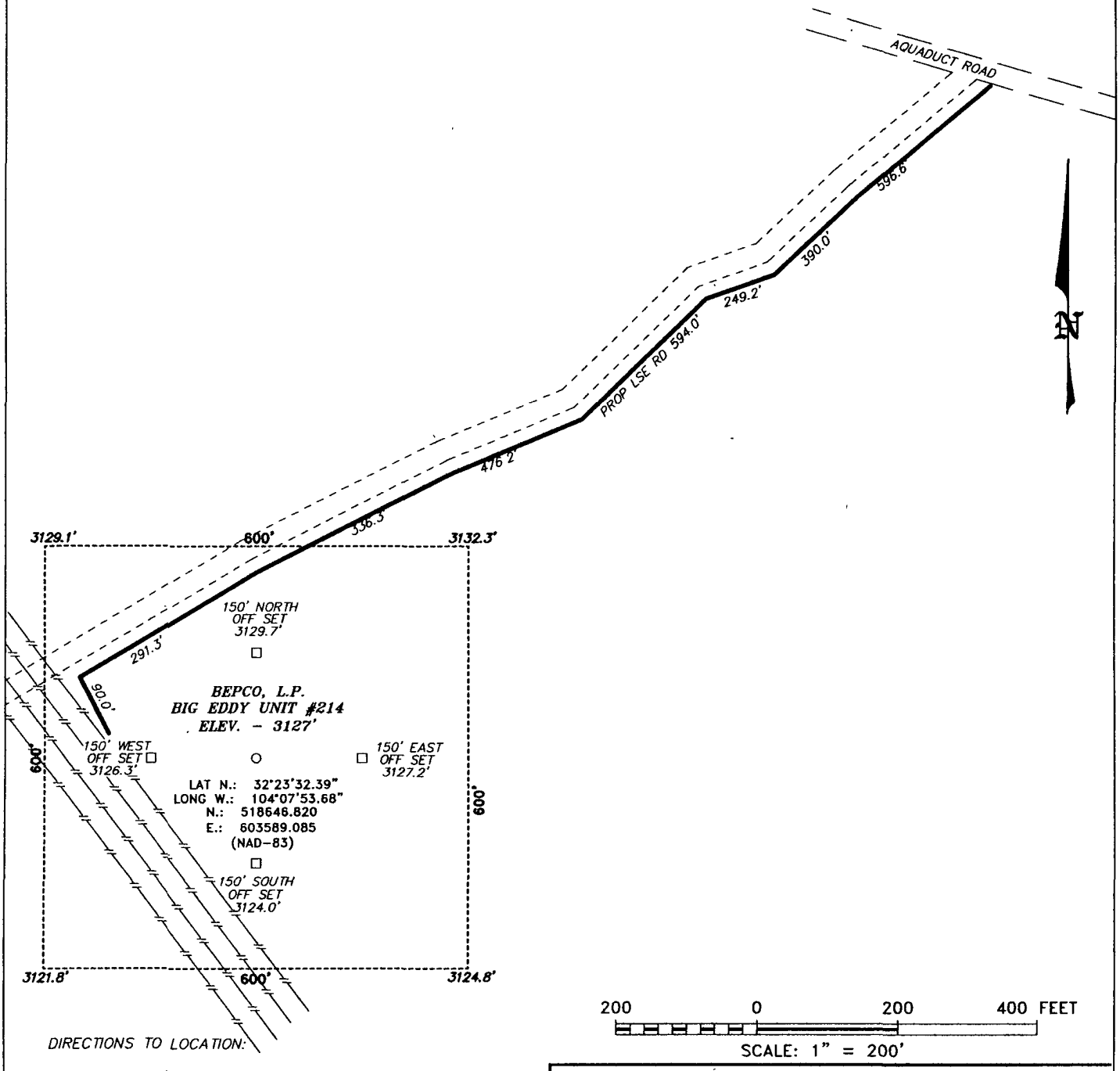
W.O. No. 13876

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

SECTION 14, TOWNSHIP 22 SOUTH, RANGE 28 EAST, N.M.P.M.,

EDDY COUNTY, **NEW MEXICO.**



DIRECTIONS TO LOCATION:

FROM MILE MARKER 43 ON HWY 62-180, GO WEST 0.4 MILES TO LEASE ROAD, ON LEASE ROAD GO SOUTH 4.2 MILES TO AQUADUCT ROAD, ON AQUADUCT ROAD GO SOUTHEAST TO PROPOSED LEASE ROAD.

BEPCO, L.P.

REF: BIG EDDY UNIT #214 / WELL PAD AND TOPO

THE BIG EDDY UNIT #214 LOCATED 1330'

