Form 3160-3 (April 2004) OCD-ARTESIA

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REPOTER

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

5. Lease Serial No. -NMNM-071988 LC071988B

If Indian, Allotee or Tribe Name

				}		
la. Type of work:	ER			7. If Unit or CA Agreemen	t, Name and No.	
lb. Type of Well: ☐Oil Well ☐Gas Well ☐Other	<b>√</b> Sin	ngle ZoneMulti	ole Zone	8. Lease Name and Well I  James Ranch Unit	11-1-0	
2. Name of Operator BEPCO, L. P. CARLERAD CO.	Allen Ot 1 Est	> ***		9. API Well No.	-3554	
3a. Address P. O. Box 2760 Midland, TX 79702	3b. Phone No. 432-683		IN	10. Field and Pool, or Explo Los Medanos - Mo	•	
4. Location of Well (Report location clearly and in accordance with a	ny State requirem	ents.*)		11. Sec., T. R. M. or Blk.an	d Survey or Area	
At surface NWSE, 1980 FSL, 2550 FEL, Lat At proposed prod. zone SENW, 1980 FNL, 1965 FWL, La			0	Lot J, S8-T23S-R3	1E-NMP	
14. Distance in miles and direction from nearest town or post office* 18 MILES EAST OF CARLSBAD, NM				12. County or Parish  EDDY	13. State NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  663'	16. No. of ac	of acres in lease 17. Spacin 320		g Unit dedicated to this well		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  140'	19. Proposed 14,727' T	Depth VD, 14,980 MD	20. BLM/I	/BIA Bond No. on file 204		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL 3325'	22. Approxin	nate date work will sta 07/01/2007	rt*	23. Estimated duration 55 days		
	24. Attac	hments				
The following, completed in accordance with the requirements of Onsho	ore Oil and Gas (	Order No.1, shall be a	ttached to the	is form:	<u></u>	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> </ol>		4. Bond to cover t Item 20 above).	he operation	ns unless covered by an exist	ing bond on file (see	
3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).	Lands, the	Operator certific     Such other site     authorized office	specific info	ormation and/or plans as may	be required by the	
25 Signature NO - 0	Name	(Printed/Typed)		Date	,	

Administrative Assistant

Conditions of approval, if any, are attached.

Approved by (Signature) Is/ Linda S.C. Rundell Name (Printed Typed)

**Annette Childers** 

/s/ Linda S.C. Rundel

2207

01/29/2007

Title

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

Office

'APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

conduct operations thereon.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

SUBJECT TO LIKE APPROVAL BY STATE

# **APPROVAL SUBJECT TO** GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

# BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.
FORT WORTH, TEXAS 76102-3131

March 15, 2007

# FEDERAL EXPRESS

Bureau of Land Management Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220-6292

Attention: Mr. Jim Stovall

Re: Subsurface Easement
James Unit No. 101 APD
1980' FSL 2250' FEL
Section 8, T23S-R31E
Eddy County, New Mexico

Dear Mr. Stovall:

Please reference the BLM's letter dated February 2, 2007, noting that the APD for the above well requires a surface use plan and statement from Devon Energy regarding the drilling pad for the Bass-JRU 101 Well, which will be next to Devon's location for the Devon-North Pure Gold Federal No. 6.

Attached hereto is the original, fully-executed Subsurface Easement whereby Devon has verified its consent to the Bass location, as well as the right to drill through Devon's lease to arrive at a bottomhole location under Bass' lease.

It is Bass' understanding that the APD for the JRU No. 101 Well will now be approved by the BLM; however, should there be any further requirements in that regard, please contact the undersigned at your earliest convenience at (817) 390-8671.

Very truly yours

Wayne Bailey

JWB:mc Attachment

cc: Stephen Martinez - Bass Midland Office

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II 1301 W. Grand Avenue, Artesia, NM 58210

#### 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., Aztec, 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 LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Code Pool Name			
	80560 LOS MEDANOS - MOF				
Property Code	Prope	rty Name	Well Number		
071988	JAMES R	102			
OGRID No.	Opera	tor Name	Elevation		
001801	BEPC	3318'			

