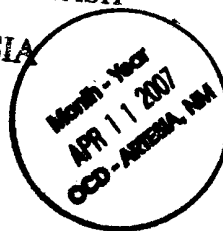


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

R-III-POTASH
OCD-ARTESIA

ATG-07-291

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 20075. Lease Serial No.
~~NMNM-07T988~~ LC 071988B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
James Ranch Unit #102 #17869. API Well No.
30-015-355431a. Type of work: ☒ DRILL ☐ REENTER1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone2. Name of Operator
BEPCO, L. P. #18013a. Address P. O. Box 2760
Midland, TX 797023b. Phone No. (include area code)
432-683-227710. Field and Pool, or Exploratory
Los Medanos - Morrow4. Location of Well (Report location clearly and in accordance with any State requirements.)*
At surface SESW, 660 FSL, 2150 FWL, Lat N32.313583, Long W103.801417
At proposed prod. zone SESW, 660 FSL, 1980 FWL, Lat N32.320889, Long W103.80197211. Sec., T. R. M. or Blk. and Survey or Area
Lot N, S8-T23S-R31E-NMP14. Distance in miles and direction from nearest town or post office*
18 MILES EAST OF CARLSBAD, NM12. County or Parish
EDDY13. State
NM15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) 482'16. No. of acres in lease
108817. Spacing Unit dedicated to this well
32018. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 2664'19. Proposed Depth
14,755' TVD, 14,771' MD20. BLM/BIA Bond No. on file
NM220421. Elevations (Show whether DF, KDB, RT, GL, etc.)
GL 3318'22. Approximate date work will start*
09/01/200723. Estimated duration
55 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. |

26. Signature
Annette ChildersName (Printed Typed)
Annette ChildersDate
01/29/2007Title
Administrative AssistantApproved by (Signature)
Linda S.C. RundellName (Printed Typed)
Linda S.C. Rundell

Date APR 2 2007

Title
STATE DIRECTOROffice
NM STATE OFFICEApplication 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 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

SUBJECT TO LIKE
APPROVAL BY STATESEE ATTACHED FOR
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

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

Form C-102
Revised October 12, 2005

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	80560	LOS MEDANOS - MORROW
Property Code	Property Name	Well Number
071988	JAMES RANCH UNIT	101
OGRID No.	Operator Name	Elevation
001801	BEPCO, L.P.	3325'

Surface Location

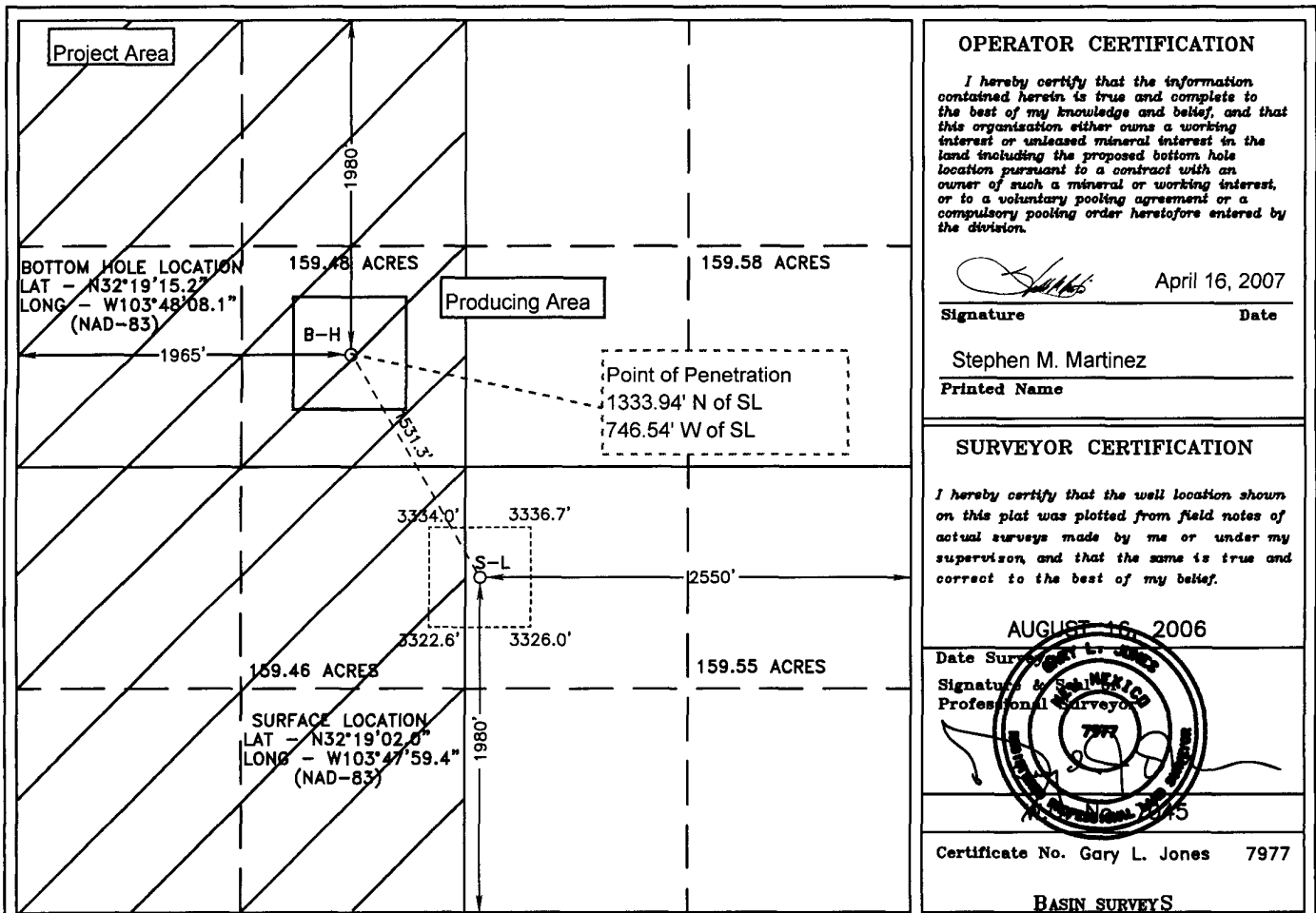
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	8	23 S	31 E		1980	SOUTH	2550	EAST	EDDY

