OCD-ARTESIA

Form 3160 -3 (April 2004)				FORM AP OMB No. I Expires Mar	004-0137
UNITED STATES DEPARTMENT OF THE I				5. Lease Serial No. NMNM-81953	
BUREAU OF LAND MANA APPLICATION FOR PERMIT TO I		EENTER		6. If Indian, Allotee or	Tribe Name
la. Type of work: DRILL REENTE	R-11	1-POTASI	-	7 If Unit or CA Agreen	nent, Name and No.
lb. Type of Well:	Single		566 de Zone	8. Lease Name and We North Pure Gold	
2 Name of Operator Devon Energy Production Company, Li	413	7	des	9. API Well No.	-34756
3a. Address 20 North Broadway Oklahoma City, Oklahoma City 73102-8260	3b. Phone No. (inc. 405-552-7	chude area code)	Les	10. Field and Pool, or Ex	ploratory
4. Location of Well (Report location clearly and in accordance with any At surface Lot D 1140' FNL & 840' FWL	y State requirements.	" 408	197	11. Sec., T. R. M. or Blk	and Survey or Area
At proposed prod. zone Lot E 1650' FNL & 600' FWL -	sec 4		·	Lot D Sec 9, T23	
 Distance in miles and direction from nearest town or post office* Approximately 40 miles east of Carlsbad, NM 				12. County or Parish Eddy County	13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of acres	in lease	17. Spacir	g Unit dedicated to this we	RECEIVED
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed De	_		BIA Bond No. on file	MAR 0 9 2006 UCU-AFITED
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3348'		date work will sta		23. Estimated duration 45 days	
	24. Attachm	ients C		d Controlled We	er Basia
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 	Lands, the 5	Bond to cover to Item 20 above). Operator certific	he operation cation specific inf	uis form: ons unless covered by an ex- formation and/or plans as n	·
25. Signature		inted/Typed)	-	C	Pate
Title Sr/Staff Engineering Technician	Ste	phanie A. Ysasa	ga		01/10/2006
Approved by (Skinature) SINCLAIN		inted/Typed) / DAVI)) E,	SINCLAIR	Date MAR 0 7 20
TING STATE DIRECTOR	Office	NM S	PATE	OFFICE	
Application approval does not warrant or certify that the applicant hold conduct operations thereon. Conditions of approval, if any, are attached.	s legal or equitable		ts in the sul		itle the applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr States any false, fictitious or fraudulent statements or representations as t	rime for any perso to any matter withi	n knowingly and v n its jurisdiction.	villfully to r	nake to any department or	agency of the United
*(Instructions on page 2) ECLARED WATER BASIN 3.9 EMENT BEHIND THE 13.89			GE	Proval Sub Meral Requ	IREMENTS A

WITNESS

CASING MUST BE CIRCULATED

R-111-P Para CEMENT BEHIND THE 95/8 CASING MUST BE <u>CIRCULATED</u> well, an OCD pit permit must be obtained prior to pit construction.

General requirements and SPECIAL STIPULATIONS attachen

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

NSL- 3348-ACBHL)(SA)

Additional Operator Remarks:

Devon Energy Production Company, LP proposes to drill a Delaware well to 12,556' for commercial quantities of oil and gas. If the well is deemed noncommercial, the wellbore will be plugged and abandoned per Federal regulations. Devon Energy Production Co., LP plans to drill the well per the attached Drilling and Surface Use Plan.

Directions To Location:

From the intersection of State Road 128 and County Road 787 (Twinwell Road) go southeast on 128 0.1 miles to lease road, then north 1.4 miles, then northeast 0.5 miles, then northwest to the North Pure Gold 9 Federal 5 location.

Access Road:

Existing lease road depicted. Archeological survey's will be requested for the existing well pad and existing access road

H2S:

No H2S is anticipated to be encountered.

