			AT'S	07-411
Submit	Ja DCD-ARTESIA S INTERIOR HIGH CAVE NAGEMENT	SPAN	Month - Year  To ARTESIA OMB No. 1004-01  Expirer March 31,	ED 37 2007
RTMENT OF THE	INTERIOR HIGH CAVE		5. Lease Serial No.	· · · · · · · · · · · · · · · · · · ·
	NAGEMENT DRILL OR REENTER		6. If Indian, Allotee or Tribe	: Name
REEN	TER	7 If Unit or CA Agreement, Name and No.  NMNM 71016X		
Gas Well Other	Single Zone Multi	ple Zone	8. Lease Name and Well No. Poker Lake Unit #220	1 -
	1801		9. API Well No.	5 · 3 S628
	3b. Phone No. (include area code)		10. Field and Pool, or Explorate	-
.1. 11	432-683-2277		Nash Draw (Dela, BS, 11. Sec., T. R. M. or Blk. and S	
rly and in accordance with a ot 3, 1780' FSL, 990' FV	iny sidie requirements: ") VL, Lat N32.200611, Lon W103.9	26333		
CARLSBAD COI	NTROLLED WATER BA		Sec 19, T24S, R30E, N	AER NMP
rest town or post office*	STRULLED WATER BA	SIN	12. County or Parish  Eddy County	13. State NM
990'	16. No. of acres in lease	17. Spacin	g Unit dedicated to this well	
	2520.68	40		
	19. Proposed Depth	20. BLM/	BIA Bond No. on file	
3000'	7600' MD / 7600' MD	NM 2	2204	
RT, GL, etc.)	22. Approximate date work will sta	rt*	23. Estimated duration	
	04/15/2008		12 days	
	24. Attachments			
the requirements of Onsh	ore Oil and Gas Order No.1, shall be a	ittached to th	is form:	
Or.	Item 20 above).		ns unless covered by an existing	bond on file (see
n Mational Corest System	a Landa tha 5 Operator certifi	cation		

Ko-Submitla OCD-ARTESIA

Form 3160-3 (April 2004)

la. Type of work:

lb. Type of Well:

Name of Operator

3a. Address P. O. Box 2760

Distance from proposed\*

location to nearest

DEPARTMENT OF THE INTERIOR HIGH CAVEK

NWSW, Lot 3, 1780' FSL, 990' FWL, Lat N32.200611, Lon W103.92

BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

Gas Well

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

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. Elevations (Show whether DF, KDB, RT, GL, etc.) 3124' GL

**V** DRILL

✓ Oil Well

Midland, TX 79702

At proposed prod. zone Same

14 Miles East of Malaga, NM

property or lease line, ft. (Also to nearest drig. unit line, if any)

BEPCO, L. P.

14. Distance in miles and direction from nearest town or post office\*

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be att

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25.	Signature	ette	Chu	alder
Title	~			

Name (Printed/Typed) **Annette Childers** 

Administrative Assistant

Approved by (Signature) /s/ James Stovall

Name (Printed/Typed)

MAY 1 5 2007

Title

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached

APPROVAL FOR 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)

## 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

#### **Additional Operator Remarks:**

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

Produciton casing will be cemented using Zone Seal Cement.

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 location.

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II 1301 W. Grand Avenue, Artesia, NM 88210

1000 Rio Brazos Rd., Aztec, NM 87410

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

DISTRICT III

DISTRICT IV

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 47545	Nash Draw (Delaware, Bone Spring, Avalon S			
Property Code	Property Code Prop		Weil Number		
OGRID No.	Open	ator Name CO, L.P.	Elevation 3124'		

#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 3	19	24 S	30 E		1780	SOUTH	990	WEST	EDDY

#### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r Infill Co	nsolidation	Code Or	ier No.				
40	N	ļ							

### 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-STANI	DARD UNIT HAS BEI	EN APPROVED BY TH	E DIVISION
LOT 1 - 40.77 AC.	40.66 AC.	40.65 AC.	40.65 AC.	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.
				Signature Date  Refer to original plat  Printed Name
LOT 2 - 40.87 AC.	40.69 AC.	40.68 AC.	40.66 AC.	SURVEYOR CERTIFICATION
	40.69 AC. 0.8' - N32"12'02.2" G - W103"55'34.8"			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.
3119.27	0.8'	40.68 AC.	40.67 AC.	Date Sury
				Professional Surveyor  Certificate No. Gary L. Jones 7977
LOT 4 - 41.06 AC.	40.73 AC.	40.70 AC.	40.70 AC.	Basin surveyS

DISTRICT I 1625 N. French Dr., Hobbe, NM 68240 DISTRICT II 611 South Pirst, Artesia, NM 88210