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
F	8	23 S	31 E		1980	NORTH	1965	WEST	EDDY

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.

Signature: *[Signature]* Date: April 16, 2007

Printed Name: Stephen M. Martinez

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.

Date Surveyed: AUGUST 16, 2006
Signature: *[Signature]*
Professional Surveyor

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

**EIGHT POINT DRILLING PROGRAM
BEP CO, L.P.**

NAME OF WELL: JAMES RANCH UNIT #102

LEGAL DESCRIPTION - SURFACE: 660' FSL & 2150' FWL, Section 8, T-23-S, R-31-E, Eddy County, New Mexico. BOTTOM HOLE: 660' FSL & 1980' FWL, Section 8, T-23-S, R-31-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 3339' (est); GL 3318'

<u>FORMATION</u>	<u>ESTIMATED TVD FROM KB</u>	<u>ESTIMATED SUBSEA TOP</u>	<u>BEARING</u>
T/Rustler	379'	2,960'	Barren
T/Salt	709'	2,630'	Barren
T/Lamar Lime	4,064'	-725'	Barren
T/Delaware	4,104'	-765'	Oil/Gas
T/Bone Spring Lime	7,924'	-4,585'	Oil/Gas
T/Wolfcamp	11,189'	-7,850'	Oil/Gas
T/Strawn	12,734'	-9,395'	Oil/Gas
T/Atoka	12,947'	-9,608'	Oil/Gas
T/Atoka Sand	13,164'	-9,825'	Oil/Gas
T/Atoka Bank	13,243'	-9,904'	Oil/Gas
T/Upper Morrow	13,771'	-10,432'	Oil/Gas
T/Middle Morrow	14,179'	-10,840'	Oil/Gas
T/Lower Morrow	14,545'	-11,206'	Oil/Gas
TD	14,755'	-11,416'	Oil/Gas

POINT 3: CASING PROGRAM

<u>TYPE</u>	<u>INTERVAL (TVD)</u>	<u>PURPOSE</u>	<u>CONDITION</u>
20"	0' - 120'	Conductor	Contractor Discretion
13-3/8", 48#, H-40, STC	0' - 700'	Surface	New
9-5/8", 40#, J-55, LTC	0' - 4,100'	Intermediate	New
7", 26#, HCP-110, LTC	0' - 12,000'	Production Casing	New
4-1/2", 13.5#, HCP-110 LTC	11,700' - 14,755'	Production Liner	New

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

The BOPE equivalent to Diagram 1 will be nipped up on the surface casing head. The BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. will be hydro-tested to 70% of internal yield pressure of casing. In addition to the high pressure test, a low pressure (200 psi) test will be required. This same BOP stack, choke, kill lines, kelly cocks, inside BOP etc. will be nipped up an 8-5/8" intermediate casing and will be hydrostatically tested to 3,000 psig by independent tester. A 200 psi test will also be performed.

- a) Upon installation
- b) After any component changes
- c) Fifteen days after a previous test
- d) As required by well conditions

A function test to insure that the preventers are operating correctly will be performed on each trip.

POINT 5: MUD PROGRAM

DEPTH (TVD)	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0' - 700'	FW	8.6 - 9.2	55-60	NC	NC	NC	9.5
760' - 4,100'	BW	10.0 - 10.2	28-30	NC	NC	NC	9.5 - 10.0
4,075' - 10,500'	FW	8.4 - 8.6	28-30	4	2	NC	9.5 - 10.0
10,500' - 12,000'	CBW	9.0 - 9.5	28-30	6	4	NC	9.5
12,000' - 13,500'	CBW/Polymer	9.0 - 13.0	34-38*	6-10	8-12	<20	9.5-10
13,500' - TD	CBW/Polymer	9.0 - 12.1	34-38*	6-10	8-12	<10	9.5-10

*Will increase viscosity for logging purposes only.

POINT 6: TECHNICAL STAGES OF OPERATION**A) TESTING**

None anticipated.

