SECRETARY'S POTASH OCD-ARTESIA ATS-07-329 EH-07-589

Form 3160-3 (April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Month - Year

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

Lease Serial No.
NMLC 069159

BUREAU OF LAND MAN	AGEMENT	A COD - ARIE	:SIA, NM	/ NMLC 069159	A	
APPLICATION FOR PERMIT TO		REENTER		6. If Indian, Allotee	or Tribe	Name
Ia. Type of work: DRILL REENTH	ER			7 If Unit or CA Agre NMNM 68294		ame and No.
lb. Type of Well: Oil Well Gas Well Other	Sir	gle ZoneMultip	le Zone	8. Lease Name and V BIG EDDY U		177
2. Name of Operator BEPCO, L. P. 180	/			9-API Well No. 50 - 0	15-	3559
3a. Address P. O. Box 2760 Midland, TX 79702		(include area code) 3-2277		10. Field and Pool, or Dublin Ranch	•	•
4. Location of Well (Report location clearly and in accordance with an	y State requirem	ents.*)		11. Sec., T. R. M. or B	lk. and Su	rvey or Area
At surface NWSW, 1760 FSL & 820 FWL, La		J. J		Lot 12, Sec 25.	, T22S, R	128E, NMP
At proposed prod. zone Same CARLSBAD CONTE	ROLLED V	WATER BASIN	ſ	10 C + D : 1		112 000
14. Distance in miles and direction from nearest town or post office* 13 MILES NE OF CARLSBAD, NM				12. County or Parish EDDY COUNT	ГҮ	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft.	16. No. of a	cres in lease		g Unit dedicated to this	well	
(Also to nearest drig. unit line, if any) 820	1596 320					
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1151	19. Proposed Depth 20. BLM/E			VBIA Bond No. on file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3134' GL	22. Approxir	nate date work will star	t*	23. Estimated duration 45 days	n	
	24. Attac	hments				
The following, completed in accordance with the requirements of Onshor	re Oil and Gas	Order No.1, shall be at	tached to th	is form:		
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 	Lands, the	Item 20 above). 5. Operator certific	ation specific info	ns unless covered by an	J	·
25. Signatu Childre		(Printed/Typed) Annette Childers			Date	38-2007
Title Administrative Assistant						-
Approved by (S)gnaptre) (NOV)	Name	(Printed/Typed)			APR	2 5 2007
STATE DIRECTOR	Office	NM STA	TE OF	FICE	_	
Application approval does not warrant or certify that the applicant hold	ls legal or equit				entitle the	applicant to
conduct operations thereon. Conditions of approval, if any, are attached.				APPROVA		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c. States any false, fictitious or fraudulent statements or representations as			villfully to m	nake to any department	or agency	of the United

*(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 DISTRICT I 1826 N. French Br., Hobbs, NM 88240 DISTRICT II 1301 W. Grand Avenue, Artesia, NM 88210

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102 Revised October 12, 2005

Submit to Appropriate District Office

State Lease — 4 Copies Fee Lease — 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Axtec, NM 87410 DISTRICT IV