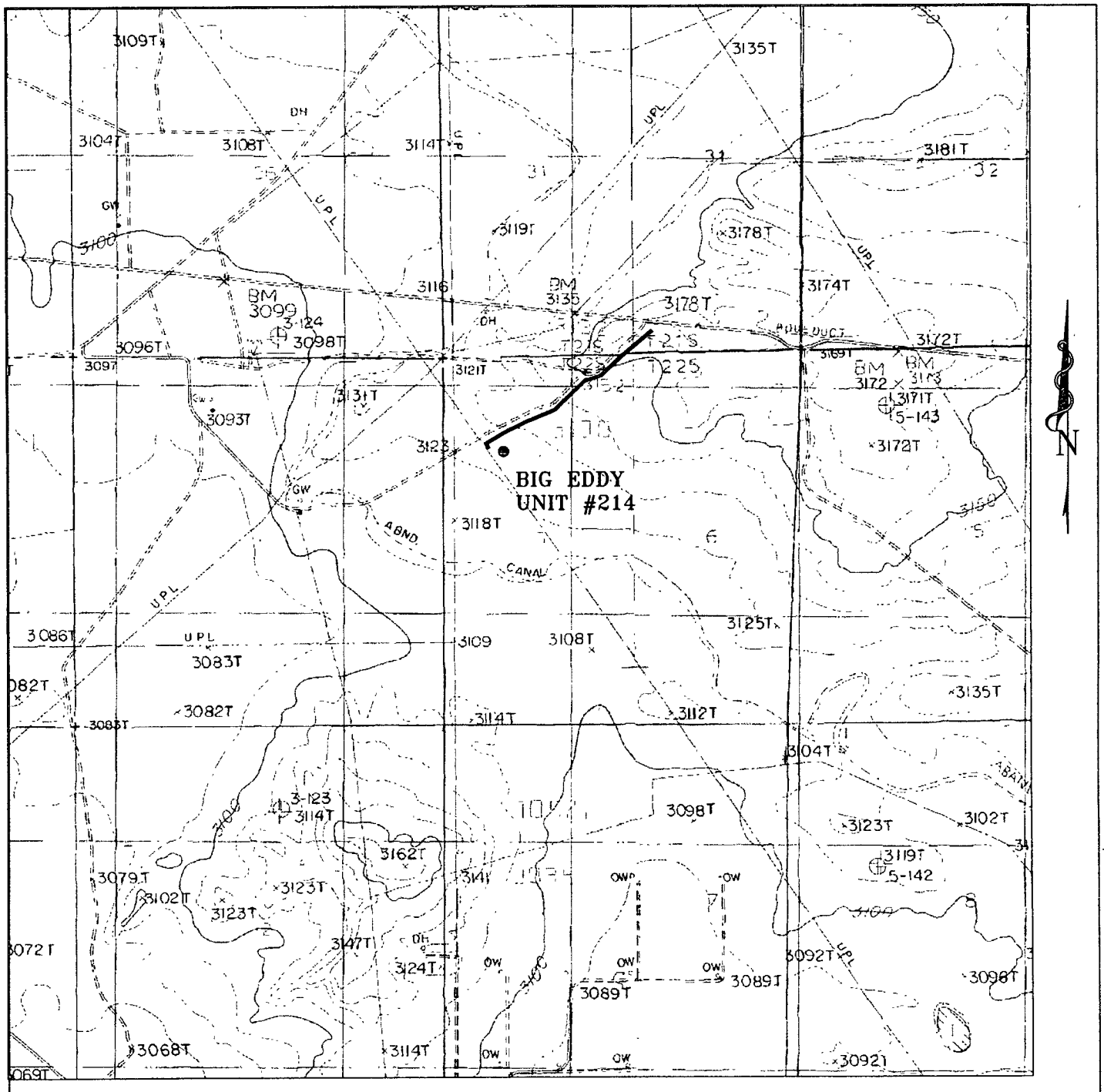
FROM THE NORTH LINE AND 860' FROM THE WEST LINE OF

SECTION 6, TOWNSHIP 22 SOUTH, RANGE 28 EAST,

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

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

W.O. Number: 18986	Drawn By: J. SMALL		
Date: 02-04-2008	Disk: 18986W JMS	Survey Date: 01-11-2008	Sheet 1 of 1 Sheets



BIG EDDY UNIT #214

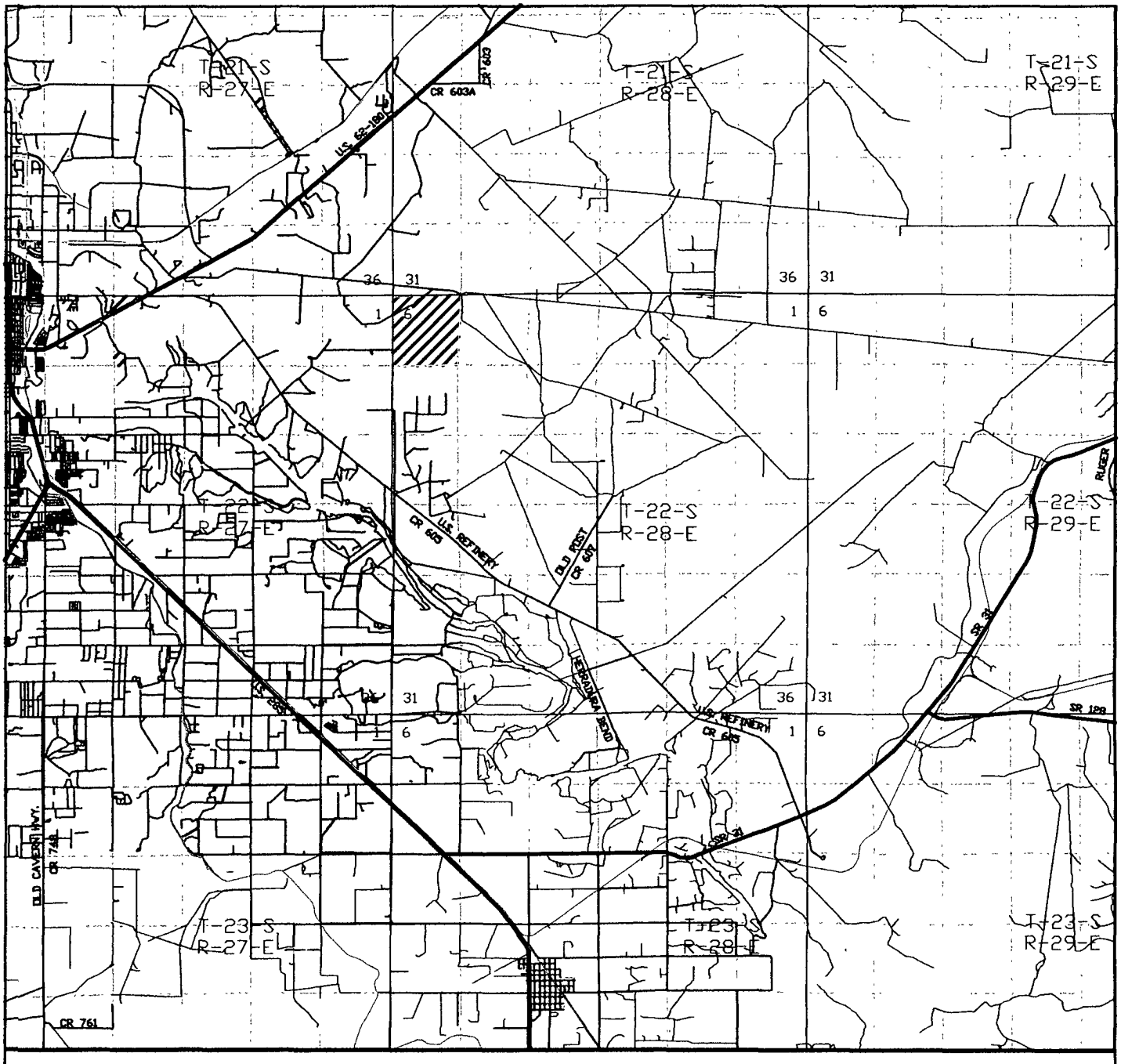
1330' FNL and 860' FWL
Section 6, Township 22 South, Range 28 East,
N.M.P.M., Eddy County, New Mexico.

basin surveys
focused on excellence in the oilfield

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

W O Number	JMS 18986T
Survey Date	01-11-2008
Scale	1" = 2000'
Date	02-04-2008

BEPCO, L.P.