B) LOGGING

GR-CNL-LDT w/Dual Induction Log (12,000'-4,100' TVD); GR-CNL (4,100' TVD - surface);
GR-CNL-LDT w/Dual Lateral Log (14,755'-12,000' TVD).

C) CONVENTIONAL CORING

None anticipated.

D) CEMENT (All Depths MD)

INTERVAL	# SACKS	FILL	TYPE	GALS/SX	PPG	FT ³ /SX
SURFACE						
Lead (100% excess)						
0' - 400'	295	400'	Light Premium Plus + 2.7lbm/sk NaCl	10.14	12.80	1.87
Tail (100% excess)						
400' - 700'	340	300'	Premium Plus + 2% CaCl ₂	6.34	14.80	1.34
INTERMEDIATE						
Lead (100% Excess)						
0 - 3,525' ft	745	3525'	Interfill 'C' Cement	16.43	11.50	2.76
Tail (100% Excess)						
3,525' - 4100'	295	575'	Premium Plus + 1% CaCl ₂	6.33	14.80	1.33
PRODUCTION						
(Three stage with DV tools set at \pm 4,000' and \pm 7,500'; circulate cement to surface)						
1 st Stage (50% excess)						
Lead						
7,500' - 11,000'	290	3500'	Interfill 'H' Halad®-9 (Low Fluid Loss Control)	16.43	11.50	2.76
Tail						
11,000' - 12,026'	185	1026'	50/50 Poz Premium + 5 lbm/sk Gilsonite + 1 lbm/sk salt + 0.6% Halad R-9 + 0.4% CFR-3 + 0.2% HR-7	5.43	14.20	1.30
2 nd Stage (75% excess)						
Lead						
4,000' - 7,000'	285	3000'	Interfill 'C'	16.43	11.50	2.76
Tail						
7,000' - 7,500'	100	500'	Premium Plus Neat	6.32	14.80	1.32
3 rd Stage						
Lead						
0' - 3,579'	235	3579'	Interfill 'C'	14.12	11.90	2.45
Tail						
3,579' - 4,000'	50	421'	Premium Plus + 1% CaCl ₂	6.33	14.80	1.33
PRODUCTION LINER						
Tail (50% Excess)						
11,700' - 14,771'	290	3071'	Super 'H' + 0.5% Halad R-344 + 0.4% CFR-3 + 5 lbm/sk Gilsonite + 1 lbm/sk Salt + 0.2% HR-7	8.24	13.00	1.67

E) DIRECTIONAL DRILLING

The directional plan for this well is a standard 'S' curve. This well will be drilled vertically to a depth of 9,660' TVD. It will then be directionally drilled at a build rate of 2.50°/100' in a westerly (270.0°) direction to a maximum angle of 15°. At a depth of 10,311' TVD (10,320' MD), the hole angle will be dropped at rate of 2.5°/100' becoming vertical again at 10,904' TVD (10,920' MD).

The well will continue vertically until a total depth of 14,755' TVD (14,771' MD) is reached with a proposed total displacement of 172' (0' N, 172' W). See the directional plan attached.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout the Delaware, Bone Spring & Wolfcamp sections. The Atoka Bank may be abnormally pressured with a maximum anticipated BHP of 8,200 psi or an equivalent mud weight of 12.2 ppg. The Morrow expected BHP is 7,500 (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°. 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

55 days drilling operations

30 days completion operations

WRD:mmm

January 23, 2007

Surface casing is to be set +/- 10' above top of salt and below all fresh water sands.

Intermediate casing will be set in the top of the Lamar. Production casing will be cemented using a multi-stage cement tool with the cement circulated to surface. A production liner will be set through the Strawn, Atoka, and Morrow groups. The proposed TD is 210' below the Lower Morrow at $\pm 14,755'$ TVD.

Drilling procedure, BOP diagram, anticipated tops and surface plans are attached along with the proposed directional drilling plan.