1220 St. Francis Dr., Santa Fe, NM 87505

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

☐ AMENDED REPORT

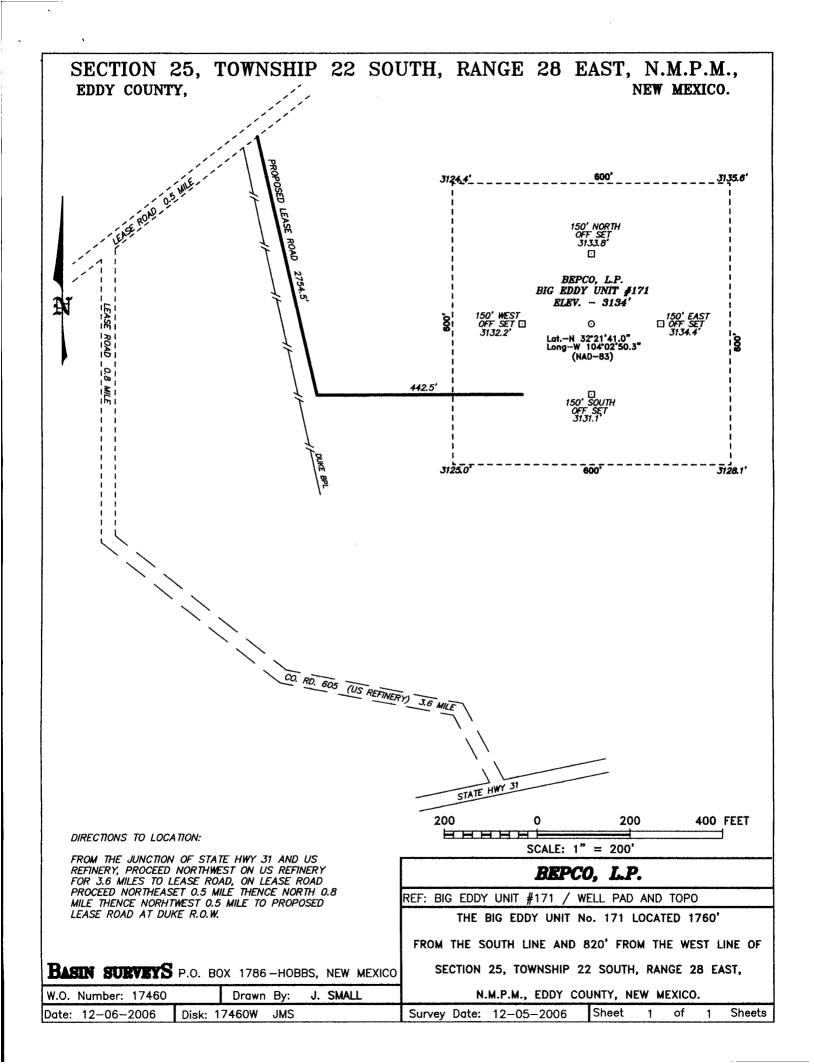
		•	WELL LO	CATION	AND A	ACREAGE	DEDICATION	N PLAT		
API Number		1	Pool Code		Pool Name					
	76140			0		Dublin Ranch (Morrow)				
Property (Code		Property Name				Well Nu	Well Number		
069159			BIG EDDY UNIT				171			
OGRID N	p.		Opera			Operator Name Elevation			ion	
001801		l	BEP			PCO, L.P. 3134'			4'	
					Surfac	e Locatio	n			
UL or lot No.	Section	Township	Range	Lot Idn	Feet fro	m the No	rth/South line	Feet from the	East/West line	County
LOT 12	25	22 S	28 E		17	60	SOUTH	820	WEST	EDDY

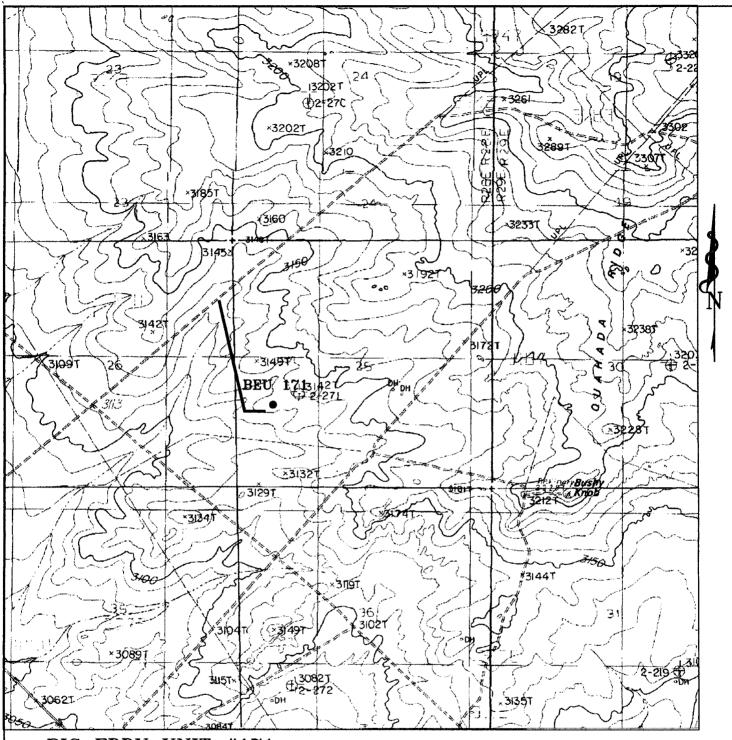
Bottom Hole Location If Different From Surface

