

**S**

**R-111-POTASH**  
**OCD-ARTESIA**

Form 3160-3  
(February 2005)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Month - Year  
**APR 11 2007**  
**OCD - ARTESIA, NM**

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

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NMNM 114978</b>
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>N/A</b>
2. Name of Operator <b>Bold Energy, LP (OGRID #233545)</b>		7. If Unit or CA Agreement, Name and No. <b>N/A</b>
3a. Address <b>415 W. Wall, Suite 500 Midland, TX 79701</b>		8. Lease Name and Well No. <b>#36454</b> <b>Sandy Federal #6</b>
3b. Phone No. (include area code) <b>432-686-1100</b>		9. API Well No. <b>30-015-35538</b>
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface <b>Unit I, 1920' FSL &amp; 660' FEL</b> At proposed prod. zone <b>(same) Unit I, 1920' FSL &amp; 660' FEL</b>		10. Field and Pool, or Exploratory <b>Forty Niner Ridge; Delaware</b>
14. Distance in miles and direction from nearest town or post office* <b>Approximately 15 miles East of Loving, NM</b>		11. Sec., T. R. M. or Blk. and Survey or Area <b>Sec 23, T23S, R30E</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>660'</b>	16. No. of acres in lease <b>960.0</b>	12. County or Parish <b>Eddy</b>
17. Spacing Unit dedicated to this well <b>40</b>	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>Approx. 1500'-#5 APD</b>	13. State <b>NM</b>
19. Proposed Depth <b>8000'</b>	20. BLM/BIA Bond No. on file <b>NMB-#000314</b>	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>3269' GL</b>	22. Approximate date work will start* <b>04/15/2007</b>	23. Estimated duration <b>40 days</b>

**24. Attachments**

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must 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 must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

25. Signature <i>Denise Menoud</i>	Name (Printed/Typed) <b>Denise Menoud</b>	Date <b>01/05/2007</b>
Title <b>Regulatory Specialist, Agent for Bold Energy, LP</b>		

Approved by (Signature) <i>/s/ Linda S.C. Rundell</i>	Name (Printed/Typed) <b>/s/ Linda S.C. Rundell</b>	Date <b>MAR 30 2007</b>
Title <b>STATE DIRECTOR</b>		Office <b>NM STATE OFFICE</b>

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 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.

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

**CARLSBAD CONTROLLED WATER BASIN**

**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.

## EXHIBIT "A"

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 S. 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 24750	Pool Name Forty Ninth Ridge; Delaware
Property Code	Property Name SANDY FEDERAL	Well Number 6
OGRID No. 233545	Operator Name BOLD ENERGY, LP	Elevation 3269'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	23	23 S	30 E		1920	SOUTH	660	EAST	EDDY

## Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>Lat - N32°17'18.5"</p> <p>Long - W103°50'42.4"</p> <p>(NAD-83)</p>	<p>3266.3' 3267.1'</p> <p>3275.6' 3273.9'</p> <p>660'</p> <p>1920'</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>1/8/07</p> <p><i>Denise Menoud</i></p> <p>Signature Date</p> <p>Denise Menoud, Agent</p> <p>for Bold Energy, LP</p> <p>Printed Name</p>	
		<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>DECEMBER 07, 2006</p> <p>Date Surveyed</p> <p>Signature of Professional Surveyor</p> <p><i>Gary L. Jones</i></p> <p>Professional Surveyor</p> <p>7977</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>	

# Drilling Prognosis

January 5, 2007

Operator: Bold Energy, LP

Field: Undes. Forty Niner Ridge, Delaware

Well: Sandy Federal #6

API: 30 - 015 - Pending

Drilling Permit BLM Approval - Pending

AFE: Pending

## General Information

Location: 1920' FSL & 660' FEL, Section 23 - T23S - R30E Eddy County, New Mexico

Elevation: 3269' TD: 8000' RKB: 18'

Objective: Delaware / Bone Springs

Contractor: Nabors #142

Contractor Office: 432 / 550-7808

Superintendent: Don Nelson (664-9990)

Toolpushers: Roy Brumfield / William Lewis

Cell: 432 / 664-9942

Sierra Supervisor: Frank Dowdy / Tony Vickery

Cell: 432 / 557-1223

## Drilling Program

Hole Size	Depth	Casing	Weight	Grade	Connect	Cement	TOC
17½"	440'	133/8"	48	H-40	STC	500 sx	Circulate
11"	3750'	85/8"	32	K-55	STC	1100 sx	Circulate
7 7/8"	8000'	5½"	17	P-110	LTC	1100 sx	Circulate