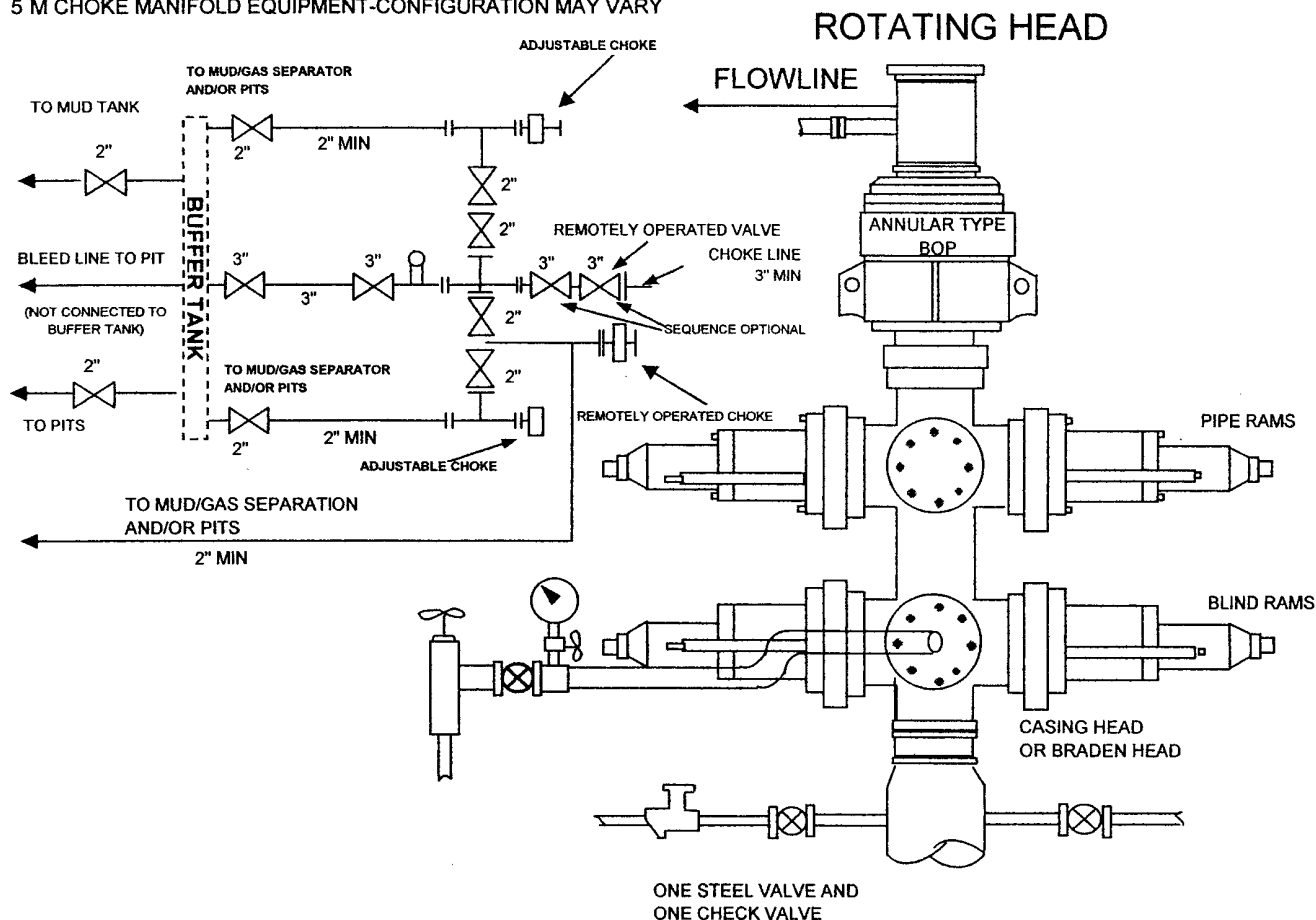
This well is located inside the Secretary's Potash area and inside the R-111 Potash area.

BEPCO, L. P.

5-M WP BOPE WITH 5-M WP ANNULAR

Diagram 1

5 M CHOKE MANIFOLD EQUIPMENT-CONFIGURATION MAY VARY



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. One double gate Blowout preventer with lower pipe rams and upper blind rams, 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 BOPs.
- 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. Chokes must be adjustable. Choke spool may be used between rams.

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: James Ranch Unit #102

LEGAL DESCRIPTION - SURFACE: 660' FSL & 2150' FWL, Section 8, T-23-S, R-31-E, Eddy County, New Mexico.

LEGAL DESCRIPTION – BOTTOM HOLE: 660' FSL & 1980' FWL, Section 8, T-23-S, R-31-E, Eddy County, New Mexico.

POINT 1: EXISTING ROADS

A) Proposed Well Site Location:

See Exhibit "A".

B) Existing Roads:

From the junction of State Highway 128 and County Road 802 (WIPP Road), go southeast on Highway 128 for 2.3 miles to the existing lease road; thence north for 1.0 miles, thence west for 0.2 miles to the Devon Pure Gold "8" Fed #5 pad and the proposed lease road.

C) Existing Road Maintenance or Improvement Plan:

See Exhibit "B". Maintenance of existing lease road may be required.

POINT 2: NEW PLANNED ACCESS ROUTE

A) Route Location:

See Exhibit "B". Approximately 677' of new road construction will be required. The new road will be 12' wide and be constructed of watered and compacted caliche.

B) Width

Twelve (12) feet wide.

C) Maximum Grade

Not applicable.

D) Turnout Ditches

Spaced per BLM requirements.