#### State of New Mexico

Rnergy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

#### DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

#### DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

#### OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, New Mexico 87504-2088

AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name	
	47545	NASH DRAW DELAWARE	
Property Code	Prop	erty Name	Well Number
001796	POKER	LAKE UNIT	220
OGRID No.	Орез	ator Name	Elevation
001801	BASS ENTERPRISES	PRODUCTION COMPANY	3124'

#### Surface Location

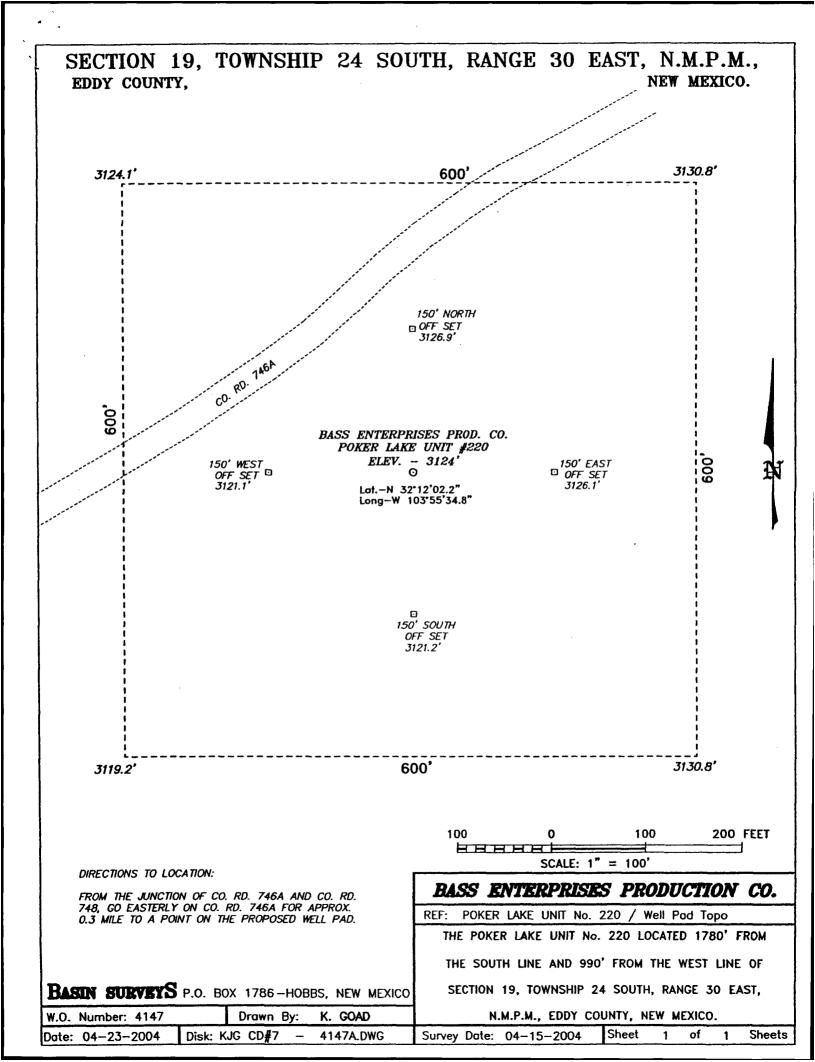
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 3	19	24 S	30 E		1780	SOUTH	990	WEST	EDDY

#### Bottom Hole Location If Different From Surface

UL or lot No.	Section 7	Township	Range	Lot Idn	Feet from the	North/South line	Peet from the	East/West line	County
Dedicated Acres	Joint or	Infill Cor	nsolidation (	Code Ore	der 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

	OR A NON-STANI	DARD UNIT HAS BEI	EN APPROVED BY TH	E DIVISION
				OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
LOT 1 - 40.77 AC.	40.66 AC.	40.65 AC.	40.65 AC.	William & Wannel  Signature  W.R. DANNELS
				Printed Name  DIVISION DRILLING SUPT.  Title  2/4/05  Date
LOT 2 - 40.87 AC.	40.69 AC.	40.68 AC.	40.66 AC.	SURVEYOR CERTIFICATION
	40.69 AC. 3130.8' LAT — N32*12'02,2"			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.
	LONG - W103*55'34.8"	40.68 AC.	40.67 AC.	Date Surveyed of Signature is Sent of Signature in Sent of Signature in Surveyed
1780, —				2704 Vig
LOT 4 - 41.06 AC.	40.73 AC.	40.70 AC.	40.70 AC.	Certificate No. Corfoles Sone 7977  BASIN SURVEYS



# EIGHT POINT DRILLING PROGRAM BASS ENTERPRISES PRODUCTION CO.

#### NAME OF WELL: Poker Lake Unit #220

LEGAL DESCRIPTION - SURFACE: 1780' FSL & 990' FWL, Section 19, T-24-S, R-30-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 3144' (est)