BIG EDDY UNIT #214
1330' FNL and 860' FWL
Section 6, Township 22 South, Range 28 East,
N.M.P.M., Eddy County, New Mexico.

basin surveys
focused on excellence in the oilfield
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W.O. Number:	JMS 19986TR
Survey Date:	01-11-2008
Scale:	1" = 2 MILES
Date:	02-04-2008

BEPCO, L.P.

Surface casing to be set into the Rustler below all fresh water sands.
Production casing will be cemented using Halliburton Class "H" plus additives w/TOC 500' into intermediate casing.
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.

BEPCO, L. P.
EIGHT POINT DRILLING PROGRAM

NAME OF WELL: BIG EDDY UNIT #214

LEGAL DESCRIPTION - SURFACE: 1330' FNL & 860' FWL, Section 6, T22S, R28E, 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 3145' (est)
GL 3127'

FORMATION	ESTIMATED TOP FROM KB	ESTIMATED SUBSEA TOP	BEARING
T/Salt	635'	+ 2,510'	Barren
B/Salt	1,775'	+ 1,370'	Barren
T/Lamar	2,245'	+ 900'	Oil/Gas
T/Delaware	2,385'	+ 760'	Oil/Gas
T/Bone Spring	5,695'	- 2,550'	Oil/Gas
T/Wolfcamp	9,225'	- 6,080'	Oil/Gas
T/Strawn	10,465'	- 7,320'	Oil/Gas
T/Atoka	10,837'	- 7,692'	Oil/Gas
T/Upper Morrow	11,427'	- 8,282'	Oil/Gas
T/Middle Morrow	11,723'	- 8,578'	Oil/Gas
T/Lower Morrow	11,985'	- 8,840'	Oil/Gas
TD	12,400'	- 9,255'	

POINT 3: CASING PROGRAM

TYPE	INTERVALS	PURPOSE	CONDITION
20", 94#, H-40, STC	0' - 40'	Conductor	Contractor Discretion
13-3/8", 48#, H-40, STC	0' - 625'	Surface	New
9-5/8", 40#, HCP-110, LTC	0' - 5,755'	Intermediate	New
5-1/2", 17#, HCP-110 LTC	0' - 9,900'	Production	New
5-1/2", 20#, HCP-110 LTC	9,900' - 12,400'	Production	New

CASING DESIGN SAFETY FACTORS:

TYPE	TENSION	COLLAPSE	BURST
13-3/8", 48#, H-40, STC	20.9	2.49	4.96
9-5/8", 40#, HCP-110, LTC	6.48	1.30	2.46
5-1/2", 17#, HCP-110 LTC	3.05	1.16	1.91
5-1/2", 20#, P-110 LTC	16.11	1.47	2.35

DESIGN CRITERIA AND CASING LOADING ASSUMPTIONS:

SURFACE CASING

Tension — A 1.6 design factor utilizing the effects of buoyancy (9.2 ppg).

Collapse — A 1.0 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.48 psi/ft). The effects of axial load on collapse will be considered.

Burst — A 1.3 design factor with a surface pressure equal to the fracture gradient at setting depth less a gas gradient to the surface. Internal burst force at the shoe will be fracture pressure a that depth. Backup pressure will be formation pore pressure. In all cases a conservative fracture pressure will be used such that it represents the upper limit of potential fracture resistance up to a 1.0 psi/ft gradient. The effects of tension on burst will not be utilized.

PROTECTIVE CASING

Tension — A 1.6 design factor utilizing the effects of buoyancy (10.2 ppg).

Collapse — A 1.0 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.53 psi/ft). The effects of axial load on collapse will be considered.

In the case of development drilling, collapse design should be analyzed using internal evacuation equal to 1/3 the proposed total depth of the well. This criterion will be used when there is absolutely no potential of the protective string being used as a production casing string.

Burst — A 1.0 surface design factor and a 1.3 downhole design factor with a surface pressure equivalent to the fracture gradient at setting depth less a gas gradient to the surface. Internal burst force at the shoe will be fracture pressure at that depth. Back pressure will be formation pore pressure. In all cases a conservative fracture pressure will be used such that it represents the upper limit of potential fracture resistance up to a 1.0 psi/ft gradient.

PRODUCTION CASING

Tension — A 1.6 design factor utilizing the effects of buoyancy (11.7 ppg).

Collapse — A 1.0 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.61 psi/ft). The effects of axial load on collapse will be considered.

Burst — A 1.25 design factor with anticipated maximum tubing pressure (5225 psig) on top of the maximum anticipated packer fluid gradient. Backup on production strings will be formation pore pressure (0.43 psi/ft). The effects of tension on burst will not be utilized.

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

A rotating head will be nippled up on the intermediate casing. The rotating head will not be hydro-tested.

A BOP equivalent to Diagram 1 will be nippled up on the surface casing head and the intermediate casing. The BOP stack, choke, etc. when rigged up on surface casing, will be tested to 70% of interval yield of casing or 1000 psig whichever is less. On the intermediate casing, the BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. will be hydro-tested to 5,000 psi on the 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 or prior to drilling the Wolfcamp
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' – 625'	FW	8.5 - 9.2	45-35	NC	NC	NC	9.5
625' – 5,755'	BW	10.0 – 10.2	28-30	NC	NC	NC	9.5
5,755' – 9,200'	FW	8.6 – 8.9	28-30	NC	NC	NC	9.5
9,200' – 10,400'	CBW	9.0 – 10.2	28-30	NC	NC	NC	9.5
10,400' – TD	CBW/Polymer	9.0 – 11.7	32-55	12-20	12-22	<10	9.5-10.0

POINT 6: TECHNICAL STAGES OF OPERATION

A) TESTING

Drill stem tests may be performed on significant shows in zones of interest, but none are anticipated.

B) LOGGING

Run #1:
GR-CNL-LDT-AIT-CAL run from 5755' to surface csg. GR-CNL to surface.

Run #2:
GR-CNL-LDT-HRLA-CAL run from TD to intermediate casing.

C) CORING

No cores are anticipated.