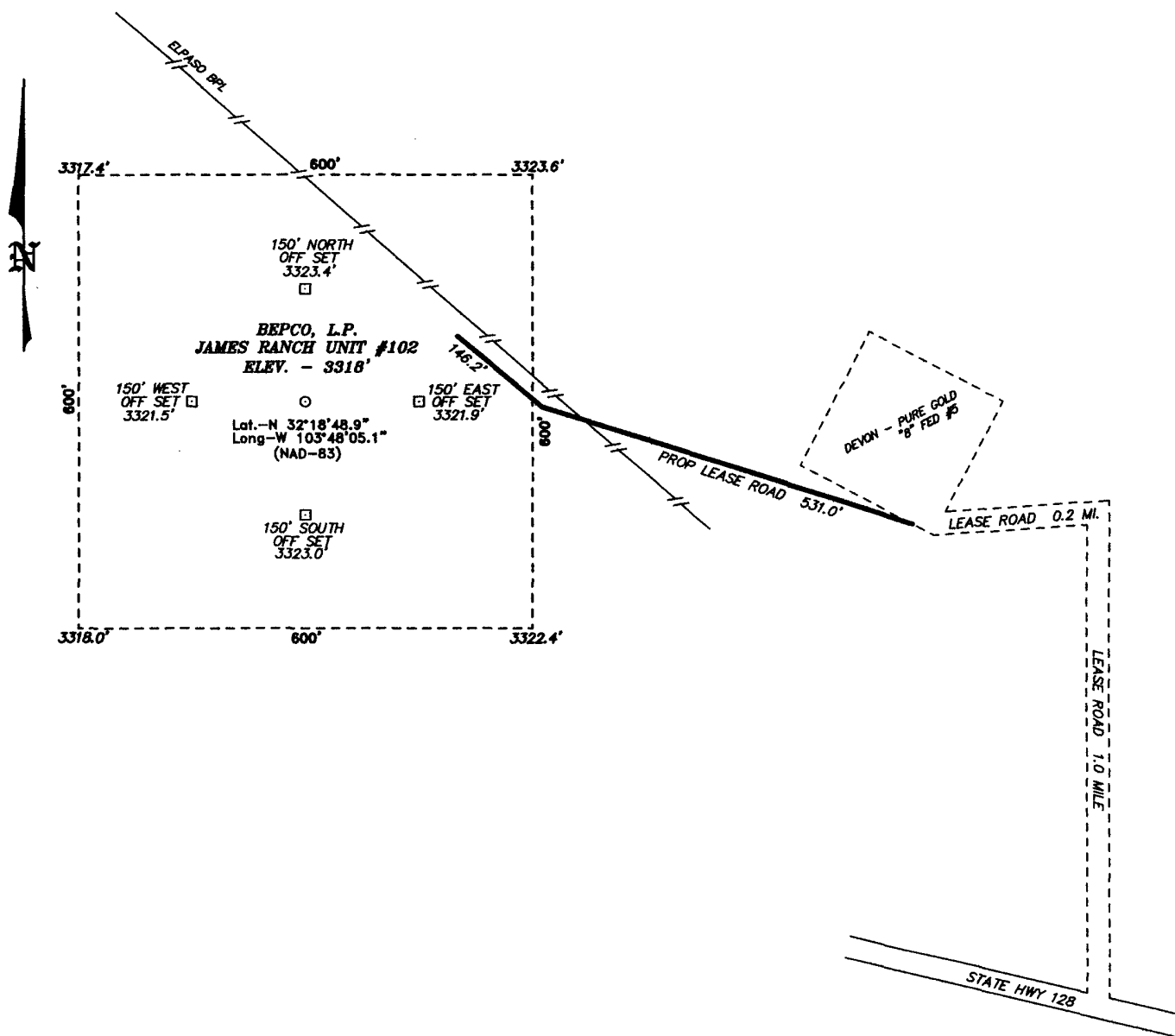
E) Culverts, Cattle Guards, and Surfacing Equipment

None.

POINT 3: LOCATION OF EXISTING WELLS

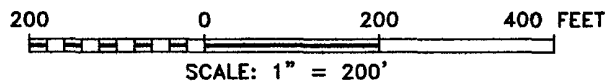
Exhibits "A" and "B" indicate existing wells within the surrounding area.

SECTION 8, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF STATE HWY 128 AND CO. RD. 802 (WPP ACCESS), PROCEED SOUTHEAST ON STATE HWY 128 FOR 2.3 MILES TO LEASE ROAD, ON LEASE ROAD PROCEED NORTH 1.0 MILE THENCE WEST 0.2 MILE TO DEVON PURE GOLD PAD AND PROPOSED LOCATION.



BEPCO, L.P.

REF: JAMES RANCH UNIT #102 / WELL PAD AND TOPO

THE JAMES RANCH UNIT No. 102 LOCATED 660'
FROM THE SOUTH LINE AND 2150' FROM THE WEST LINE OF
SECTION 8, TOWNSHIP 23 SOUTH, RANGE 31 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