GL 3124'

FORMATION	ESTIMATED TOP FROM KB	ESTIMATED SUBSEA TOP	BEARING
T/Rustler	119'	+3025	Barren
T/Salt	359'	+2785'	Barren
T/Lwr Brushy Canyon "8" A	6929'	-3785'	Oil/Gas
T/Bone Spring	7202'	-4058'	Oil/Gas
TD	7600'	-4456'	

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

TYPE 16" 32 8-5/8", 28#, J-55, LT&C 5-1/2", 17.5#, J-55, LT&C	— Hole 12 44	INTERVALS 0'- 40' 0'- 310' 0'-6300'	PURPOSE Conductor Surface Production	CONDITION Contractor Discretion New New
5-1/2", 17#, J-55, LT&C	7 18	6300' - <b>7700'</b> 11.0 <i>(</i> )	Production	New

#### POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

A BOP equivalent to Diagram 1 will be nippled 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. These tests will 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	MUD TYPE	WEIGHT	_FV_	PV	YP	FL	Ph
0' - 310'	FW Spud Mud	8.5 - 9.2	70-38	NC	NC	NC	10.0
310' - 5600'	Brine Water	9.8 -10.2	28-30	NC	NC	NC	9.5-10.5
5600' - TD'	Brine Water/Diesel	8.8 - 9.0	32-40	8	2	<25 cc	9.5 - 10.0

<sup>\*</sup>May increase vis for logging purposes only.

#### **POINT 6: TECHNICAL STAGES OF OPERATION**

#### A) TESTING

None anticipated.

#### B) LOGGING

GR-CNL-LDT-AIT from TD to base of Salt (+/- 3200'). GR-CNL-CAL from base of Salt to surface.

#### C) CONVENTIONAL CORING

None anticipated.

#### D) CEMENT

INTERVAL SURFACE:	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT³/SX		
Lead 0'-310' (100% excess circ to surface)	200	310	Prem Plus + 2% CaCl <sub>2</sub> + 1/4# Flocele	6.33	14.8	1.35		
PRODUCTION:							Nitrogen	Compressive Strength
Base Slurry w/nitrogen 2900-7600' + (50% excess)	775	4700	Premium Plus + 2% Zone Sealant 2000 See COA	6.32 9.1-	14.5	2.3-1.39	300/600 scf/bbl	1200

#### E) DIRECTIONAL DRILLING

No directional services anticipated.

#### **POINT 7: ANTICIPATED RESERVOIR CONDITIONS**

Normal pressures are anticipated throughout Delaware section. A BHP of 3438 psi (max) or MWE of 8.7 ppg is expected. Lost circulation may exist in the Delaware Section from 3413-7066'. No  $H_sS$  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