DISTRICT I 1625 N. French Dr., Hobbe, NM 88240 DISTRICT II State of New Mexico

Form C-102 Revised March 17, 1999

Energy, Minerals and Natural Resources Department

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Azteo, NM 87410

811 South First, Artesia, NM 88210

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	40297 Las Med	Pool Name		
Property Code	Property Name	Well Number		
	NORTH PURE GOLD "4" FEDERAL	2		
OGRID No.	Operator Name	Elevation		
6137	DEVON ENERGY PRODUCTION CO., L.P. 3348'			

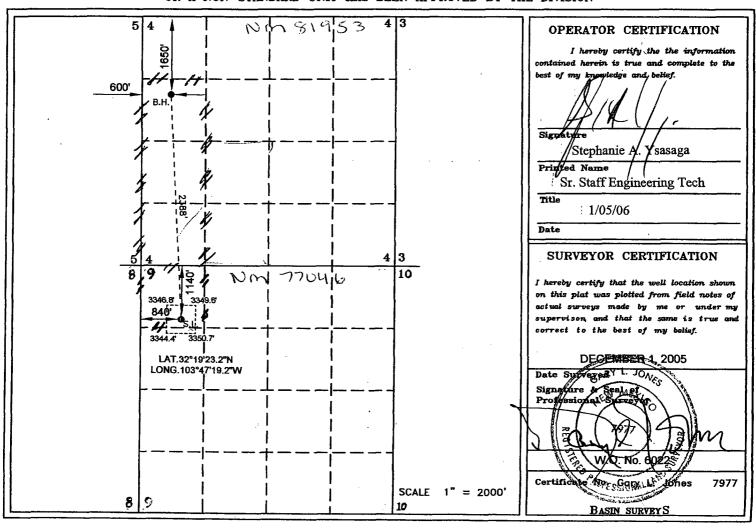
Surface Location

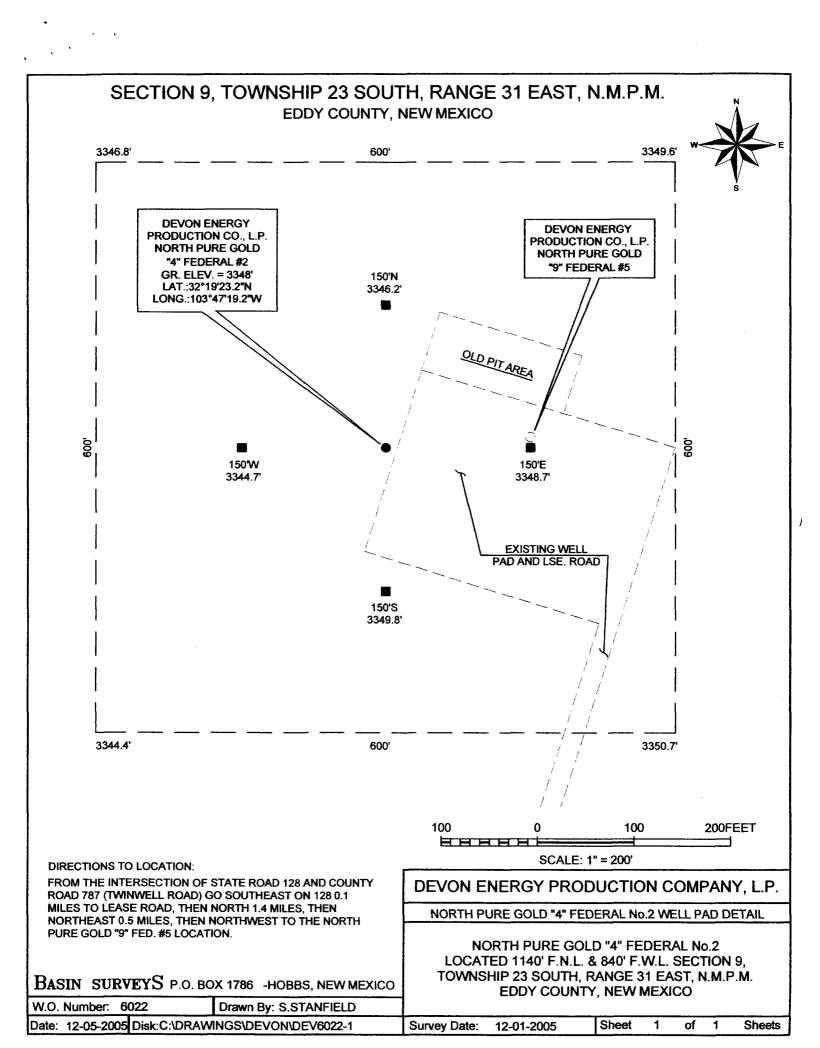
ĺ	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	D	9	23-S	31-E		1140	NORTH	840	WEST	EDDY