D) CEMENT

INTERVAL	AMOUNT SX	FT OF FILL	TYPE	GALS/SX	PPG	FT^3/SX
SURFACE						
Lead						
0' – 325' (100% excess)	250	325	Halliburton Light + Premium Plus + 2.7 #/sk salt	10.14	12.80	1.87
Tail						
325'-625' (100% Excess)	340	300	Premium Plus + 2% $CaCl_2$	6.37	14.80	1.35

INTERMEDIATE

INTERVAL	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT^3/SX
Lead						
0' – 5,250' (100% Excess)	1150	5250	Premium Interfill H + 8 pps Gilsonite	16.43	11.50	2.76
Tail						
5250' – 5755' (100% Excess)	240	505	Super H + 5 pps Gilsonite + 3 pps Salt + 0.5% LAP-1+0.4% CFR-3 + 0.25 pps Defoamer+ 0.25 pps Pol-E-Flake	4.72	13.2	1.6

PRODUCTION (Two stage DV tool @ 8000' and circulate cement to 5250')

INTERVAL	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT^3/SX
1st Stage						
LEAD						
8000'-10,300' (50% excess)	370	2300	Interfill H + 5 pps Gilsonite + 0.125pps Pol-E-Flake + 0.5% Halad 9 + 0.3% HR-601	13.61	11.90	2.46
TAIL						
10,300'-12,400' (50% excess)	500	2100	Super H +0.5% Halad 344 + 0.4%CFR3+5pps Gilsonite + 1pps Salt + 0.3% HR-601	7.73	13.20	1.60
2nd Stage LEAD 5250'-7000' (50% excess)	330	2250	Premium Interfill H + 0.125pps Pol-E-Flake	14.10	11.90	2.46
TAIL						
7000'-8000' (50% excess)	170	500	Premium H Cement + 0.5% Halad 9	5.20	15.6	1.18

E) DIRECTIONAL DRILLING

No directional services anticipated. A straight hole will be drilled to 12,400' TD.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout the Delaware and Bone Spring sections. The Wolfcamp and Strawn are expected to have a BHP of 5515 (max) or an equivalent mud weight of 10.0 ppg. The Atoka may have pressures of 6600 - 7000 psi (11.7 ppg). Due to the tight nature of the reservoir rock (high pressure, low volume), the well may be drilled under balanced utilizing a rotating head. The Morrow will be normally pressured. The expected BHT at TD is 200°F. 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.

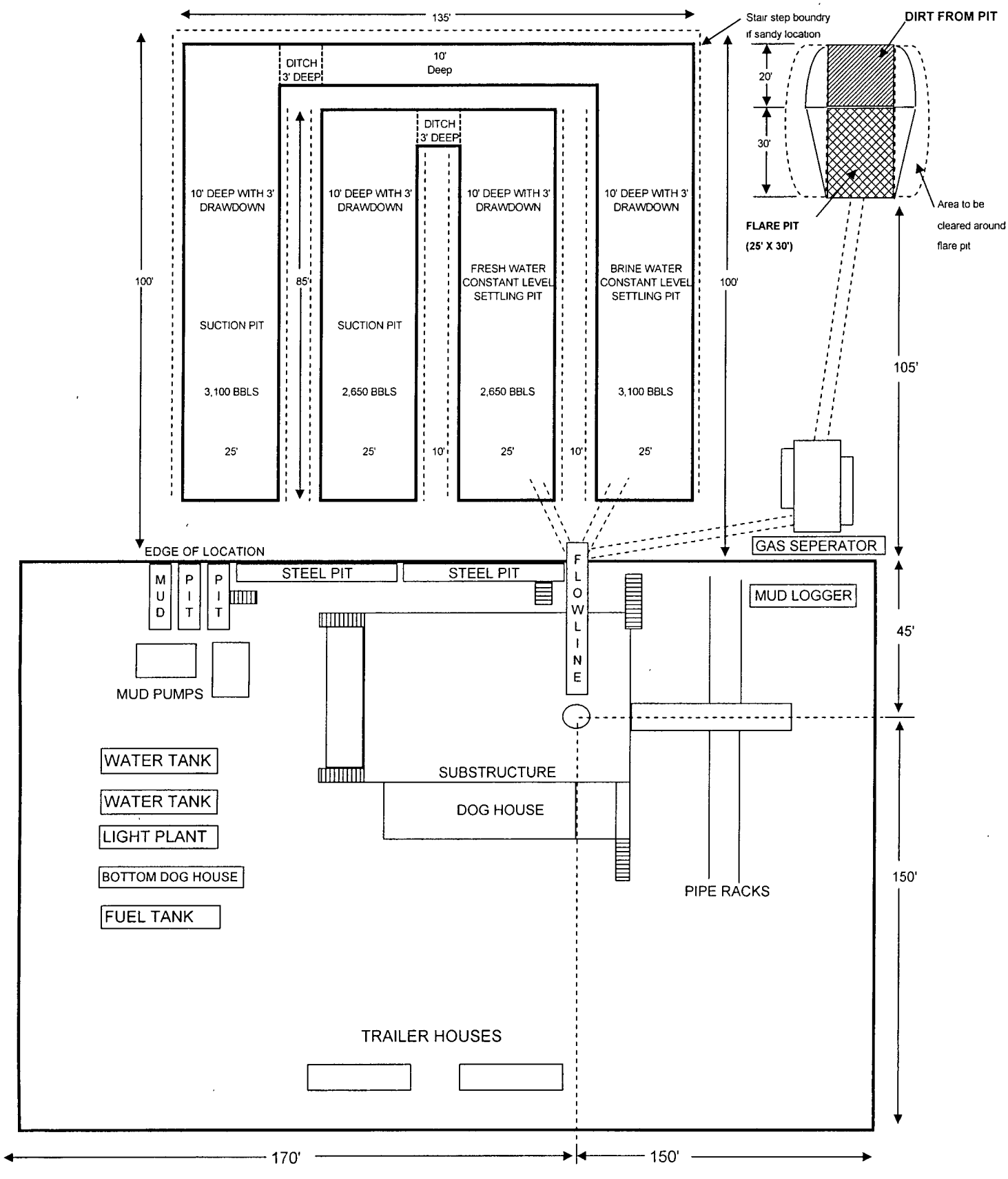
B) Anticipated Starting Date

Upon approval

40 days drilling operations

20 days completion operations

Rig Layout Schematic
Exhibit 'D'



BEPCO, L. P.