	UL or lot No.	Section To	ownship	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	Dedicated Acres	Joint or Ir	nfill Con	solidation C	ode Ord	ler 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

	OR A NON-ST	TANDARD UNIT HAS	BEEN APPROVED BY T	THE DIVISION
LOT 4 42.31 ACRES	LOT 3 42.39 ACRES	LOT 2 42.46 ACRES	LOT 1 42.53 ACRES	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 organisation 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.
LOT 5 42.30 ACRES	LOT 6 42.37 ACRES	LOT 7 42.44 ACRES	LOT 8 42.50 ACRES	C. K. (Buddy) Jenkins Printed Name SURVEYOR CERTIFICATION
107 12 42.28 ACRES 31244 313	LAT - M32'21'41.0'	LOT 10 42.40 ACRES	LOT 9 AZ.46 ACRES	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.
3105.0° 312 107 13 42.25 ACRES	(NAD-85) LOT 14 22.32 ACRES	LOT 18 12:39 ACRES	LOT 16 42-45 ACRES	DECEMBER 05, 2006 Date Survey Professional divers 60 Certificate No. Gary L. Jones 7977
				Basin surveyS





BIG EDDY UNIT #171 1760' FSL and 820' FWL Section 25, Township 22 South, Range 28 East, N.M.P.M., Eddy County, New Mexico.



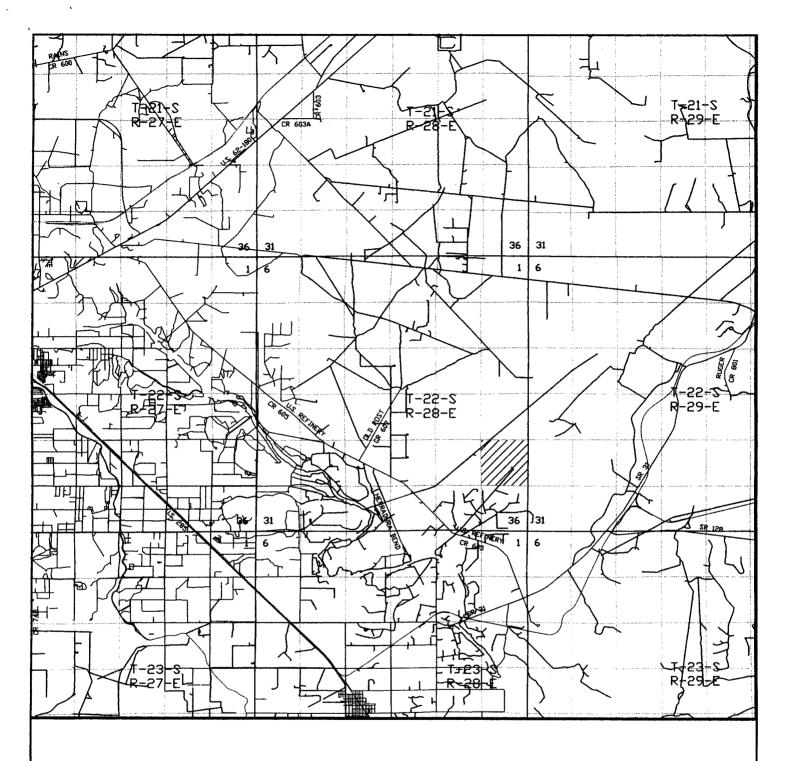
P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 - Office (505) 392-3074 - Fax basinsurveys.com W.O. Number: JMS 17460T

Survey Date: 12-05-2006

Scale: 1" = 2000'

Date: 12-06-2006

BEPCO, L.P.