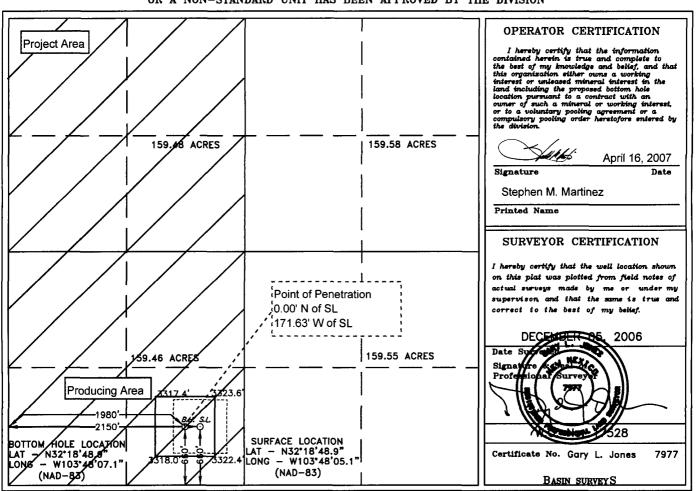
#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	8	23 S	31 E		660	SOUTH	2150	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
N	8	23 S	31 E		660	SOUTH	1980	WEST	EDDY
Dedicated Acre	s Joint o	r Infill Co	nsolidation	Code Or	der 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



## SUBSURFACE EASEMENT

This Subsurface Easement is entered into this 1st day of March, 2007 by and between DEVON ENERGY PRODUCTION COMPANY, L.P. ("DEVON") and BASS ENTERPRISES PRODUCTION CO. ("BEPCO")

## NOTICE IS TAKEN OF THE FOLLOWING FACTS:

- 1. BEPCO intends to drill the James Ranch Unit #101 as a directional 13,000' (total vertical depth) Morrow test well with a SHL of 2550' FEL & 1980' FSL of and a BHL of 1980' FNL & 1965' FWL all in Section 8-T23S-R31E, in Eddy County, New Mexico as depicted on the attached State of New Mexico form C-102; and
- 2. Due to certain Potash drilling restrictions imposed by the Bureau of Land Management, drilling a vertical well at a surface location in the W/2 of said section 8 is not permitted, and
- 3. BEPCO has staked and permitted its proposed well at the above mentioned SHL and DEVON is the owner of the leasehold estate underlying the E/2 of said section 8. Additionally, DEVON is the operator of the North Pure Gold Federal #6 well located 1980' FSL & 2310' FEL of said section 8, and
- 4. As the record oil and gas leasehold owner underlying the E/2 of said section 8 and as operator of the North Pure Gold Federal #6 well, DEVON desires to grant to BEPCO a subsurface easement to drill and produce through the rock strata underlying the leasehold estate in the E/2 of said Section 8 to a BHL of 1980' FNL & 1965' FWL of said Section 8 pursuant to the terms of this agreement.

NOW, THEREFORE, for adequate consideration, the receipt of which is hereby acknowledged, and in consideration of the premises and covenants contained herein, DEVON does hereby without warranties or covenants of title, or of any nature, express or implied or otherwise, grant to BEPCO a subsurface easement through the rock strata underlying the leasehold estate in the E/2 of Section 8-T23S-R31E, Eddy County New Mexico such that BEPCO may locate its proposed James Ranch Unit #101 well at a surface location in the E/2 of said Section 8 and from said surface location drill through and across the underground rock strata of DEVON to a bottom hole location in the W/2 of Section 8, T23-R31E, Eddy County, New Mexico. The easement granted herein includes the right of BEPCO to drill, complete, rework, sidetrack, operate, produce, plug and abandon such well through the rock strata underlying the leasehold estate of DEVON.

All operations conducted by BEPCO with respect to the James Ranch Unit #101 well shall be conducted in a good and workmanlike manner and shall be at BEPCO's sole cost, risk and expense. Furthermore, all operations conducted by BEPCO with respect to the well (including without limitation, plugging and abandonment operations) shall be conducted in strict compliance with the statutes, rules, regulations, requirements and orders of any governmental agency having jurisdiction thereof.

BEPCO, its successors and assigns shall fully defend, indemnify, release and completely hold harmless DEVON, and it's affiliates, partners, subsidiaries, officers, employees, and directors from and against all actions, claims, demands, liabilities, damages, losses, costs and expenses, including, but not limited to attorneys' fees (and any other costs associated with handling of or defense of any such action or claim of any kind), for injuries to or illness or death or for damage to, loss of or loss of use of the DEVON operated North Pure Gold Federal #6 well, to the extent such injury, illness, death, loss or loss of use arises out of BEPCO's operations hereunder.

This Subsurface Easement shall continue in full force and effect through a period ending ninety (90) days following the plugging and abandonment of the James Ranch Unit #101 well.