10-M WP BOPE WITH 5-M WP ANNULAR

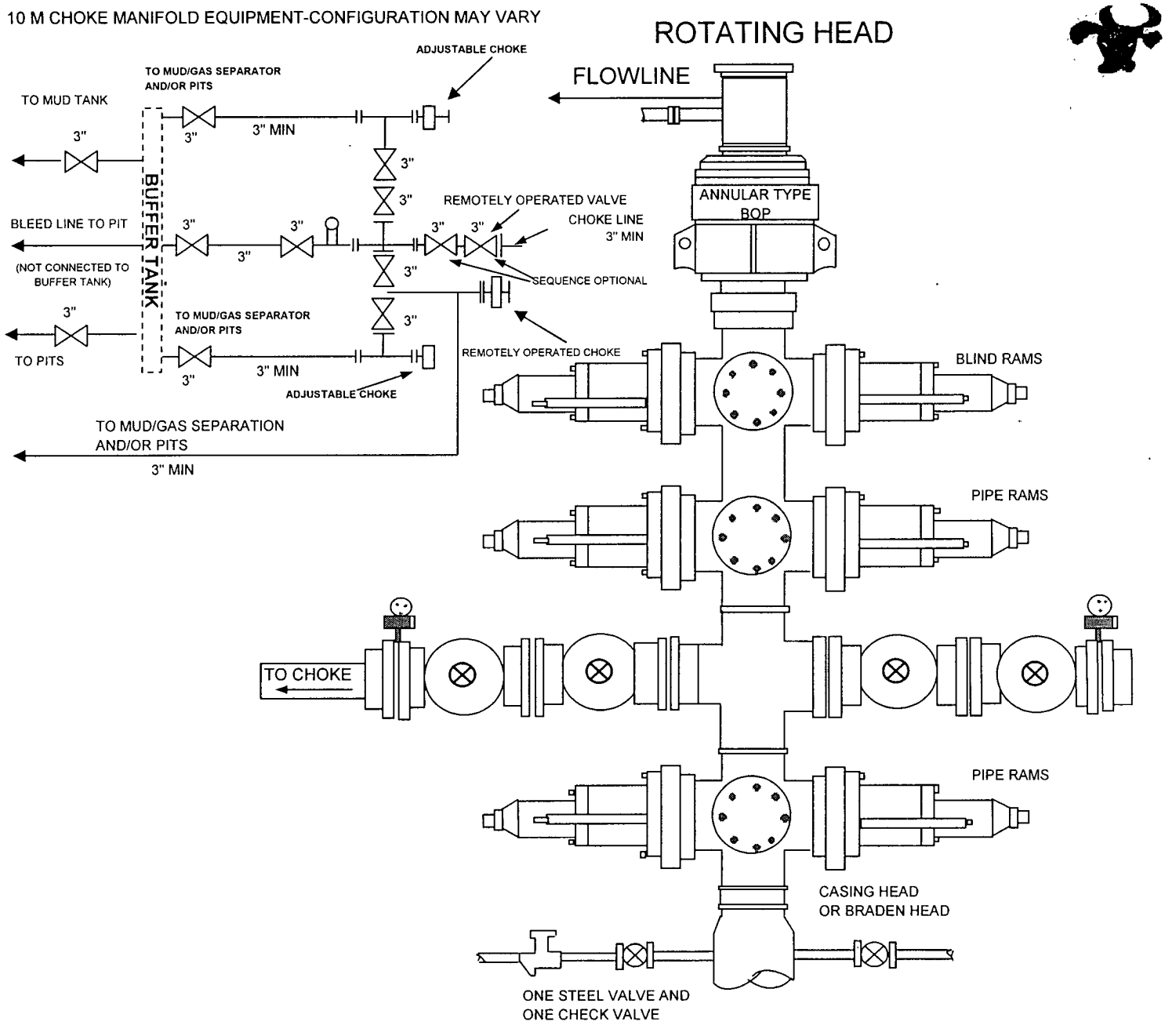


DIAGRAM 1

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: BIG EDDY UNIT #214

LEGAL DESCRIPTION – SURFACE: 1330' FNL & 860' FWL, Section 6, T22S-R28E, Eddy County, NM

POINT 1: EXISTING ROADS

A) Proposed Well Site Location

See Exhibit "A".

B) Existing Roads:

From mile marker 43 on HWY 62-180 proceed West 0.4 mile to lease road, on lease road go south 4.2 miles to Aqueduct Road, go South East to 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 3024' long from existing lease road. The road will be constructed of watered and 6" of 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:

Indian Draw Deep Com 7 #1 located in SE NW Section 7, T22S, R28E, Eddy County, N.M.

B) New Facilities in the Event of Production:

New production facilities will be installed at the new location.

C) Rehabilitation of Disturbed Areas Unnecessary for Production:

Following the construction of production facilities, those access areas required for continued production will be graded to provide drainage and minimize erosion. The areas necessary for use will be graded to blend in 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 the City of Carlsbad or piped from the IMC Booster Station water well located 5.2 miles east of Carlsbad. Brine water will be hauled from I & W Brine Water Station 0.75 miles south east of Carlsbad.

B) Water Transportation System

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

POINT 6: SOURCE OF CONSTRUCTION MATERIALS

A) Materials

Exhibit "C" shows location of caliche source.

B) Land Ownership

Federally Owned.

C) Materials Foreign to the Site

On site caliche will be used, but if necessary caliche will be hauled from the nearest BLM approved caliche pit.

D) Access Roads

3024' of new access road will be required. See Exhibit "B".

POINT 7: METHODS FOR HANDLING WASTE MATERIAL

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 the 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 testing indicates potential productive zones. In any case, the "mouse" hole and the "rat" hole will be covered. The reserve pit will be fenced and the fence maintained until the pit is backfilled. Reasonable cleanup will be performed prior to the final restoration of the site.

POINT 8: ANCILLARY FACILITIES

We will be constructing a new gathering line to the north or east to tie into existing pipelines.

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 "B" and "D"

C) Lining of the Pits

The reserve pit will be lined with >20 mil plastic.

POINT 10: PLANS FOR RESTORATION OF THE SERVICE

A) Reserve Pit Cleanup

A pit will be fenced at the time of rig release and shall be maintained until the pit is backfilled. Previous to backfill operations, any hydrocarbon material on the pit surface shall be removed. The fluids and solids contained in the pit shall be backfilled with soil excavated from the site and soil adjacent to the reserve pit. The restored surface of the pit 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 BLM stipulations during the appropriate season following restoration.

B) Restoration Plans – Production Developed

The reserve pit 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 pit 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 BLM stipulations.

D) Rehabilitation 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

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 within 1 mile of 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 BLM. Any location or construction conflicts will be resolved before construction begins.

J) Surface Ownership

The well site and access road are both 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

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

DRILLING
Stephen M. Martinez
Box 2760
Midland, Texas 79702
(432) 683-2277

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

Steve Johnson
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 BEPCO L.P. 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.