BIG EDDY UNIT #171 1760' FSL and 820' FWL Section 25, Township 22 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 basinsurveys.com

W.O. Number:	JMS 17460T
Survey Date:	12-05-2006
Scale: 1" = 2	MILES
Date: 12-06-	-2006

BEPCO, L.P.

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

Production casing will be cemented using Howco Interfill system with TOC 500' above all productive intervals.

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.

EIGHT POINT DRILLING PROGRAM BEPCO L.P.

NAME OF WELL: BIG EDDY UNIT #171

LEGAL DESCRIPTION - SURFACE: 1760' FSL & 820' FWL, Section 25, 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 3157' (est)

GL 3134'

•	ESTIMATED	ESTIMATED	
FORMATION	TOP FROM KB	SUBSEA TOP	BEARING
T/Salt	442'	+ 2,715'	Barren
T/Lamar	2,792'	+ 365'	Barren
T/Wolfcamp	9,677'	- 6,520'	Oil/Gas
TD	13,250'	- 10,093'	

POINT 3: CASING PROGRAM

TYPE	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u> .
20"	0' - 40'	Conductor	Contractor Discretion
13-3/8", 48#, H40, STC	0' - 432'	Surface	New
△ 9-5/8", 36#, K-55 , LTC	0' - 6,430'	Intermediate	New
5-1/2", 17#, HCP110, LTC	0'- 13,250'	Production	New

4/0# HCN-80 9-6

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

A BOP equivalent to Diagram 1 will be nippled up on the surface and intermediate casings. The BOPE on the surface casing will be tested to 70% of interval yield or 1000 psig whichever is less using the rig pump.

On the intermediate casing the BOPE will be hydro-statically tested by independent tester to 5000 psig and 250 psig. BOPE includes choke manifold, upper & lower Kelly cocks, kill lines, etc. The annular preventor will be tested to 2500 psig. 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	<u>WEIGHT</u>	<u>FV</u>	PV	YP	FL	<u>Ph .</u>
0' - 442'	FW	8.5 - 9.2	45-35	NC	NC	NC _	9.5
442' - 6,350'	BW	10.0	28-30	NC	NC	NC	9.5
6,350' - 8,500'	FW	8.6 - 8.9	28-30	4	2	NC	9.5
8,500' - TD	CBW/Polymer	8.9 - 10.5	28-30	6	4	<20	9.5

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-LLD run from 13,250' (TD) to intermediate casing at 6430', GR-CNL to surface. May run FMI logging over Morrow.

C) CORING

No cores are anticipated.

D) CEMENT

D) CEMEN	!	FT OF				
INTERVAL SURFACE Lead	AMOUNT SX	FILL	TYPE	GALS/SX	PPG	FT ³ /SX
0' - 432' (100% Excess)	450	432	Premium Plus + 2% CaCl ₂ + $\frac{1}{4}$ /sx Pol-e-flake	6.32	14.8	1.34
INTERMEDIATE Lead						
0' - 5850' (100% Excess) Tail	1475	5850	Interfill C + ¼#/sx Pol-e-flake	14.10	11.90	2.45
5850' - 6350' (100% Excess)	235	500	Premium Plus + 2% CaCl ₂	6.34	14.80	1.34
PRODUCTION 1 st Stage LEAD						
8500'-11,250' (50% excess)	480	2650	Interfill H + 5pps Gilsonite + 0.5% Halad 9 + 1/8 pps Pol-e-flake	13.61	11.90	2.11
TAIL 11,250'-13,250' (50% excess)	465	2000	Super H + 0.5% Halad 344 + 0.4% CFR3 + 5 pps Gilsonite	8.20	13.00	1.61
,			+ 1 pps Salt + 0.2% HRT			
2 nd Stage LEAD 5930' - 8500'	580	2570	DR Super H + 5 #lek Cilconite	7.81	12.20	1.60
(50% excess)	300	2310	PB Super H + 5 #/sk Gilsonite + 1 #/sk Salt + 1.2% HR-7 + 0.5% Halad 344 + 0.4% CFR-3.		13.20	1.60-