BASS ENTERPRISES PRODUCTION CO.
By: W. Manlettung
DEVON EXERGY PRODUCTION COMPANY, L.P.  By:  D. D. DeCarlo, Vice President
rledged before me on the 15th day of March, on behalf of said corporation.
Notary Public  MERRYN E. CROMARTIE  NOTARY PUBLIC  STATE OF TEXAS  My Comm. Exp. 06-18-2010
\$ \$ \$
rledged before me on the 2 <sup>nd</sup> day of March, ent of Devon Energy Production Company, L.P., an Oklahoma d partnership.
Notary Public  O5005789  OBLIC OKLAMORITHIA

# EIGHT POINT DRILLING PROGRAM BEPCO, L.P.

#### NAME OF WELL: JAMES RANCH UNIT #101

LEGAL DESCRIPTION - SURFACE: 1980' FSL & 2550' FEL, Section 8, T-23-S, R-31-E, Eddy County, New Mexico. BOTTOM HOLE: 1980' FSL & 1965' 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 3346' (est); GL 3325'

	ESTIMATED	ESTIMATED	
FORMATION	TVD FROM KB	SUBSEA TOP	<b>BEARING</b>
T/Rustler	371'	2,975'	Barren
T/Salt	706'	2,630'	Barren
T/Lamar Lime	4,066'	-725'	Barren
T/Delaware	4,081'	-735'	Oil/Gas
T/Bone Spring Lime	7,941'	-4,600	Oil/Gas
T/Wolfcamp	11,176'	-7,830'	Oil/Gas
T/Strawn	12,721'	-9,375'	Oil/Gas
T/Atoka	12,934'	-9,588'	Oil/Gas
T/Atoka Sand	13,146'	-9,800'	Oil/Gas
T/Atoka Bank	13,225'	-9,879'	Oil/Gas
T/Upper Morrow	13,753'	-10,407'	Oil/Gas
T/Middle Morrow	14,161'	-10,815'	Oil/Gas
T/Lower Morrow	14,527'	-11,191'	Oil/Gas
TD	14,727'	-11,381'	Oil/Gas

### **POINT 3: CASING PROGRAM**

<u>TYPE</u>	INTERVAL (TVD)	<u>PURPOSE</u>	CONDITION
20"	0' – 120'	Conductor	Contractor Discretion
13-3/8", 48#, H-40, STC	0' – 696'	Surface	New
9-5/8", 40#, J-55, LTC	0' - 4,075'	Intermediate	New
7", 26#, HCP-110, LTC	0' - 12,000'	Production Casing	New
4-1/2", 13.5#, HCP-110 LTC	11,700' - 14,727'	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 nippled 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	<u>WEIGHT</u>	<u>FV</u>	<u>PV</u>	<u>YP</u>	<u>FL</u>	<u>Ph</u>
0' - 706'	FW	8.6 - 9.2	<del>55-</del> 60	NC	NC	NC	9.5
760' - 4,075'	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

<sup>\*</sup>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'-4,075' TVD); GR-CNL (4,075' TVD – surface); GR-CNL-LDT w/Dual Lateral Log (14,727'-12,000' TVD).

## C) CONVENTIONAL CORING

None anticipated.

# D) CEMENT (All Depths MD)

INTERVAL	# SACKS	FILL	TYPE	GALS/SX	PPG	FT <sup>3</sup> /SX
SURFACE Lead (100% excess)						
0' - 396'	295	396'	Light Premium Plus + 2.7lbm/sk NaCl	10.14	12.80	1.87
Tail (100% excess) 396' – 696'	340	300'	Premium Plus + 2% CaCl <sub>2</sub>	6.34	14.80	1.34
	040	300	Trainian Flas 7 2 / 0 dd Si <sub>2</sub>	0.04	14.00	1.04
INTERMEDIATE Lead (100% Excess)						
0 3,500' ft	745	3500'	Interfill 'C' Cement	16.43	11.50	2.76
Tail (100% Excess) 3,500' - 4075'	295	575'	Premium Plus + 1% CaCl₂	6.33	14.80	1.33
PRODUCTION	(Three stan	e with DV	/ tools set at + 4,000' and ± 7,500'; circulate cement to surfa	100)		
1 <sup>st</sup> Stage (50% excess)	(Till CC Stag	ic with D	Tools set at _ 4,000 and _ 7,000; Grediate coment to suns	100)		
Lead 7,500' 11,000'	290	3500'	Interfill 'H" Halad®-9 (Low Fluid Loss Control)	16.43	11.50	2.76
Tail			50/50 Poz Premium + 5 lbm/sk Gilsonite + 1 lbm/sk salt			
11,000' - 12,253'	225	1253'	+ 0.6% Halad R-9 + 0.4% CFR-3 + 0.2% HR-7	5.43	14.20	1.30
2 <sup>nd</sup> Stage (75% excess)						
Lead 4,000' - 7,000'	285	3000'	Interfill 'C'	16.43	11.50	2.76
Tail				10.43	11.50	2.70
7,000' - 7,500'	100_	500'	Premium Plus Neat	6.32	14.80	1.32
3 <sup>rd</sup> 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 <sub>2</sub>	6 22	14.00	
•	30	421	Flemium Plus + 1% CaCl2	6.33	14.80	1.33
PRODUCTION LINER Tail (50% Excess)						
,			Super 'H' + 0.5% Halad R-344 + 0.4% CFR-3 + 5 lbm/sk			
11,953" – 14,980"	290	3327	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 5,992' TVD. It will then be directionally drilled at a build rate of 2.50°/100' in a NW (330.77°) direction to a maximum angle of 20°. At a depth of 10,216' TVD (10,453' MD), the hole angle will be dropped at rate of 2.5°/100' becoming vertical again at 11,000' TVD (11,253' MD). The well will continue vertically until a total depth of 14,727' TVD (14,980' MD) is reached with a proposed total displacement of 1,529' (1334' N, 747' 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