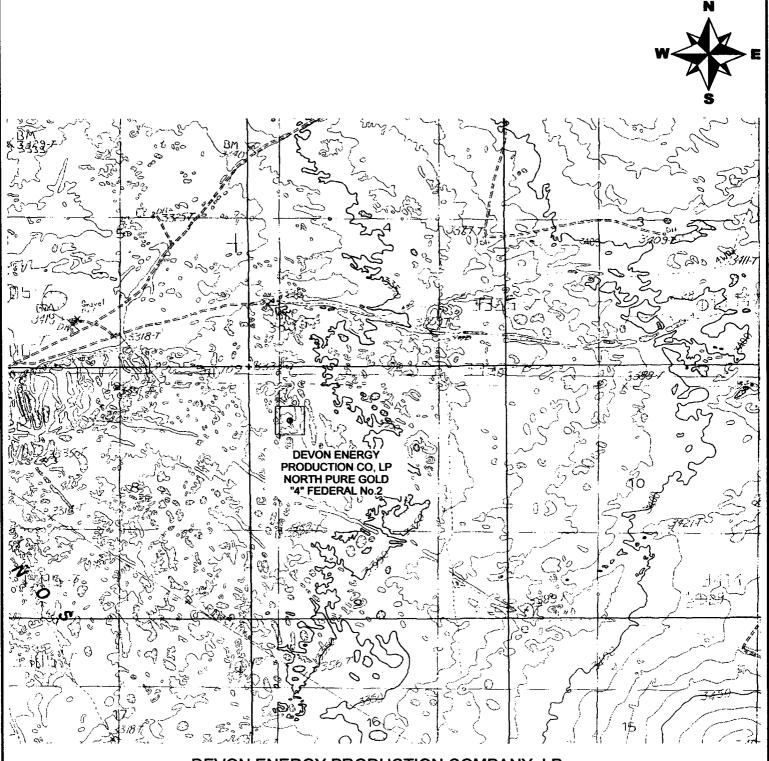
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	4	23-S	31-E ,		1650	NORTH	600	WEST	EDDY
	Dedicated Acres Joint or Infill Consolidation Code Order No.								
180 160									•

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







DEVON ENERGY PRODUCTION COMPANY, LP NORTH PURE GOLD "4" FEDERAL No.2 SECTION 9, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO



P.O. Box 1786 1120 West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 - Office (505) 392-2206 - Fax basinsurveys.com

W.O. Number:	C:\DRAWINGS\DEVON\ DEV6022-2
Survey Date:	DECEMBER 1, 2005
SCALE:	1"=2000'
Date:	DECEMBER 5, 2005

DEVON ENERGY PRODUCTION CO., LP

DRILLING PROGRAM

Devon Energy Production Company, LP North Pure Gold 4 Federal 2

Surface Location: 1140' FNL & 840' FWL, Unit D, Sec 9 T23S R31E, Eddy, NM Bottom hole Location: 1650' FNL & 600' FWL, Unit E, Sec 4 T23S R31E, Eddy, NM

1. Geologic Name of Surface Formation

a. Permian

2. Estimated tops of geological markers:

a.	Rustler	340'	
b.	Salado	630'	
c.	Delaware	3810'	
d.	Bone Spring	7635'	
<u></u>	-Wolfeamp	10025'	
<u>f</u>	Strawn	124652 (- 00 (TVD)	
g.	Total Depth	124652 12556' (7935'TVD)	

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas

a.	Upper Permian Sands	-	Fresh Water
b.	Delaware	3810'	Oil/Gas
c.	Bone Spring	7635'	Oil/Gas
d=	Wolfcamp	10925'	Oil/Gas
G	Strawn	12465'	Gas

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13 3/8" casing at 430' and circulating cement back to surface. Fresh water will be protected by setting 9 5/8" casing at 3980' and circulating cement to surface. The 7" casing will be set through the Delaware to 8,220' circulating cement to surface. The 4 $\frac{1}{2}$ " liner will be set and cemented through the Delaware to 8,220'.