W.O. Number: 17528

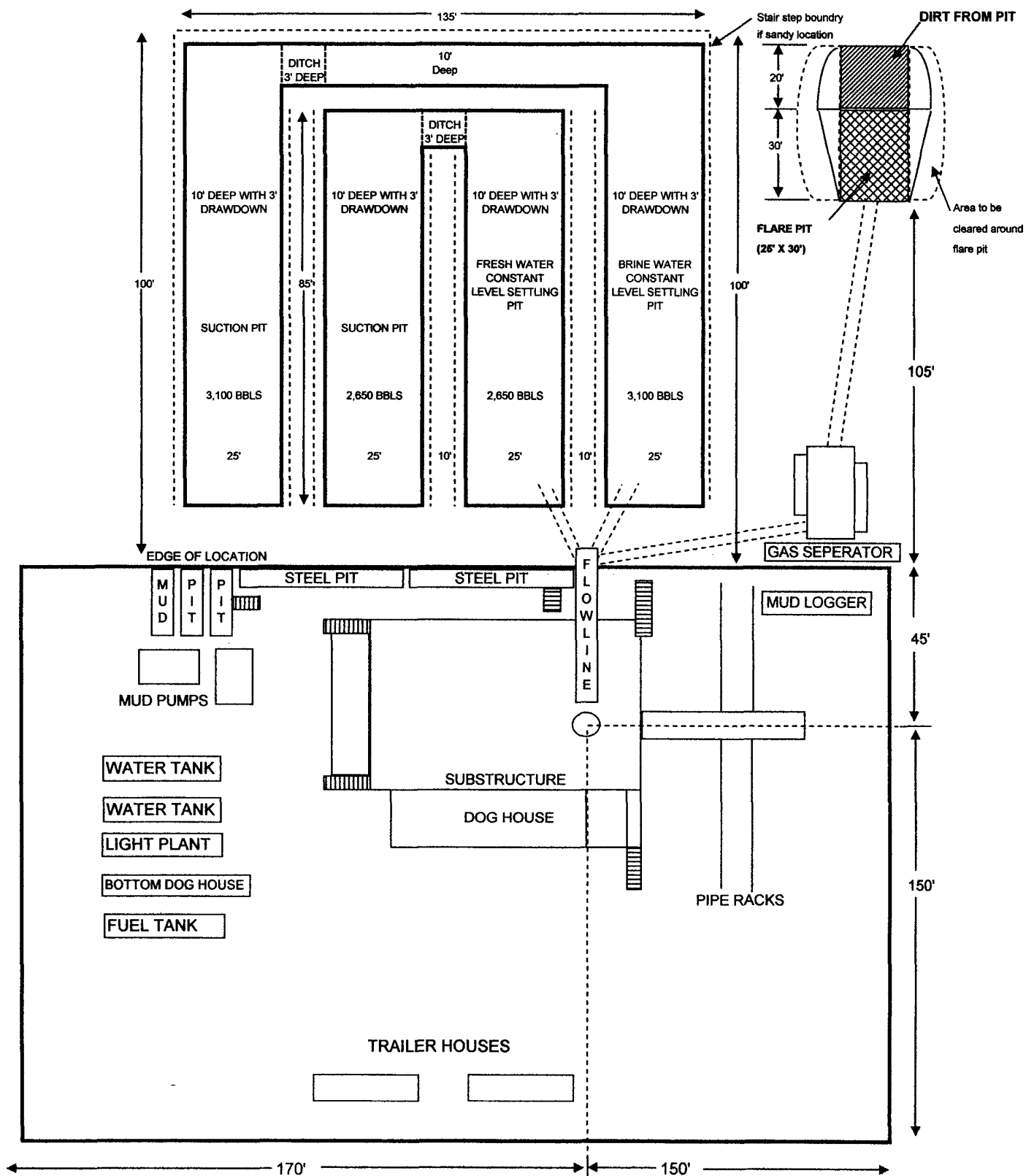
Date: 12-06-2006

Survey Date: 12-05-2006

ADOBE IRONHORSE

Exhibit "C"

Rig Layout Schematic





Bass Enterprises Production Co.

Eddy Co., New Mexico (Nad 83)

James Ranch Unit #102

James Ranch Unit #102

S-Well #1

Plan: Plan #1

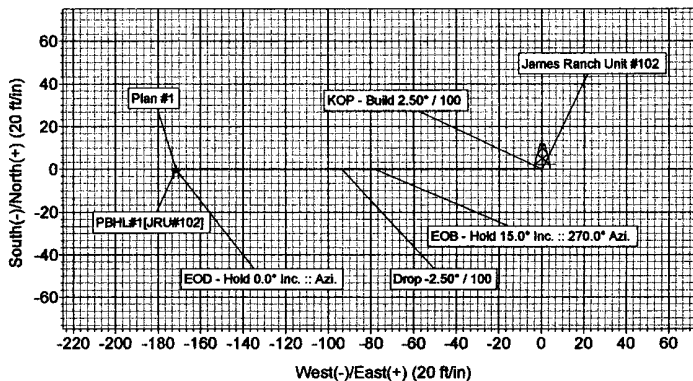
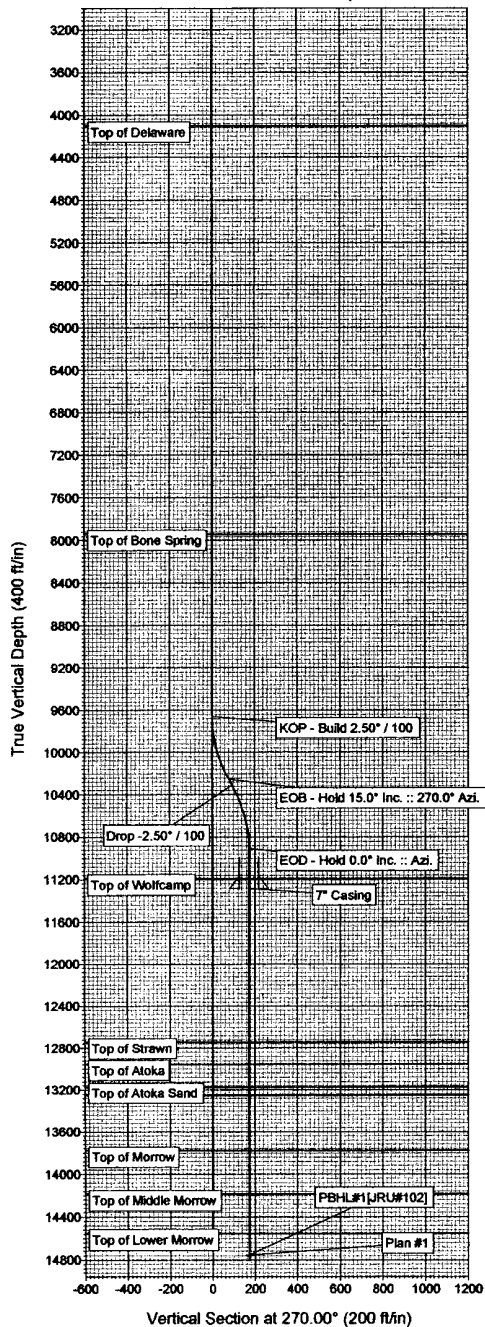
Standard Survey Report