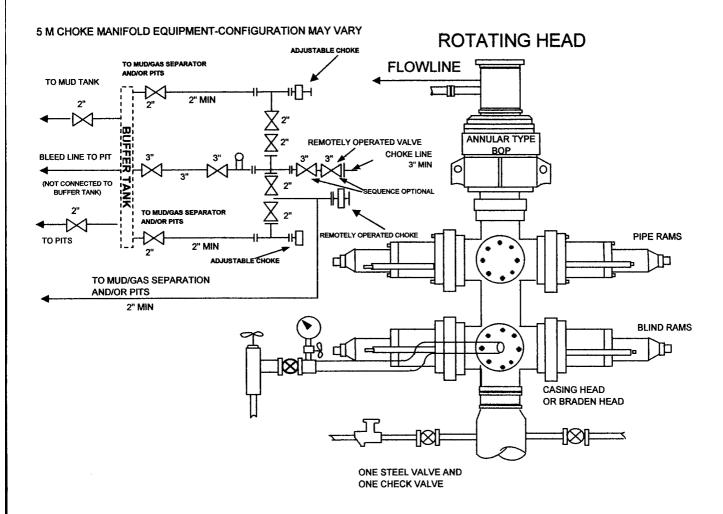
WRD:smm January 23, 2007 Surface casing is to be set +/- 10' above top of salt and below all fresh water sands. Intermediate casing will be set in the top of the Lamar. Production casing will be cemented using a multi-stage cement tool with the cement circulated to surface. A production liner will be set through the Strawn, Atoka, and Morrow groups. The proposed TD is 200' below the Lower Morrow at ±14,727' 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.

The surface location is located within the Devon Pure Gold Lease, a lease operated by Devon Energy Production Company, LP.

# **BEPCO, L. P.** 5-M WP BOPE WITH 5-M WP ANNULAR Diagram 1



## 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 mininum of one inch in diameter.
- D. The available closing pressure shall be at least 15% in excess of that required with suffficient 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.

MAC 1/21/2002

Wtd-Ser/Drilling/DrillingDiagrams/BOPs.xls5-M WP - 5-M WP (2)

#### **MULTI-POINT SURFACE USE PLAN**

## NAME OF WELL: James Ranch Unit #101

LEGAL DESCRIPTION - SURFACE: 1980' FSL & 2550' FEL, Section 8, T-23-S, R-31-E, Eddy County, New Mexico.

LEGAL DESCRIPTION – BOTTOM HOLE: 1980' FSL & 1965' 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 1.4 miles, thence west for 0.3 miles to the existing well pad.

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". No new road construction will be required.

B) Width

Not applicable.

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.

A) Existing facilities owned or controlled by lessee/operator.

Bass' facilities located at JRU #17 (+/- 5,280' northeast of wellbore).

B) New Facilities in the Event of Production:

The location of additional production facilities have yet to be determined. A Sundry notice will be submitted for approval after completion.

C) Rehabilitation of Disturbed Areas Unnecessary for Production:

Following flowline construction, those access areas required for continued production will be graded to provide drainage and minimize erosion. The areas unnecessary for use will be graded to blend in with 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 Johnson Water Station 27 miles east of Carlsbad, New Mexico. Brine water will be hauled from Champion Brine Water Station, 3.5 miles east and 2.5 miles south of Carlsbad, New Mexico.

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

Onsite caliche if available.

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

See Exhibit "B" - none required.

## 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 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 electric log analysis indicates potential productive zones. The reserve pit will be fenced and bird netted. The fence will be 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 SURFACE

### A) Reserve Pit Cleanup

The pits will be fenced immediately after construction and shall be maintained until they are backfilled. Previous to backfill operations, any hydrocarbon material on the pits' surfaces shall be removed. The fluids and solids contained in the pits shall be backfilled with soil excavated from the site and soil adjacent to the reserve pits. The restored surface of the pits 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 Bureau of Land Management stipulations during the appropriate season following restoration.