2/11/08
Date

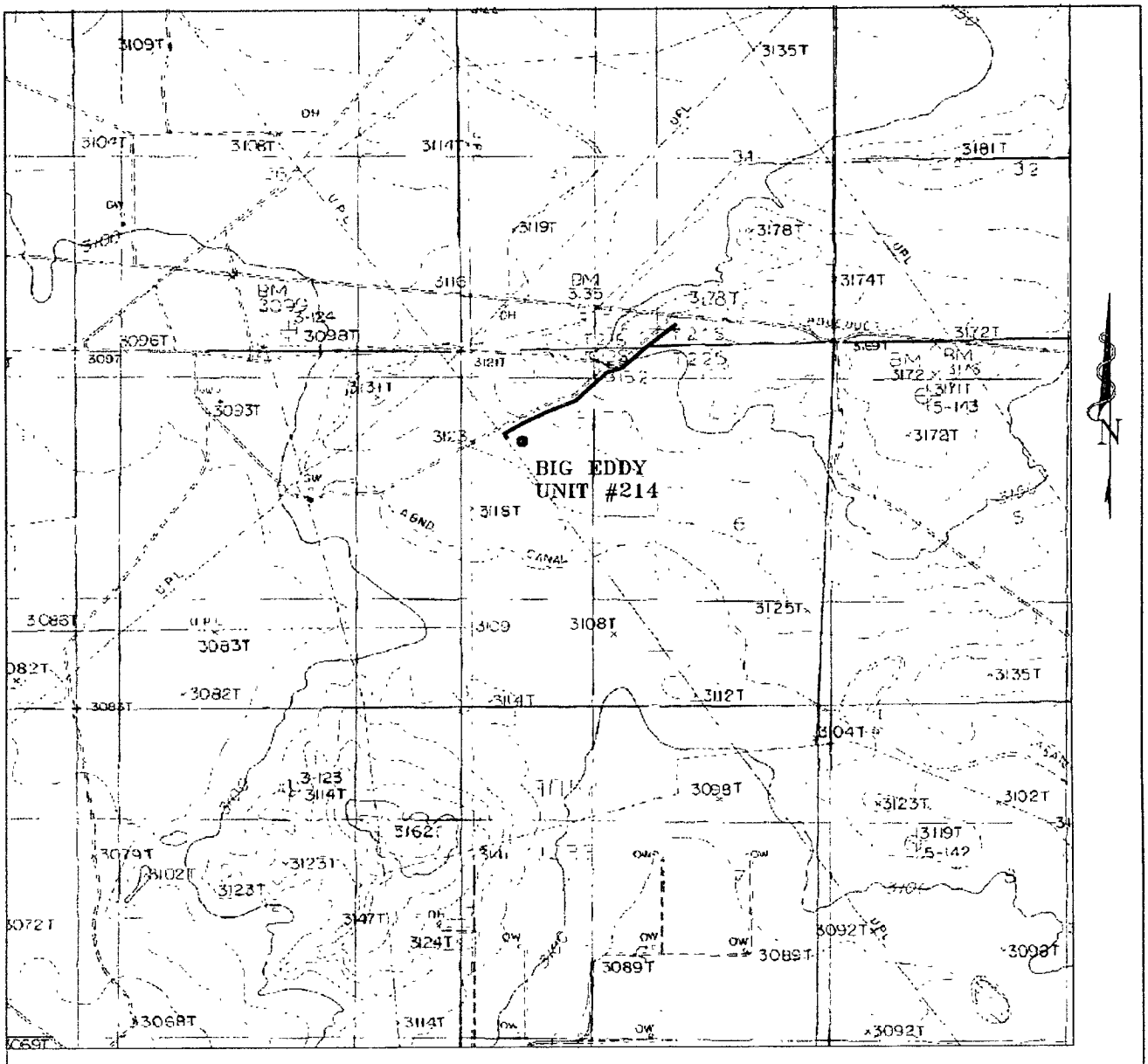
Stephen M. Martinez

WRD:smm

BEPCO, L.P.

Exhibit 'A'

Proposed Well Site Location



BIG EDDY UNIT #214
1330' FNL and 860' FWL
Section 6, Township 22 South, Range 28 East,
N.M.P.M., Eddy County, New Mexico.

basin surveys
focused on excellence in the oilfield
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W.O. Number: [illegible] 18086T
Survey Date: 01-11-2008
Scale: 1" = 2000'
Date: 02-04-2008

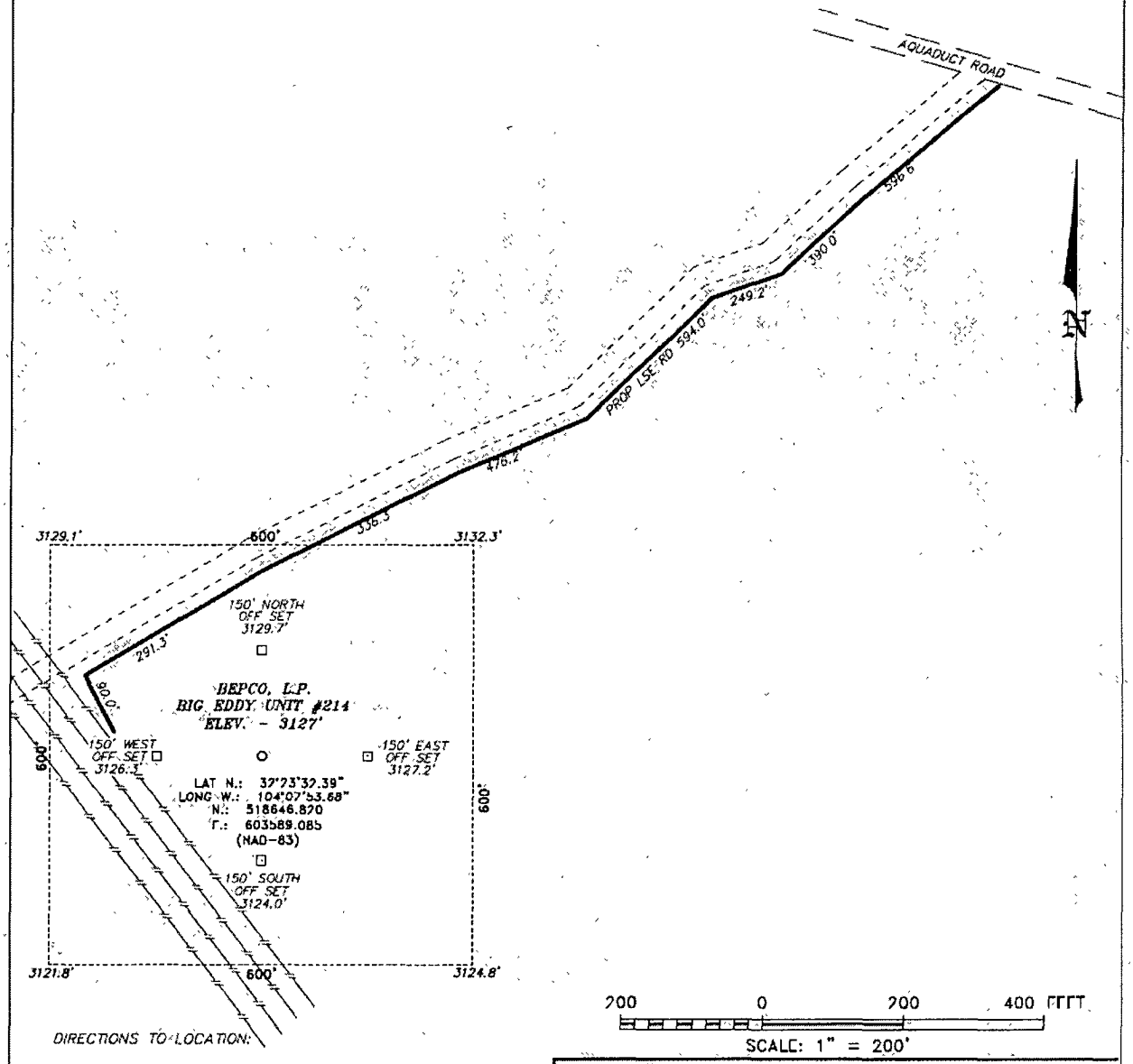
BEPCO, L.P.