## Wellhead / BOPE

Wellhead	135/8" - 3K SOW	13 5/8" - 3K x 11" - 5K	11" - 5K x 7 1/16" - 10K
BOPE	135/8" - 5K Stack SRRAG	135/8" - 5K Stack SRRAG	

## Mud Program

Interval	Type	MW	VIS	FL
0' - 440'	FW - Spud	8.4 - 9.2	32 - 34	NC
440' - 3750'	Brine / Sweeps	10.0	28 - 30	NC
3800' - 8000'	FW / Cut Brine / Sweeps	8.4 - 9.0	28 - 30	NC

Company: NOVA Drilling Fluids

Office: \_\_\_\_\_

Engineer: TBA

Warehouse: \_\_\_\_\_

**Geological Data**

**Geologist:** John Worrall 505 / 622-5893 office 432 / 230-9431 cell 505 / 622-2768 home

**Estimated Formation Tops: (GL = 3269')**

Formation	Subsea	MD	Formation	Subsea	MD
Triassic	0'	0'	Manzanita Mkr	-1686'	4955'
Rustler	2829'	440'	L Sand Objective	-4331'	7600'
B/ 1 <sup>st</sup> Salt	1059'	2210'	Bone Spring	-4431'	7700'
T/ 2 <sup>nd</sup> Salt	489'	2780'	Bone Spring, Upper	-4511'	7780'
B/ Salt	-311'	3580'	TD	-4731'	8000'
Delaware	-566'	3835'			

**Evaluation Program**

**Mud Logs:** 3750' to TD **Mud Logger:** TBD

**DST / Coring Intervals:** None Anticipated

**E-Log Suite:** Triple Combo (GR - DSN, SDL, DLL/MSFL) w/ CSNG @ TD. Pull GR-N to surface. SWC's may be taken in zones of interest.

**Logging Company:** Halliburton

**Contact:** Richard Kelley

**Location:** Hobbs, New Mexico

**Phone:** 505 / 914-0324 cell 505 / 392-0776 office

**Completion**

Single Delaware / Bone Spring oil well; multi-stage completion - selectively perfed & stimulated down 5½" casing. Well will be equipped to be rod pumped.

**Emergency Contacts / Notifications**

Sierra Engineering	Drilling Superintendent	Russ Ginanni	432 / 425-7450 cell 432 / 683-8000 off
Sierra Engineering	HSE Manager	Montie Low	432 / 559-8950 cell 432 / 683-8000 off
Bold Energy, LP	Operations Engineering Manager	Shannon Klier	432 / 296-8602 cell 432 / 686-1100 off
Bold Energy, LP	President	Joe Castillo	432 / 230-0202 cell 432 / 686-1100 off
Bold Energy, LP	Production Supt.	Donny Money	432 / 661-8803 cell
BLM	Carlsbad	Notifications After Hours	505 / 234-5972 505 / 361-2822

**Directions**

From the junction of New Mexico State Highway 128 & County Road 795 (Mobley Ranch), (1) go south ½ mile on CR 795 to "Y"; (2) take left fork and go 2½ miles to lease road on left; (3) turn east for 0.9 mile to new lease road and follow into location.