4. Casing Program:

Hole Size	<u>Interval</u>	OD Csg	Weight	<u>Collar</u>	<u>Grade</u>
17 ½"	0' - 430'	13 3/8"	48#	ST&C	H-40
12 1/4"	0' – 3980'	9 5/8"	40#	ST&C	J-55
8 3/4"	0' - 8220'	7"	23# & 26#	LT&C	J-55
6 1/8"	Horizontal Section	4 ½"	11.60#	BT&C	N-80

5. Cement Program:

a. 13 3/8" Surface

Cement to surface with 350 sx 35:65 Poz Class C + 6% Bentonite + 2% CaCl2 + 0.25 lbs/sack Cello flake & tail w/250 sx Class C + 2% CaCl2. Circulate cement to surface.

b.	9 5/8"	Intermediate	Cement to surface with 977 sx 35:65 Poz Class C + 6% Bentonite + 5% 5% Sodium Chloride + .25 lbs/sk Cello flake. Tail with 200 sx 60:40 Poz Class C + 4% MPA = 1 + 5% Sodium Chloriade + 4% Sodium Metasilicate + 0.25 lbs/sx Cello flakes. Circulate cement to surface.
c.	7"	Production	Cement 1 st stage with 225 sx 35:65 Poz Class C + 6% Bentonite + 3% Sodium Chloriade + 0.3 % FL-52 + 3 lbs/sk LCM-1 + .25 lbs/sx Celloflake + .25% R-3. Tail with 510 sx 60:40 Poz Class C + 4% MPA-1 + 2% Sodium Chloride + 1% BA-10 + .75% EC-1+2 lbs/sk Kol Seal + .25 lbs/sk Cello Flake. 2 nd stage lead with 203 sx 35:65 Poz Class C + 6% Bentonite + 5% Sodium Chloride + .25 lbs/sk Cello Flake, tail with 200 sx 60:40 Poz Class C + 4% MPA-1 + 5% Sodium Chloride + .4% Sodium Metasilicate + .25 lbs/sk Cello Flake. Circulate cement to suface.
d.	4 1/2"	Liner	Cement with 378 sx 60:40 Poz: Class H + 1% NaCl + 1% BA-10 + .75% EC-1 + 4% MPA-1 + 0.15% Diacel LWL.

The above cement volumes could be revised pending the caliper measurement from the open hole logs.

6. **Pressure Control Equipment:**

The blowout preventor equipment (BOP) shown in exhibit #B (A) will consist of a (5M system) double ram type (5000 psi WP) preventor and a bag-type (Hydril) preventor (5000 psi WP) and rotating head. Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 ½" drill pipe rams on bottom. Both BOP's will be installed on the 13 3/8" surface casing and utilized continuously until total depth is reached. All BOP's and associated equipment will be tested to 1200 psi with the rig pump before drilling out the 13 3/8" casing shoe (70% of 48#, H-40 casing). Prior to drilling out the 9 5/8" casing shoe, the BOP's and Hydril will be tested as per BLM Drilling Operations Order #2.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drillers log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 5000 psi rating.

7. **Proposed Mud Circulation System**

<u>Depth</u>	Mud Wt.	<u>Visc</u>	Fluid Loss	Type System
0' – 430'	8.8	40-45	NC	Fresh Water
430' – 3980'	10.0	30	NC	Brine Water
3980'- 8220'	8.5-9.0	30-32	50-60	Fresh Water/Gel
				/Starch
8220' – TD	8.5-8.8	31-34	15	Fresh Water/Polymer

The necessary mud products for weight addition and fluid loss control will be on location at all times.