26 January, 2007





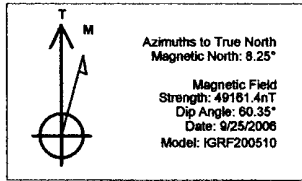
Project: Eddy Co., New Mexico (Nad 83)
 Site: James Ranch Unit #102
 Well: James Ranch Unit #102
 Wellbore: S-Well #1
 Plan: Plan #1 (James Ranch Unit #102/S-Well #1)



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	D/Leg	T/Face	V/Sec	Target
1	9659.97	0.00	0.00	9659.97	0.00	0.00	0.00	0.00	0.00	
2	9659.98	0.00	0.00	9659.98	0.00	0.00	0.00	0.00	0.00	
3	10259.98	15.00	270.00	10253.15	0.00	-78.09	2.50	270.00	78.09	
4	10319.86	15.00	270.00	10310.80	0.00	-93.54	0.00	0.00	93.54	
5	10919.66	0.00	0.00	10903.97	0.00	-171.63	2.50	180.00	171.63	
6	14770.69	0.00	0.00	14755.00	0.00	-171.63	0.00	0.00	171.63	PBHL#1(JRU#102)

ANNOTATIONS		
TVD	MD	Annotation
9659.98	9659.98	KOP - Build 2.50° / 100
10253.15	10259.98	EOB - Hold 15.0° Inc. :: 270.0° Azi
10310.80	10319.86	Drop -2.50° / 100
10903.97	10919.66	EOD - Hold 0.0° Inc. :: Azi

PROJECT DETAILS: Eddy Co., New Mexico (Nad 83)
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Ground Level



Plan: Plan #1 (James Ranch Unit #102/S-Well #1)
 Created By: L.D. Burton Date: 12/21/2006



Black Viper Energy

Survey Report



Company: Bass Enterprises Production Co.
Project: Eddy Co., New Mexico (Nad 83)
Site: James Ranch Unit #102
Well: James Ranch Unit #102
Wellbore: S-Well #1
Design: Plan #1

Local Co-ordinate Reference: Well James Ranch Unit #102
TVD Reference: WELL @ 0.00ft (Original Well Elev)
MD Reference: WELL @ 0.00ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.14.1.0 Server DB

Project	Eddy Co., New Mexico (Nad 83)		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	James Ranch Unit #102				
Site Position:		Northing:	478,222.67 ft	Latitude:	32° 18' 48.900 N
From:	Lat/Long	Easting:	705,664.09 ft	Longitude:	103° 48' 5.100 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	0.28 °

Well	James Ranch Unit #102					
Well Position	+N/-S	0.00 ft	Northing:	478,222.67 ft	Latitude:	32° 18' 48.900 N
	+E/-W	0.00 ft	Easting:	705,664.09 ft	Longitude:	103° 48' 5.100 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	0.00 ft	

Wellbore	S-Well #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF200510	9/25/2006	(°)	(°)	(nT)
			8.25	60.35	49,161

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	9,659.97	
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	270.00	

Survey Tool Program	Date 1/26/2007				
From	To	Survey (Wellbore)	Tool Name	Description	
(ft)	(ft)				
9,659.97	14,770.69	Plan #1 (S-Well #1)	GM	Gyro Multi-Shot	

Planned Survey									
Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Rate
(ft)			(ft)			(ft)	(°/100ft)	(°/100ft)	(°/100ft)
9,659.98	0.00	0.00	9,659.98	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build 2.50° / 100									
10,259.98	15.00	270.00	10,253.15	0.00	-78.09	78.09	2.50	2.50	0.00
EOB - Hold 15.0° Inc. :: 270.0° Azi.									
10,319.66	15.00	270.00	10,310.80	0.00	-93.54	93.54	0.00	0.00	0.00
Drop -2.50° / 100									
10,919.66	0.00	0.00	10,903.97	0.00	-171.63	171.63	2.50	-2.50	0.00
EOD - Hold 0.0° Inc. :: Azi.									
11,204.69	0.00	0.00	11,189.00	0.00	-171.63	171.63	0.00	0.00	0.00
Top of Wolfcamp									
12,756.69	0.00	0.00	12,741.00	0.00	-171.63	171.63	0.00	0.00	0.00
Top of Strawn									