BEPCO L.P.

Exhibit 'B'

Proposed Access Route

SECTION 14, TOWNSHIP 22 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM MILE MARKER 43 ON HWY 62-180, GO WEST 0.4 MILES TO LEASE ROAD, ON LEASE ROAD GO SOUTH 4.2 MILES TO AQUADUCT ROAD, ON AQUADUCT ROAD GO SOUTHEAST TO PROPOSED LEASE ROAD.

BEPCO, L.P.

REF: BIG EDDY UNIT #214 / WELL PAD AND TOPO

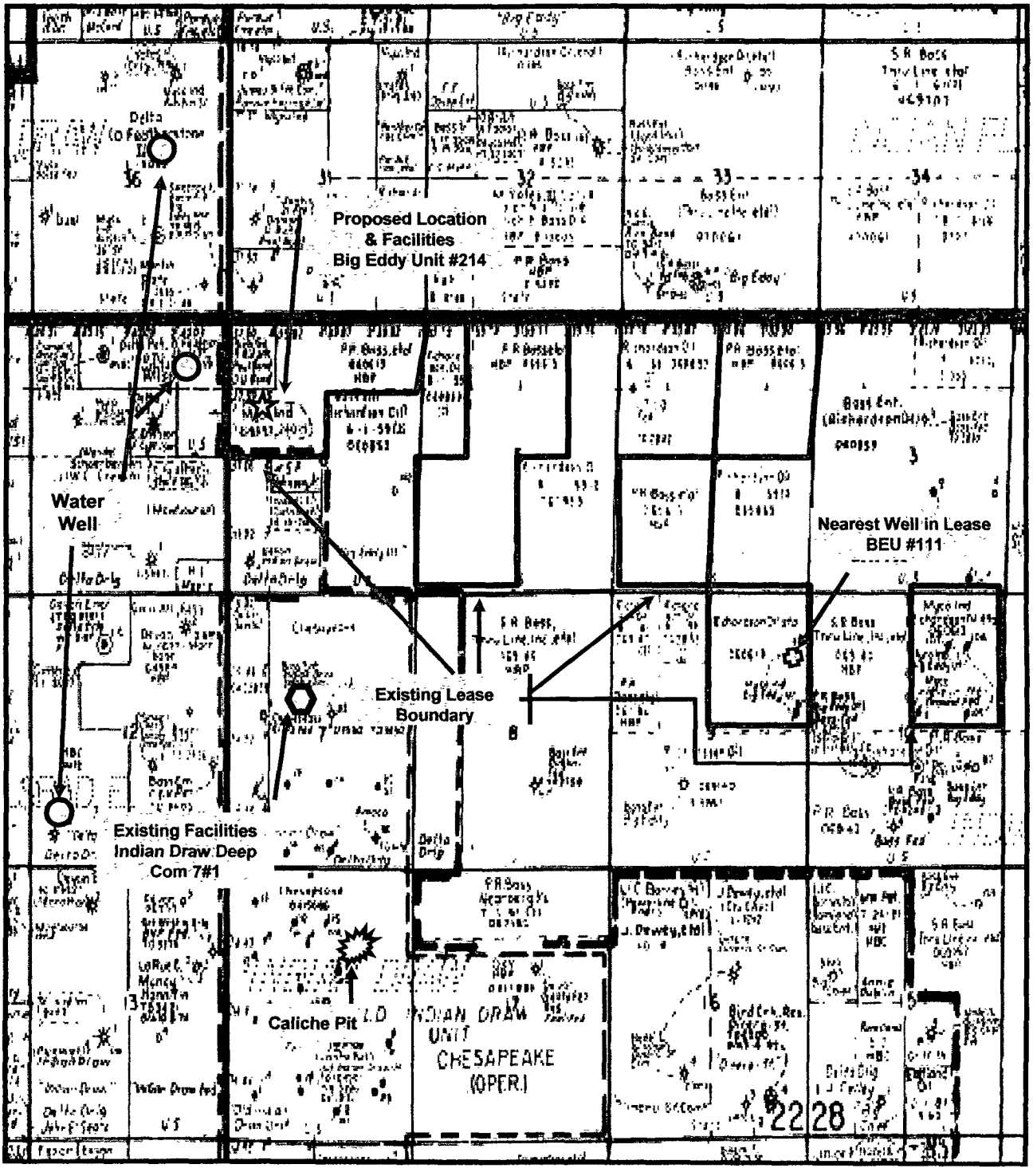
THE BIG EDDY UNIT #214 LOCATED 1330' FROM THE NORTH LINE AND 860' FROM THE WEST LINE OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 28 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

W.O. Number: 18986	Drawn By: J. SMALL	Survey Date: 01-11-2008	Sheet 1 of 1 Sheets
Date: 02-04-2008	Disk: 18986W JMS		

BEPCO L.P.