8. Testing, Logging, and Coring Program:

- a. Drill stem tests will be based on geological sample shows.
- b. The open hole electrical logging program will be:
 - i. Total Depth to Intermediate Casing Dual Laterol-Micro Laterolog with SP and Gamma Ray. Compensated Neutron Z Density log with Gamma Ray and Caliper.
 - ii. Total Depth to Surface Compensated Neutron with Gamma Ray
 - iii. No coring program is planned.
 - iv. Additional testing will be initiated subsequent to setting the 7" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

9. Auxilliary Well Control and Monitoring Equiptment:

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- c. Hydrogen Sulfide detection equipment will be in operations after drilling out the 13 3/8" casing shoe until the 9 5/8" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

10. Potential Hazards:

a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 7500 psi and Estimated BHT 7500

11. Anticipated Starting Date and Duration of Operations:

a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 32 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

SURFACE USE PLAN

Devon Energy Production Company, LP

North Pure Gold 4 Federal 2

Surface Location: 1140' FNL & 840' FWL, Unit D, Sec 9 T23S R31E, Eddy, NM Bottom hole Location: 1650' FNL & 600' FWL, Unit E, Sec 4 T23S R31E, Eddy, NM

1. Existing Roads:

- a. The well site and elevation plat for the proposed well are reflected on Exhibit 2. The well was staked by Basin Surveys.
- b. All roads into the location are depicted on Exhibit 3.
- c. Directions to Location: From the intersection of state road 128 and County Road 787 (Twinwell Road) go southeast on 128 0.1 miles to lease road, thence north 1.4 miles, then northeast 0.5 miles, then northwest to the North Pure Gold 9 Fed 5 location.

2. Access Road

- a. Exhibit #3 shows the existing lease road and well pad.
- b. The maximum width of the road will be 15'. It will be crowned and made of 6" of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.
- c. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location. The average grade will be approximately 1%.
- d. No cattle guards, grates or fence cuts will be required. No turnouts are planned.

3. Proposed Facilities

- a. In the event the well is found productive, a tank battery would be constructed.
- b. The tank battery, all connections and all lines will adhere to API standards.
- c. If the well is productive, rehabilitation plans are as follows:
 - i. The reserve pit will be closed pursuant to NM OCD rules and guidelines.
 - ii. The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as possible to the original state.

4. Methods of Handling Waste Material:

- a. Drill cuttings will be disposed of in the reserve pits.
- b. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary landfill.
- c. The supplier, including broken sacks, will pick up salts remaining after completion of well.
- d. Wastewater from living quarters will be drained into hole with a minimum of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- e. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for further drying. If the drilling fluids do not evaporate in a reasonable

time they will be hauled off by transports to a state approved disposal site. Later pits will be broken out to speed dry. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in a storage tank and sold.

5. Well Site Layout

- a. Exhibit D Shows the proposed well site layout.
- b. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- c. Mud pits in the active circulating system will be steel pits & the reserve pit will be lined with a 12 mil synthetic woven liner.
- d. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. After the rig is removed, the reserve pit will be fenced on the fourth side to preclude endangering wildlife. The fencing will be in place until the pit is reclaimed. If the well is a producer, the reserve pit fence and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

6. Other Information:

- a. The area surrounding the well site is grassland. The topsoil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, sagebrush, yucca and miscellaneous weeds.
- b. The surface is owned by the US Government and is administered by the Bureau of Land Management. The surface is of limited use except for the grazing of livestock and the production of oil and gas.
- c. An Archaeological survey will be forwarded to the Bureau of Land Management.
- d. There are no dwellings within 2 miles of location.

Operators Representative:

The Devon Energy Production Company, L.P. representatives responsible for ensuring compliance of the surface use plan are listed below.

James Blount Don Mayberry Operations Engineer Advisor Superintendent

Devon Energy Production Company, L.P.

20 North Broadway, Suite 1500

Oklahoma City, OK 73102-8260

Devon Energy Production Company, L.P.

Post Office Box 250

Artesia, NM 88211-0250

(405) 228-4301 (office) (505) 748-3371 (office) (405) 834-9207 (Cellular) (505) 746-4945 (home)

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road; that I am familiar with the conditions that presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will

be performed by Devon Energy Production Company, L.P with this plan and the terms and conditions under which it		
Signed: Stephanie A. Ylsasaga	Date:	January 10th, 2006
Staff Engineering Technician		

Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, LP North Pure Gold 4 Federal 2

Surface Location: 1140' FNL & 840' FWL, Unit D, Sec 9 T23S R31E, Eddy, NM Bottom hole Location: 1650' FNL & 600' FWL, Unit E, Sec 4 T23S R31E, Eddy, NM