12 days drilling operations

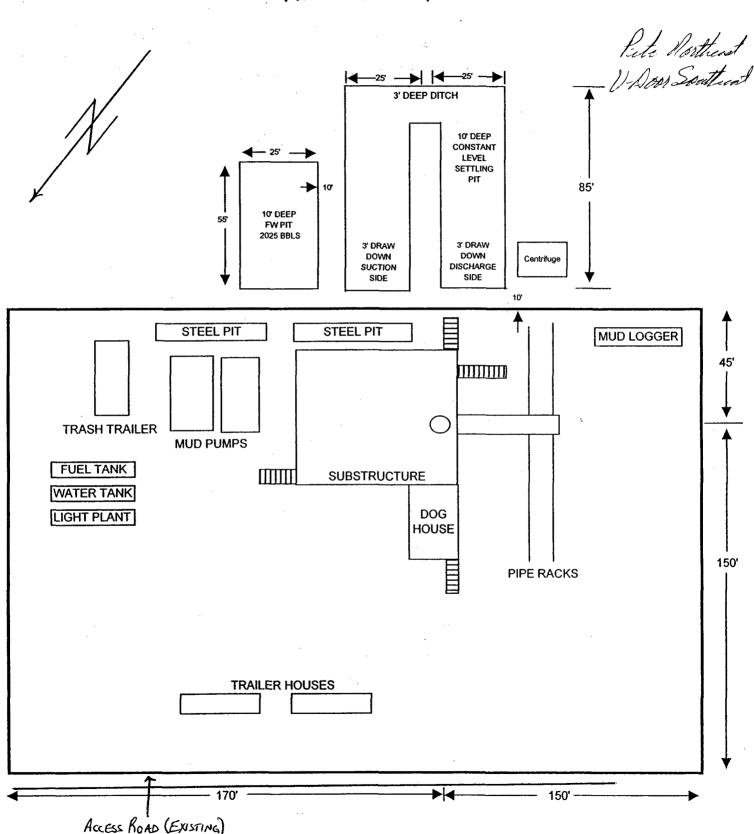
14 days completion operations

WRD/cdg February 1, 2005

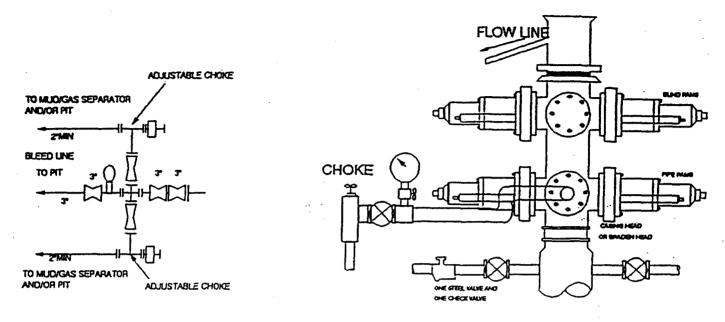
# Bass Enterprises Production Company Grey Wolf Rig 15 Well Pad Reserve Pit Diagram

POKER LAKE UNIT #220

**EXHIBIT "D"** 



# 2000 PSI WP



#### THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. One double gate blowout preventer with lower rams for pipe and upper rams blind, 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 BOP's.
- 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. All chokes will be adjustable. Choke spool may be used between rams.

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

#### NAME OF WELL: Poker Lake Unit #220

LEGAL DESCRIPTION - SURFACE: 1780' FSL & 990' FWL, Section 19, T-24-S, R-30-E, Eddy County, New Mexico.

#### **POINT 1: EXISTING ROADS**

A) Proposed Well Site Location:

See Exhibit A and Survey Plats

B) Existing Roads:

From Carlsbad, New Mexico, go 8 miles south on Highway 285 to Highway 31. Turn north and go 7 miles on Highway 31. Turn east on Highway 128 and go 4 miles to Rawhide Road (located between mile markers 4 and 5). Turn southeast onto Rawhide Road and go approximately 11.0 miles southerly.

C) Existing Road Maintenance or Improvement Plan:

See Exhibit A and Survey Plats.

#### **POINT 2: NEW PLANNED ACCESS ROUTE**

A) Route Location:

See Exhibit B. No new roads required. Location is located adjacent to an existing lease road.

B) Width

N/A

C) Maximum Grade

Not applicable.

D) Turnout Ditches

Spaced per BLM requirements.

E) Culverts, Cattle Guards, and Surfacing Equipment

If required, culverts and cattle guards will be set per BLM Specs.

#### **POINT 3: LOCATION OF EXISTING WELLS**

Exhibits A & B indicate existing wells within the surrounding area.

# Conditions of Approval Cave and Karst

EA#: NM-080-07-0648 Lease #: NM-02860

# Bass Enterprises Production Company (BEPCO) Poker Lake Unit #220

#### Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

#### Berming:

Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

#### **Cave/Karst Subsurface Mitigation**

The following stipulations will be applied to protect cave/karst and ground water concerns:

#### Rotary Drilling with Fresh Water:

Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. Use depth to the deepest expected fresh water as listed in the geologist report.

#### Casing:

All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

#### **Lost Circulation:**

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater then 75 percent occur simultaneously while drilling in any cavebearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

#### **Abandonment Cementing:**

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

#### **Record Keeping:**

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

#### CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

BEPCO, L.P.

Well Name & No.

220-Poker Lake Unit

Location:

1780FSL, 0990FWL, Section 19, T-24-S, R-30-E

Lease:

NMNM 02860

#### I. DRILLING OPERATIONS REQUIREMENTS:

- A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:
  - 1. Spudding well
  - 2. Setting and/or Cementing of all casing strings
  - 3. BOPE tests
    - Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
- B. Although no Hydrogen Sulfide has been reported in the area, it is always a possible hazard.
- C. 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.

#### II. CASING:

- A. The <u>8-5/8</u> inch surface casing shall be set <u>above the salt and a minimum of 25 feet into the Rustler Anhydrite at approximately 310 feet and cemented to the surface.</u>
  - 1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  - 2. Wait on cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
  - 3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
  - 4. If cement falls back, remedial action will be done prior to drilling out that string.

Possible lost circulation in the Delaware and Bone Spring formations. High cave/karst.

B. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is cement shall extend a minimum of 200 feet inside the surface casing.

C. If hardband drill pipe is rotated inside casing; returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool I joints of the drill pipe will be installed prior to continuing drilling operations.

#### **III. PRESSURE CONTROL:**

- **A.** All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2.
- **B.** Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 2000 (2M) PSI.
- C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - 1. The tests shall be done by an independent service company.
  - 2. The results of the test shall be reported to the appropriate BLM office.
  - 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

**Engineer on call:** 505-706-2779

WWI 041307