E) DIRECTIONAL DRILLING

No directional services anticipated. A straight hole will be drilled to 13,250' TD.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout the Delaware, Bone Spring & Wolfcamp sections. The Strawn expected BHP is 5515 (max) or an equivalent mud weight of 10.0 ppg. The Atoka is usually over pressured 10.5 to 11.5 ppg. However the direct offset Marbob Irish Whiskey Federal #1 did not need mud weights over 10 ppg (according to bit records). The well plan therefore reflects this. The Morrow will be normally pressured. 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 200°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

45 days drilling operations

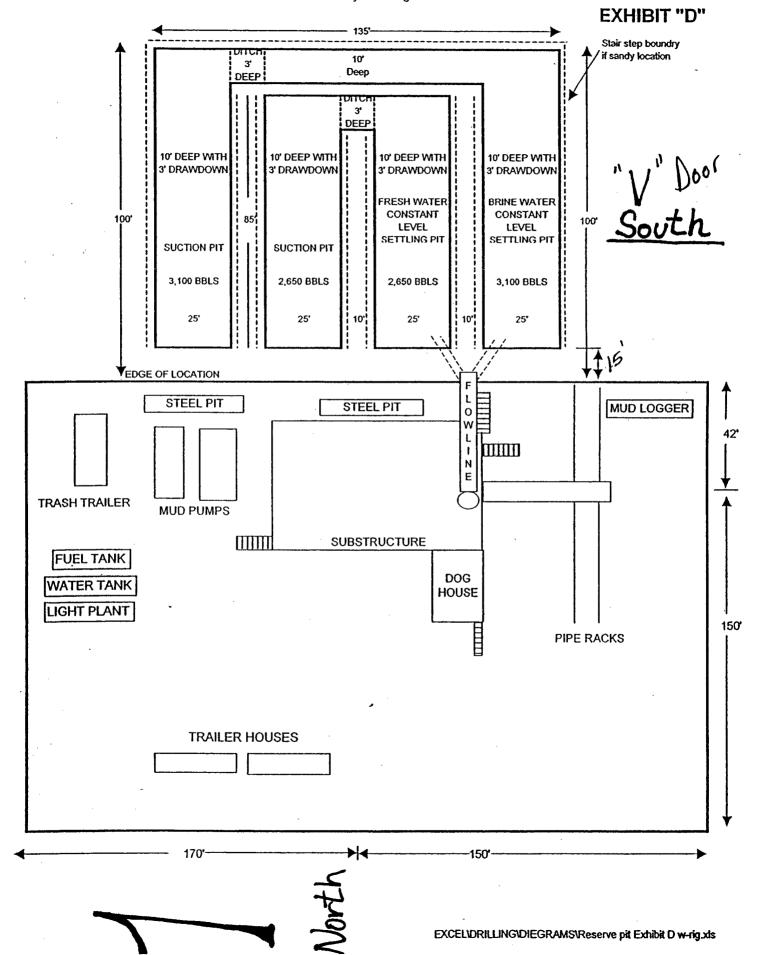
20 days completion operations

CKJ/cnt

MA

BASS ENTERPRISES PRODUCTION COMPANY

Poker Lake Unit #2 67
Grey Wolf Rig 15



5-M WP BOPE WITH 5-M WP ANNULAR

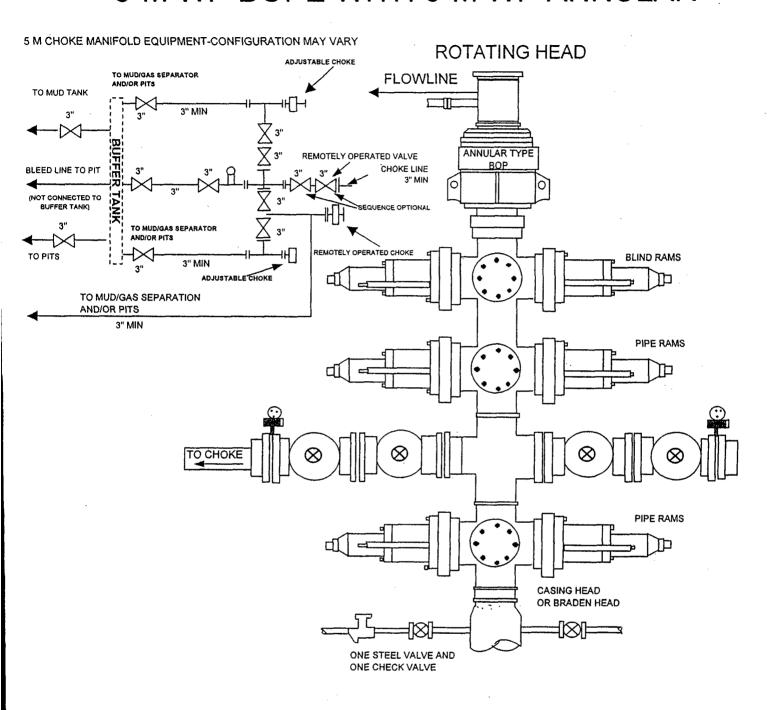


DIAGRAM 1

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: BIG EDDY UNIT #171

LEGAL DESCRIPTION - SURFACE: 1760' FSL & 820' FWL, Section 25, T21S-R28E, Eddy County,

NM

POINT 1: EXISTING ROADS

A) Proposed Well Site Location

See Exhibit "A".

B) Existing Roads:

From the junction of State Hwy 31 and U.S. Refinery, proceed northwest on U.S. Refinery for 3.6 miles to lease road; on lease road, proceed northeast 0.5 miles thence north 0.8 miles thence northwest 0.5 miles to proposed lease road at Duke R.O.W.

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 3197' 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 "A" indicates existing wells within the surrounding area.

POINT 4: LOCATION OF EXSITING OR PROPOSED FACILITIES