- 1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
- 2. Wear ring will be properly installed in head.
- 3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 5000 psi working pressure.
- 4. All fittings will be flanged.
- 5. A full bore safety valve tested to a minimum 5000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
- 6. All choke lines will be anchored to prevent movement.
- 7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
- 8. Will maintain a kelly cock attached to the kelly.
- 9. Hand wheels and wrenches will be properly installed and tested for safe operation.
- 10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
- 11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

UNITED STATES DEPARTMENT OF THE INTERIOR

Bureau of Land Management Roswell Field Office 2909 West Second Street Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name: Street or Box: City, State: Zip Code:	Devon Energy Production Company, LP 20 North Broadway, Suite 1500 Oklahoma City, Oklahoma 73102-8260
conducted on the leased land or pe	cable terms, conditions, stipulations and restrictions concerning operations ortion thereof, as described below.
Lease No.:	
Legal Description of Land:	320 acres SL: 9-T23S-R31E 1140 FNL' & 840' FWL BHL: 4-T23S-R31E 1650' FNL & 600' FWL
Formation(s):	
Bond Coverage: BLM Bond File No.:	Quahada Ridge; Delaware Nationwide CO-1104
Authorized Signature: Title:	Stephanie A. Ysasaga
Title:	Sy. Staff Engineering Technician
Date:	1/10/06

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

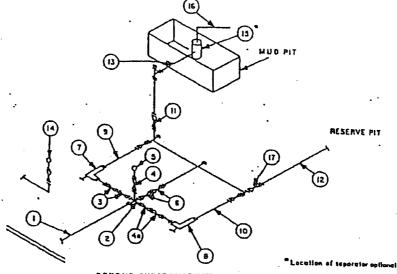
- 1. All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
 - a. Characteristics of H2S
 - b. Physical effects and hazards
 - c. Proper use of safety equipment and life support systems.
 - d. Principle and operation of H2S detectors, warning system and briefing areas
 - e. Evacuation procedures, routes and first aid.
 - f. Proper use of 30-minute pressure demand air pack.

2. H2S Detection and Alarm System

- a. H2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
- 3. Windsock and/or wind streamers
 - a. Windsock at mud pit area should be high enough to be visible
 - b. Windsock at briefing area should be high enough to be visible
 - c. There should be a windsock at entrance to location
- 4. Condition Flags and Signs
 - a. Warning Sign on access road to location
 - b. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location.
- 5. Well Control Equipment
 - a. See Exhibit "E" & "E-1"
- 6. Communication
 - a. While working under masks chalkboards will be used for communication.
 - b. Hand signals will be used where chalk board is inappropriate
 - c. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
- 7. Drill stem Testing
 - a. Exhausts will be watered
 - b. Flare line will be equipped with an electric igniter or a propane pilot light in case gas reaches the surface.
 - c. If the location is near to a dwelling a closed DST will be performed.
- 8. Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.

If H2S is encountered, mud system will be altered if necessary to maintain control or formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

1



2	EY	n	ND	S11	BST	BUC	TURE

			MINI	MUM REQL	HREMENTS	5				
			3,000 MWP			5,000 MWP			10,000 MWF	,
No.		I,D,	NOMINAL	RATING	1.0.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Une from drilling spool		3.	3,000		3-	5,000		3.	
. 2	Cross 3"x3"x3"x2"			3,000			5.000			10,000
	Cross 3"x3"x3"x3"	1							 	40.000
3	Valvos(1) Gale [] Plug [](2)	3-1/8-		3,000	3-1/8*		5,000	3-1/8"		10,000
4	Valve Gale □ Plug □(2)	1-13/16*		3,000	1-13/16*		5,000	1-13/16*		10,000
43	Valves(1)	2-1/16"		3,000	2-1/16"		5,000	3-1/B*	 	10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate □ (2)	3-1/6-		000,E	3-1/8*		5,000	J-1/8*		10,000
7	Adjustable Choke(3)	2"		3,000	2*		5:000	2-	 	
8	Adjustable Choke	1*		3,000	1.		5,000	2*	 	10,000
9	Line	1	י ט"	3,000	· · · · · · · · · · · · · · · · · · ·	3-	5,000		3-	10,000
10	Line		2"	3.000		2.	5.000			10,000
11	Valves Gate □ Plug □(2)	3-1/8*	·	3,000	3-1/8"		5,000	3-1/8"	. 3*	10,000
12	Lines	T	3"	1,000		3.	1,000	<u>_</u>	3.	
13	Lines	1	3-	1.000		3-	1.D00	 -		2,000
14	Remote reading compound standpipe pressure gauge			3,000		-	5,000		3-	2,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
16	Line		4"	1,000		4*	1.000		4°	2,000
17	Valves Gale □ Plug □(2)	3-1/8*		3,000	3-1/8"		5,000	3-1/8"		10,000