#### B) Restoration Plans - Production Developed

The reserve pits 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 pits 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 Bureau of Land Management's stipulations.

#### D) Rehabilitation's 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.

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

One water well is located within the SE/4 of Sec. 6, T23S, R31E, approximately ½ mile northwest of the surface location. One water well is located within the SW/4 of Sec. 4, T23S, R31E, approximately ½ mile northeast of the surface location. There are several other water wells within 2 miles north of the surface location (WIPP site).

G) Residences and Buildings

There are no dwellings within 1 mile of the surface location.

H) Historical Sites

None observed.

I) 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**

Page 6

(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 L. Lyon

Box 2760

Midland, Texas 79702

(432) 683-2277

#### **POINT 13: CERTIFICATION**

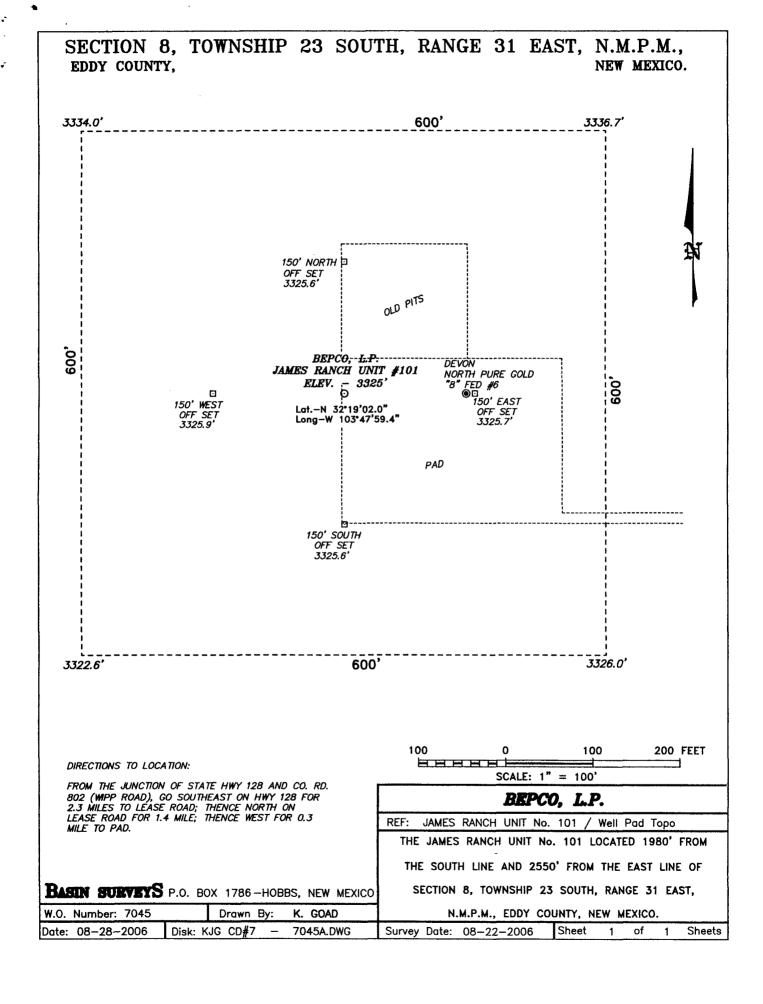
I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated 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 filing of a false statement.