## BOP EQUIPMENT

Bold Energy, LP

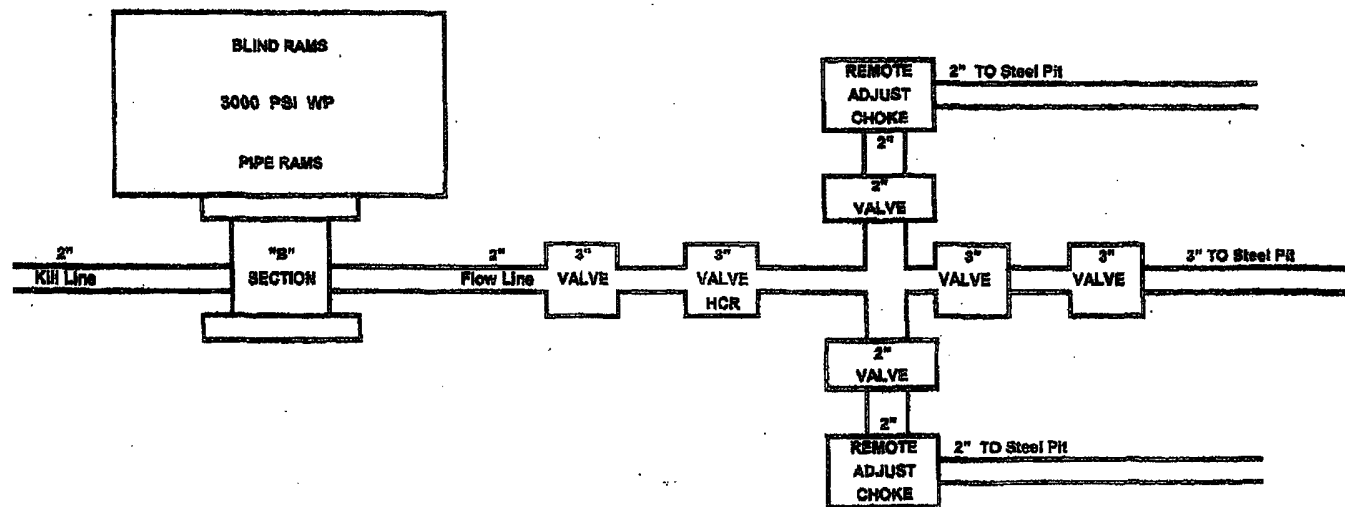


EXHIBIT F

**1. EXISTING ROADS**

- A. Exhibit A is a portion of a section map showing the location of the proposed well as staked.
- B. Exhibits B and B-1 are maps showing existing roads in the vicinity of the proposed well site.
- C. Directions to well location:  
From the junction of State Highway 128 and County Road 795 (Mobley Ranch), proceed south 0.5 miles on County Road 795 to a "Y". Take left fork and proceed 2.5 miles to lease road east, proceed east 0.9 miles to the proposed lease road.

**2. ACCESS ROADS**

- A. Length and Width: 325.1' long and 30' wide

The access road will be built and is shown on Exhibit A-1.