- (1) Only one required in Class 3M.
- (2) Gate valves only shall be used for Class 10M.
- (3) Remote operated hydraulic choke required on 5,000 pal and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

- 1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- 2. All flanges shall be API 68 or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- 3. All lines shall be securely anchored.
- 4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- 5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- 6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged toos.
- 7. Discharge lines from chokes, choke bypass and from top of gas apparator should vent as far as practical from the well.

STACK REQUIREMENTS

No.	ltem		Mın. I.D.	Min. Nominal
1	Flowline			
2	Fill up line			2-
3	Drilling nipple			
4	Annular preventer			
5	Two single or one dual hydoperaled rams			
ба	Drilling spool with 2" min. 3" min choke line outlets			
6b	2" min. kill line and 3" mir outlets in ram. (Alternate t			
7	Vaive .	Gale □ Plug □	3-1/8"	
8	Gale valve-power operat	leđ	3-1/8"	
9	Line to choke manifold			3,
10	Valves	Gate 🖸 Plug 🖸	2-1/16"	
11	Check valve		2-1/16"	
12	Casing head		1	
13	Valve	Gate [] Plug []	1-13/16"	
14	Pressure gauge with need	die valve		<u> </u>
15	Kill line to rig mud pump r			2"

(3) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1
ANHULAR PREVENTER
BLIND RAMS
FIPE RAMS
G ORILLING
CY2ING D (B)
HE AD CASING (2)

CONFIGURATION

			OPTIONAL		
16	Flanged valve	;		1-13/16"	

CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psl, minimum.
- Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- 3.BOP controls, to be located near drillers position.
- 4.Kelly equipped with Kelly cock.
- 5.inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- 6.Kelly saver-sub equipped with rubber casing protector at all times.
- 7.Plug type blowout preventer tester.
- 8.Extra set pipe rams to fit drill pipe in use on location at all times.
- 9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

- Bradenhead or casinghead and side valves.
- 2. Wear bushing, If required.

GENERAL NOTES:

- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- 2.All connections, valves, fittings, piping, etc., subject to wall or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chore. Valves must be full opening and suitable for high pressure mud service.
- Controls to be of standard design and each marked, showing opening and closing position.
- 4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- All valves to be equipped with handwheels or handles ready for immediate use.
- 5. Choke lines-must be sultably anchored.

- 7. Handwheels and extensions to be connected and ready for use.
- 8. Valves adjacent to drilling apool to be kept open. Use outside valves except for emergency.
- All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- Casinghead connections shall not be used except in case of emergency.
- 11.Do not use kill line for routine IIII-up operations.

DEVON ENERGY North Pure Gold 4 Fed 2H

slot #1

Eddy County New Mexico

PROPOSAL LISTING

by Baker Hughes INTEQ

Your ref : Plan 4 Our ref : prop4849 License :

Date printed : 2-Nov-2005 Date created : 27-Oct-2005 Last revised : 27-Oct-2005

Field is centred on n32 40 29.200,w103 55 30.8 Structure is centred on 668566.000,481656.000,999.00000,N

Slot location is n32 19 22.831,w103 47 15.521 Slot Grid coordinates are N 481656.000, E 668566.000 Slot local coordinates are 0.00 N 0.00 E