1-25-2007

Date

WRD:smm

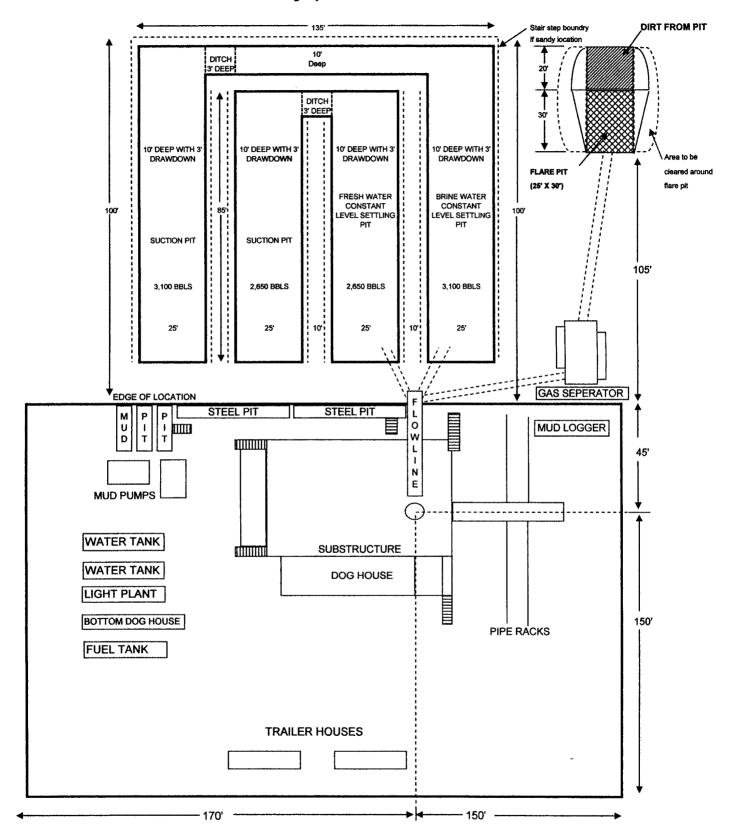
Stephen M Martinez



## **ADOBE IRONHORSE**

## Exhibit "C"

Rig Layout Schematic





# **Bass Enterprises Production Co.**

Eddy Co., New Mexico (Nad 83) James Ranch Unit #101 James Ranch #101 S-Well #1

Plan: Plan #2

# **Standard Survey Report**

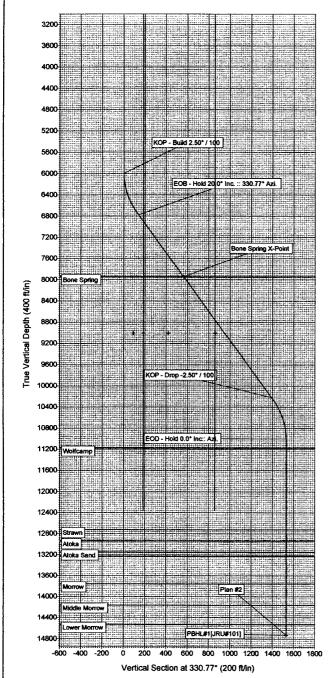
22 January, 2007

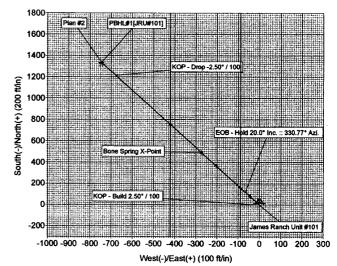




#### Project: Eddy Co., New Mexico (Nad 83) Site: James Ranch Unit #101 Well: James Ranch #101 Wellbore: S-Well #1 Plan: Plan #2 (James Ranch #101/S-Well #1)







TVD MO Annotation's MO Annotation 5991.90 (50P - Build 2.50° / 100 (6775.75 (6791.90 (50P - Build 20.0° Inc.: 330.77° Azi. 1009.00 (1253.09 (50P - Hold 0.0° Inc.: Azi.

PROJECT DETAILS: Edity Co., New Mexico (Nad 83)

Geodetic Systemi JS State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: New Mexico Eastern Zone

System Datum: Ground Level



Azimuths to True North

Magnetic Field trength: 49139.4nT Dip Angle: 60.36° Date: 9/22/2006 lodel: IGRF200510

SECTION DETAILS											
Se	c MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	
1	5990.00	0.00	0.00	5990.00	0.00	0.00	0.00	0.00	0.00		
2	5991.90	0.00	0.00	5991.90	0.00	0.00	0.00	0.00	0.00		
3	6791.90	20.00	330.77	6775.75	120.61	-67.50	2.50	330.77	138.21		
4	10453.09	20.00	330.77	10216.15	1213.33	-679.04	0.00	0.00	1390.42		
5	11253.09	0.00	0.00	11000.00	1333.94	-746.54	2.50	180.00	1528.63		
6	14980.09	0.00	0.00	14727.00	1333.94	-746.54	0.00	0.00	1528.63	PBHL#1[JRU#101	

Plan: Plan #2 (James Rench #101/5-Well #1)
Created By: L.D. Burton Date: January 19, 200



## **Black Viper Energy**

Survey Report



Company: **Project**: Site:

Bass Enterprises Production Co. Eddy Co., New Mexico (Nad 83)

James Ranch Unit #101 James Ranch #101

Well: Wellbore: Design:

S-Well #1 Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Database:

Well James Ranch #101

WELL @ 3325.00ft (Original Well Elev) WELL @ 3325.00ft (Original Well Elev)

Minimum Curvature

EDM 2003.14.1.0 Server DB

Project

Eddy Co., New Mexico (Nad 83)

Map System: Geo Datum:

Map Zone:

US State Plane 1983

North American Datum 1983 New Mexico Eastern Zone

System Datum:

Ground Level

Site

James Ranch Unit #101

Site Position:

Northing:

479,548.90 ft

Latitude:

32° 19' 2,000 N

From:

Lat/Long

Easting: Slot Radius: 706,146.65 ft

Longitude:

103° 47' 59.400 W

Position Uncertainty:

0.00 ft

Grid Convergence:

0.29 °

Well

James Ranch #101

Well Position

+N/-S +F/-W 0.00 ft 0 00 ft Northing: Easting:

479.548.90 ft 706,146.65 ft Latitude: Longitude: 32° 19' 2.000 N

Position Uncertainty

0.00 ft

Wellhead Elevation:

Ground Level:

103° 47' 59,400 W

0.00 ft

Wellbore

S-Weil #1

Magnetics

**Model Name** 

IGRF200510

Sample Date

9/22/2006

Declination

(°) 8.25 Dip Angle

60.36

Field Strength

(nT)

49,139

Design

Plan #2

Audit Notes:

Version:

Phase:

PROTOTYPE

Tie On Depth:

5,990.00

Vertical Section:

Depth From (TVD) (m)

0.00

1/4/2007

+NJ-S (ft) 0.00

+E/-W m 0.00

Direction (°) 330.77

**Survey Tool Program** From

To

Survey (Wellbore)

**Tool Name** 

Description

5.990.00

14,980.09 Plan #2 (S-Well #1)

GM

Gyro Multi-Shot

**Planned Survey** 

			Vertical		TA IN L	Vertical	Dogleg	Build	Tum
Measured Depth	Inclination	Azimuth	Verucai Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)	(°)	(*)	(ft)	(ft)	(ft)	(ft)	(*/100ft)	(*/100ft)	(°/100ft)
5,990.00	0.00	0.00	5,990.00	0.00	0.00	0.00	0.00	0.00	0.00
5,991.90	0.00	0.00	5,991.90	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build	2.50° / 100								
6,791.90	20.00	330.77	6,775.75	120.61	-67.50	138.21	2.50	2.50	0.00
EOB - Hold 2	20.0° inc. :: 330.77	7° Azi.							
8,031.93	20.00	330.77	7,941.00	490.71	-274.63	562.33	0.00	0.00	0.00
Bone Spring	1								
10,453.09	20.00	330.77	10,216.15	1,213.33	-679.04	1,390.42	0.00	0.00	0.00
KOP - Drop	-2.50° / 100								
11,253.09	0.00	0.00	11,000.00	1,333.94	-746.54	1,528.63	2.50	-2.50	0.00
EOD - Hold (	0.0° Inc:: Azi.								



## **Black Viper Energy**

Survey Report



Company: Project: Site:

Well:

Bass Enterprises Production Co. Eddy Co., New Mexico (Nad 83)

James Ranch Unit #101 James Ranch #101

Wellbore: Design: S-Well #1 Plan #2 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Database:

Well James Ranch #101

WELL @ 3325.00ft (Original Well Elev)
WELL @ 3325.00ft (Original Well Elev)

True

Minimum Curvature

EDM 2003.14.1.0 Server DB

Planned Survey									
Measured Depth (N)	Inclination	Azimuth (°)	Vertical Depth (ft)	+N/-S (m)	+E/-W (n)	Vertical Section (ft)	Dogleg Rate (*/100m)	Build Rate (*/100ft)	Tum Rate (*/100ft)
11,429.09	0.00	0.00	11,176.00	1,333.94	-746.54	1,528.63	0.00	0.00	0.00
Wolfcamp 12,974.09	0.00	0.00	12,721.00	1,333.94	-746.54	1,528.63	0.00	0.00	0.00
<b>Strawn</b> 13,187.09	0.00	0.00	12,934.00	1,333.94	-746.54	1,528.63	0.00	0.00	0.00
Atoka 13,399.09	0.00	0.00	13,146.00	1,333.94	-746.54	1,528.63	0.00	0.00	0.00
Atoka Sand 13,478.09	0.00	0.00	13,225.00	1,333.94	-746.54	1,528.63	0.00	0.00	0.00
Atoka Bank 14,006.09	0.00	0.00	13,753.00	1,333.94	-746.54	1,528.63	0.00	0.00	0.00
<b>Morrow</b> 14,414.09	0.00	0.00	14,161.00	1,333.94	-746.54	1,528.63	0.00	0.00	0.00
Middle Morrov 14,780.09	<b>w</b> 0.00	0.00	14,527.00	1,333.94	-746.54	1,528.63	0.00	0.00	0.00
Lower Morrov 14,980.09	v 0.00	0.00	14,727.00	1,333.94	-746.54	1,528.63	0.00	0.00	0.00