Exhibit 'C'
Location of Existing Wells



PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BEPCO LP
LEASE NO.:	LC-060613
WELL NAME & NO.:	214-Big Eddy Unit
SURFACE HOLE FOOTAGE:	1330' FNL & 860' FWL
BOTTOM HOLE FOOTAGE	' F L & ' F L
LOCATION:	Section 6, T. 22 S., R 28 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (505) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

The reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed 135' X 100' on the East side of the well pad V-Door South.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

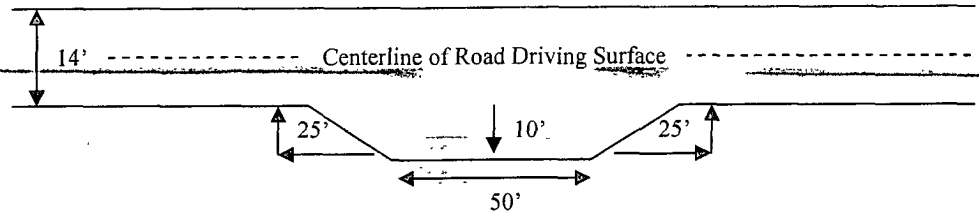
Ditching

Ditching shall be required on both sides of the road.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

Standard Turnout – Plan View

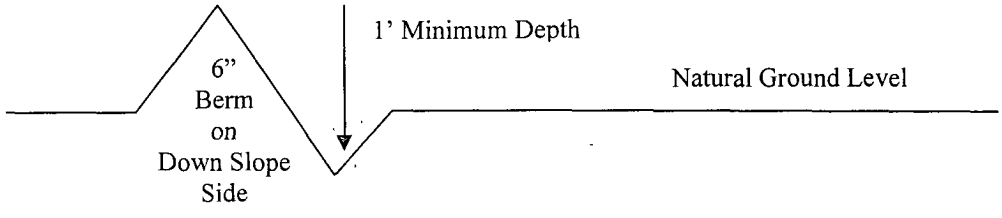


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

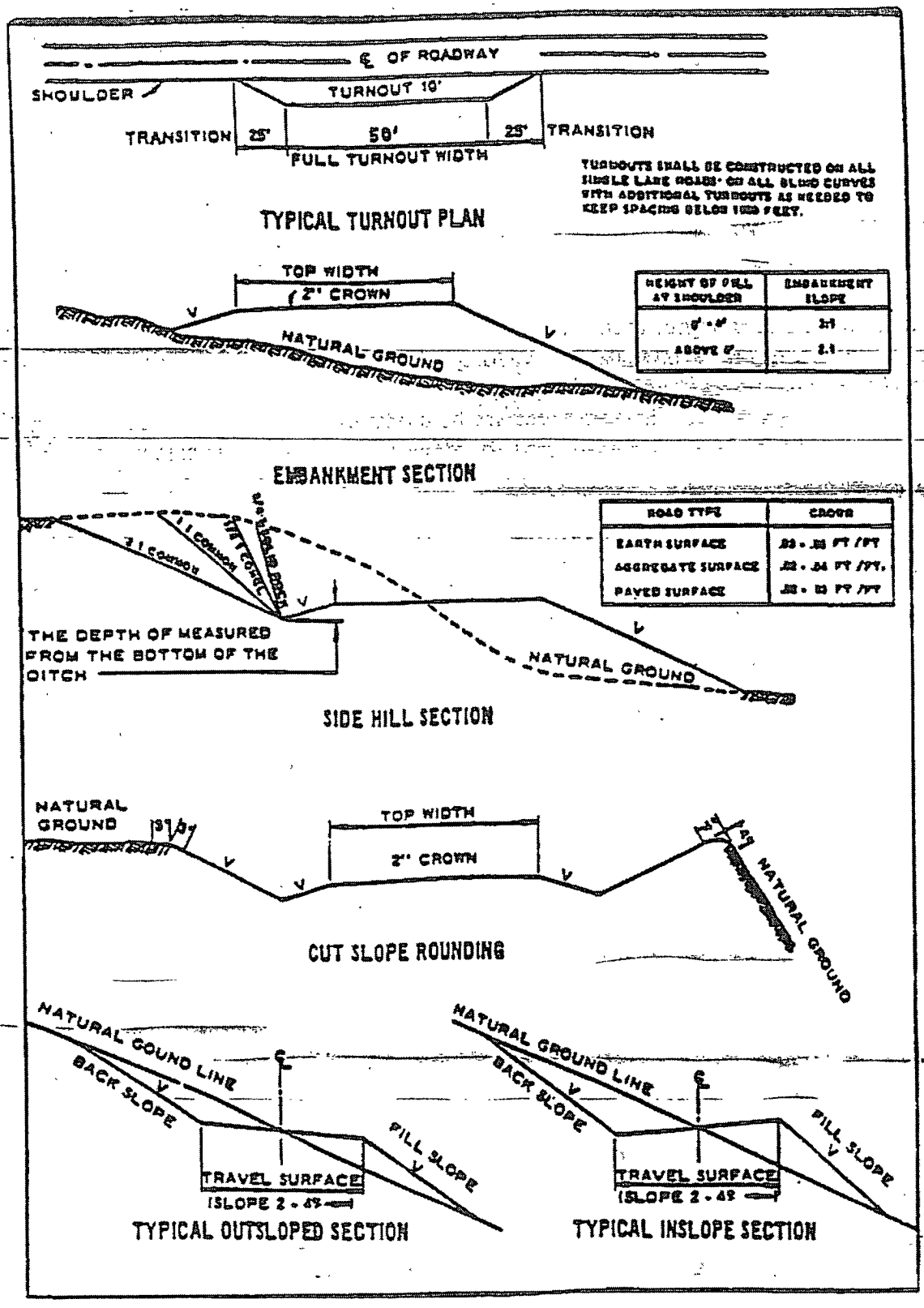
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**

2. 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.

3. Floor controls are required for 3M or Greater systems. These 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.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Medium cave/karst.
Possible lost circulation in the Delaware, Bone Spring and Capitan Reef formations.
Possibility of high pressure gas bursts within the Wolfcamp formation and over pressure in the Pennsylvanian section.

1. The **13-3/8** inch surface casing shall be set **at approximately 550 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface.

   Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing.

   a. 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.

   b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

   c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

   d. If cement falls back, remedial cementing will be done prior to drilling out that string.

If the Capitan Reef is encountered and circulation lost, the drilling fluid is to be switched to fresh water.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing **(casing to be set in the top of the Bone Spring formation below the cutoff shale)** is:

   ☒ Cement to surface. If cement does not circulate see B.1.a-d above.

   Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   a. **First stage to DV tool, cement shall:**

   ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.

b. **Second stage above DV tool, cement shall:**

☒ Cement should tie-back at least 200 feet into previous casing string. **Operator shall provide method of verification.**

4. 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 joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. 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 Sec. 17.

2. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

   a. The tests shall be done by an independent service company.

   b. The results of the test shall be reported to the appropriate BLM office.

   c. 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.

   d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. 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.

   e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation. **if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days**. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

   f. A variance to test the surface casing and BOP/BOPE to the reduced pressure of **1000** psi with the rig pumps is approved.

D. 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.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

WWI 041208

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures
The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color Shale Green, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES

C. ELECTRIC LINES

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

At the time reserve pits are to be reclaimed, operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

B. RESERVE PIT CLOSURE

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

Seed Mixture 1, for Loamy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection bye the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent gemination = pounds pure live seed

(Insert Seed Mixture Here)

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.