- B. Surface Material

Existing

- C. Maximum Grad

Less than five percent

- D. Turnouts

None necessary

- E. Drainage Design

Existing

- F. Culverts

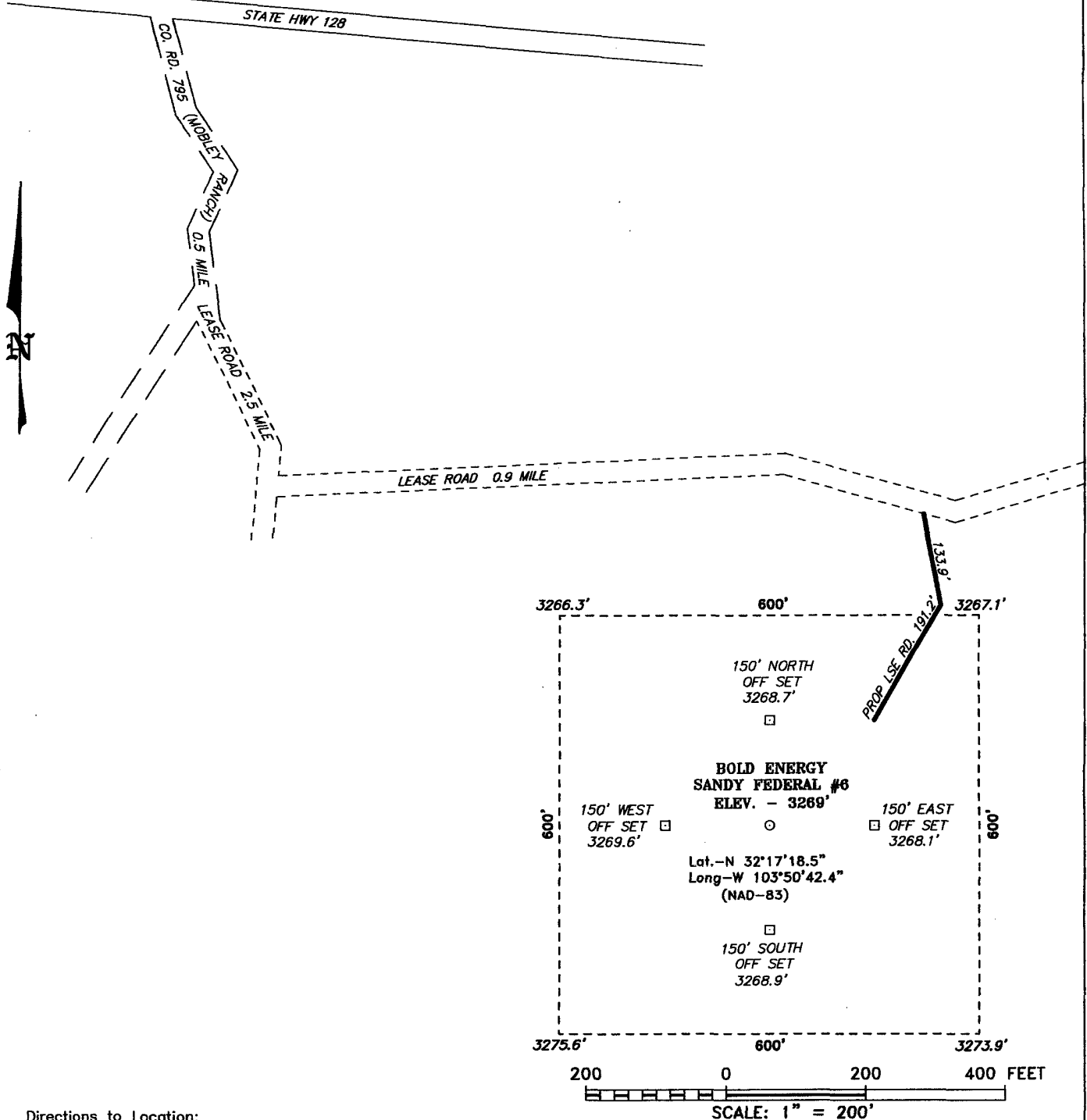
None necessary

- G. Gates and Cattle Guards

None needed

## EXHIBIT "B 1"

SECTION 23, TOWNSHIP 23 SOUTH, RANGE 30 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



## Directions to Location:

FROM THE JUNCTION OF STATE HWY 128 AND CO. RD. 795 (MOBLEY RANCH), PROCEED SOUTH 0.5 MILE ON CO. RD. 795 TO A "Y", TAKE LEFT FORK AND PROCEED 2.5 MILE TO LEASE ROAD EAST, PROCEED EAST 0.9 MILE TO THE PROPOSED LEASE ROAD.

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

W.O. Number: 17523

Drawn By: J. M. SMALL

Date: 12-12-2006

Disk: JMS 17523W

## **BOLD ENERGY, LP**

REF: SANDY FEDERAL #6 / WELL PAD TOPO

THE SANDY FEDERAL No. 6 LOCATED 1920' FROM  
THE SOUTH LINE AND 660' FROM THE EAST LINE OF  
SECTION 23, TOWNSHIP 23 SOUTH, RANGE 30 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 12-07-2006

Sheet 1 of 1 Sheets

## CONDITIONS OF APPROVAL - DRILLING

Well Name & No.      **Sandy Federal # 6**  
Operator's Name:    **Bold Energy LP**  
Location:            **1920'FSL, 660'FEL, SEC23, T23S, R30E, Eddy County, NM**  
Lease:                **NM-114978**

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 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: 13.375 inch, 8.625 inch, 5.5 inch

C. BOP tests

2. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan should be activated prior to drilling into the N/A Formation. A copy of the plan shall be posted at the drilling site.

3. 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.

4. 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.

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

6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

7. 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 13.375 inch surface casing shall be set ABOVE THE SALT, AT LEAST 25 feet INTO THE RUSTLER ANHYDRITE @ APPROXIMATELY 440 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 8 5/8 inch salt protection casing is CIRCULATE CEMENT TO THE SURFACE. This casing string will be set at least 100 feet below the salt and no more than 600 feet below the salt @ approximately 3750 feet

3. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall CIRCULATE TO THE SURFACE.

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 13.375 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) is 2000 psi.
3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
  - A variance to test the \_\_\_\_\_ to the reduced pressure of \_\_\_\_\_psi with the rig pumps is approved.
  - 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.

**Engineers can be reached at 505-706-2779 for any variances that might be necessary.**

F Wright 1/29/07