Black Viper Energy
Survey Report



Company: Bass Enterprises Production Co.
Project: Eddy Co., New Mexico (Nad 83)
Site: James Ranch Unit #102
Well: James Ranch Unit #102
Wellbore: S-Well #1
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well James Ranch Unit #102
WELL @ 0.00ft (Original Well Elev)
WELL @ 0.00ft (Original Well Elev)
True
Minimum Curvature
EDM 2003.14.1.0 Server DB

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,969.69	0.00	0.00	12,954.00	0.00	-171.63	171.63	0.00	0.00	0.00
Top of Atoka									
13,186.69	0.00	0.00	13,171.00	0.00	-171.63	171.63	0.00	0.00	0.00
Top of Atoka Sand									
13,265.69	0.00	0.00	13,250.00	0.00	-171.63	171.63	0.00	0.00	0.00
Top of Atoka Bank									
13,793.69	0.00	0.00	13,778.00	0.00	-171.63	171.63	0.00	0.00	0.00
Top of Morrow									
14,201.69	0.00	0.00	14,186.00	0.00	-171.63	171.63	0.00	0.00	0.00
Top of Middle Morrow									
14,567.69	0.00	0.00	14,552.00	0.00	-171.63	171.63	0.00	0.00	0.00
Top of Lower Morrow									
14,770.69	0.00	0.00	14,755.00	0.00	-171.63	171.63	0.00	0.00	0.00



Black Viper Energy

Survey Report



Company: Bass Enterprises Production Co.
Project: Eddy Co., New Mexico (Nad 83)
Site: James Ranch Unit #102
Well: James Ranch Unit #102
Wellbore: S-Well #1
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well James Ranch Unit #102
WELL @ 0.00ft (Original Well Elev)
WELL @ 0.00ft (Original Well Elev)
True
Minimum Curvature
EDM 2003.14.1.0 Server DB

Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
PBHL#1(JRU#102)	0.00	0.00	14,755.00	0.00	-171.63	478,221.82	705,492.46	32° 18' 48.900 N	103° 48' 7.100 W
- plan hits target									
- Point									

Casing Points

Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter
(ft)	(ft)		(")	(")
11,300.00	11,284.31	7"	7	7-1/2

Formations

Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
	4,104.00	Top of Delaware		0.00	
	7,939.00	Top of Bone Spring		0.00	
11,204.69	11,189.00	Top of Wolfcamp		0.00	
12,756.69	12,741.00	Top of Strawn		0.00	
12,969.69	12,954.00	Top of Atoka		0.00	
13,186.69	13,171.00	Top of Atoka Sand		0.00	
13,265.69	13,250.00	Top of Atoka Bank		0.00	
13,793.69	13,778.00	Top of Morrow		0.00	
14,201.69	14,186.00	Top of Middle Morrow		0.00	
14,567.69	14,552.00	Top of Lower Morrow		0.00	

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N-S	+E-W	
(ft)	(ft)	(ft)	(ft)	
9,659.98	9,659.98	0.00	0.00	KOP - Build 2.50° / 100
10,259.98	10,253.15	0.00	-78.09	EOB - Hold 15.0° Inc. :: 270.0° Azi.
10,319.66	10,310.80	0.00	-93.54	Drop -2.50° / 100
10,919.66	10,903.97	0.00	-171.63	EOD - Hold 0.0° Inc. :: Azi.

Checked By: _____ Approved By: _____ Date: _____

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: BEPCO, L.P.
Well Name & No. 102 - JAMES RANCH UNIT
Location: 660' FSL & 2150' FWL - SEC 8 - T23S - R31E - EDDY COUNTY (SHL)
660' FSL & 1980' FWL - SEC 8 - T23S - R31E - EDDY COUNTY (BHL)
Lease: LC-071988-B

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 13-3/8 inch 9-5/8 inch 7 inch 4-1/2 inch liner

C. BOP tests

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. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

5. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

II. CASING:

1. The 13-3/8 inch surface casing shall be set at 700 feet, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the 9-5/8 inch salt protection casing is circulate cement to the surface. Note: If Delaware Formation is penetrated (approx. 4000') set 9-5/8 inch casing above the sands in the Lamar limestone.

3. The minimum required fill of cement behind the 7 inch production casing is circulate cement to the surface.

4. The minimum required fill of cement behind the 4-1/2 inch production liner is cement shall extend upward to the top of the production liner at approx. 11,700 feet.

5. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be 2000 psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 9-5/8 inch casing shall be 5000 psi.
3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
 - The tests shall be done by an independent service company.
 - The results of the test shall be reported to the appropriate BLM office.
 - Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
 - Testing must be done in a safe workman-like manner. Hard line connections shall be required.
 - BOPE must be tested prior to drilling into the Wolfcamp Formation by an independent service company.

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. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.