## **Black Viper Energy**

Survey Report



Company: Project: Site: Well: Bass Enterprises Production Co. Eddy Co., New Mexico (Nad 83)

James Ranch Unit #101 James Ranch #101

Wellbore: S-Well #1 Design: Plan #2 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Database:

Well James Ranch #101

WELL @ 3325.00ft (Original Well Elev) WELL @ 3325.00ft (Original Well Elev)

True

Minimum Curvature

EDM 2003.14.1.0 Server DB

Targets										
Target Na - hit/m - Shap	niss target D	lp Angle (*)	Dip Dir.	TVD (ft)	+N-S (fi)	+E/-W (ft)	Northing (ft)	Easting (ft)	Lathude	Longitude
x3 - plai - Poi	in misses by 717.71	0.00 Ift at 8897.6	0.00 67ft MD (875	9,000.00 4.53 TVD,	160.57 749.10 N, -419.	-89.85 23 E)	479,709.03	706,056.00	32° 19' 3.589 N	103° 48' 0.447 W
x1 - pla: - Poi	n misses by 806.09 int	0.00 oft at 8865.5	0.00 52ft MD (872	9,000.00 24.32 TVD,	78.54 739.50 N, -413.	-43.95 86 E)	479,627.22	706,102.31	32° 19' 2.777 N	103° 47' 59.912 W
x2 - pia: - Poi	n misses by 495.99 int	0.00 oft at 8978.	0.00 39ft MD (883	9,000.00 30.38 TVD,	366.52 773.19 N, -432.	-205.09 72 E)	479,914.40	705,939.74	32° 19' 5.627 N	103° 48' 1.790 W
•	[JRU#101] an hits target int	0.00	0.00	14,727.00	1,333.94	-746.54	480,879.11	705,393.48	32° 19' 15.200 N	103° 48' 8.100 W
x4 - pla - Poi	an misses by 82.48 int	0.00 It at 9128.8	0.00 7ft MD (8971	9,000.00 1.79 TVD, 8	750.49 318.10 N, -457.8	-419.95 5 E)	480,297.30	705,722.97	32° 19' 9.427 N	103° 48' 4.294 W

Casing Points  Measu Dep (1)	NOTE OF THE RESIDENCE OF THE SECOND OF THE S		124	Name		Casing Diameter (")	Hole Diemet (")	Market and the second of the second	
11,5	53.09 11,300.00	7"				7	7	7-1/2	

Formations Measured	Vertical		<b>Dig</b>
Depth (R)	Depth (ft)	Name	Dip Direction Lithology
8,031.9	3 7,941.00	Bone Spring	0.00
11,429.0	9 11,176.00	Wolfcamp	0.00
12,974.0	9 12,721.00	Strawn	0.00
13,187.0	9 12,934.00	Atoka	0.00
13,399.0	9 13,146.00	Atoka Sand	0.00
13,478.0	9 13,225.00	Atoka Bank	0.00
14,006.0	9 13,753.00	Morrow	0.00
14,414.0	9 14,161.00	Middle Morrow	0.00
14,780.0	9 14,527.00	Lower Morrow	0.00

Plan Annotation	18				en e
	Measured Depth (ft)	Vertical Depth (ft)	Local Coordine +N/-S (ft)	ates +E/-W (ft)	Comment
	5,991.90	5,991.90	0.00	0.00	KOP - Build 2.50° / 100
	6,791.90	6,775.75	120.61	-67.50	EOB - Hold 20.0° Inc. :: 330.77° Azi.
	10,453.09	10,216.15	1,213.33	-679.04	KOP - Drop -2.50° / 100
	11,253.09	11,000.00	1,333.94	-746.54	EOD - Hold 0.0° Inc:: Azi.

	<del>-</del>	
Checked By:	Approved By:	Date:

#### CONDITIONS OF APPROVAL - DRILLING

**Operator's Name:** 

BEPCO, L.P.

Well Name & No.

101 - JAMES RANCH UNIT

Location:

1980' FSL & 2550' FEL – SEC 8 – T23S – R31E – EDDY COUNTY (SHL)

1980' FNL & 1965' 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 <u>13-3/8</u> inch surface casing shall be set at <u>700 feet</u>, 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 <u>9-5/8</u> inch salt protection casing is <u>circulate cement to</u> 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 <u>4-1/2</u> inch production liner is <u>cement shall extend</u> <u>upward to the top of the production liner at approx. 11,700 feet.</u>
- 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 <u>2000</u> psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the <u>9-5/8</u> inch casing shall be <u>5000</u> 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.