A) No Existing facilities within one mile owned or controlled by lessee/operator:

POINT 4: LOCATION OF EXSITING OR PROPOSED FACILITIES

B) New Facilities in the Event of Production:

New production facilities will be installed at the new location at Big Eddy Unit #171 (Sec 25, T22S, R28E).

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 and brine will be hauled from the City of Carlsbad. Brine water will be hauled from Champion Brine Water Station, 3.5 miles east and 2.5 miles south of Carlsbad.

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. It is planned to use on-site caliche if possible. Pits are located in Sec 8, T22S, R28E and Sec 9, T23S, R28E if necessary.

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

As described in point 2, 3197' of new lease road will be built. 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

None Required.

POINT 9: WELL SITE LAYOUT

A) Rig Orientation and Layout

Exhibit "C" 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 "C"

C) Lining of the Pits

The reserve pit will be lined with 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. Closest know water well is SWSE Sec 15, T22S, R28E. (approx 2-1/2 miles northeast of BEU #171).

G) Residences and Buildings

None in the immediate vicinity.

H) Historical Sites

None observed.

1) Archeological Resources

An archeological survey will be obtained for this area. The survey area will be a 600' x 600' square with its center on the wellhead stake. 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 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

Michael Lyon 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 filling of a false statement.

Date

CKJ/cnt

C. K. Jenkins By
C.K. Jenkins

Kel