Projection type: mercator - New Mexico East (3001), Spheroid: Clarke - 1866

Reference North is Grid North

DEVON ENERGY North Pure Gold 4 Fed 2H,slot #1 ,Eddy County New Mexico

PROPOSAL LISTING Page 1 Your ref : Plan 4 Last revised : 27-Oct-2005

Measured Depth	Inclin Degrees	Azimuth Degrees	True Vert Depth	R E C T A N C O O R D I		Dogleg Deg/100f	Vert t Sect	GRID C Easting	O O R D S Northing
0.00	0.00	336.00	0.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
500.00	0.00	336.00	500.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
1000.00	0.00	336.00	1000.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
1500.00	0.00	336.00	1500.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
2000.00	0.00	336.00	2000.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
2500.00	0.00	336.00	2500.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
3000.00	0.00	336.00	3000.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
3500.00	0.00	336.00	3500.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
4000.00	0.00	336.00	4000.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
4500.00	0.00	336.00	4500.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
5000.00	0.00	336.00	5000.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
5500.00	0.00	336.00	5500.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
6000.00	0.00	336.00	6000.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
6500.00	0.00	336.00	6500.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
7000.00	0.00	336.00	7000.00	0.00N	0.00E	0.00	0.00	668566.00	481656.00
7458.00	0.00	336.00	7458.00	0.00 N	0.00E	0.00	0.00	668566.00	481656.00
7558.00	12.01	336.00	7557.27	9.54N	4.25W	12.01	9.83	668561.75	481665.54
7658.00	24.02	336.00	7652.19	37.75N	16.81W	12.01	38.91	668549.19	481693.75
7758.00	36.04	336.00	7738.61	83.38N	37.12W	12.01	85.94	668528.88	481739.38
7858.00	48.05	336.00	7812.74	144.44N	64.31W	12.01	148.89	668501.69	481800.44
7958.00	60.06	336.00	7871.34	218.27N	97.18W	12.01	224.98	668468.82	481874.27
8058.00	72.07	336.00	7911.83	301.61N	134.28W	12.01	310.89	668431.72	481957.61
8158.00 8207.27	84.08 90.00	336.00 336.00	7932.46 7935.00	390.83N	174.01W	12.01 12.01	402.85	668391.99	482046.83
8284.00	90.00	336.00	7935.00	435.76N 505.86N	194.01W 225.22W	0.00	449.16 521.42	668371.99 668340.78	482091.76 482161.86
8300.00	90.00	336.59	7935.00	520.51N	231.65W	3.68	536.51	668334.35	482176.51
8400.00	90.00	340.26	7935.00	613.49N	268.42W	3.68	632.00	668297.58	482269.49
8500.00	90.00	343.94	7935.00	708.63N	299.15W	3.68	729.19	668266.85	482364.63
8600.00 8700.00	90.00	347.61	7935.00	805.55N	323.71W	3.68	827.69	668242.29	482461.55
8700.00	90.00	351.29	7935.00	903.84N	342.02W	3.68	927.08	668223.98	482559.84
8800.00	90.00	354.96	7935.00	1003.11N	353.98W	3.68	1026.97	668212.02	482659.11
8900.00	90.00	358.64	7935.00	1102.93N	359.56W	3.68	1126.93	668206.44	482758.93
8937.07	90.00	0.00	7935.00	1140.00N	360.00W	3.68	1163.93	668206.00	482796.00
9000.00	90.00	0.00	7935.00	1202.93N	360.00W	0.00	1226.68	668206.00	482858.93
9100.00	90.00	0.00	7935.00	1302.93N	360.00W	0.00	1326.39	668206.00	482958.93
9200.00	90.00	0.00	7935.00	1402.93N	359.99W	0.00	1426.10	668206.01	483058.93
9300.00	90.00	0.00	7935.00	1502.93N	359.99W	0.00	1525.82	668206.01	483158.93
9400.00	90.00	0.00	7935.00	1602.93N	359.99W	0.00	1625.53	668206.01	483258.93
9500.00	90.00	0.00	7935.00	1702.93N	359.98W	0.00	1725.25	668206.02	483358.93
9600.00	90.00	0.00	7935.00	1802.93N	359.98W	0.00	1824.96	668206.02	483458.93
9700.00	90 00	0.00	7075 00	1000 037	350 000	0.00	1004 50		
9800.00	90.00 90.00	0.00	7935.00 7935.00	1902.93N 2002.93N	359.98W	0.00	1924.68	668206.02	483558.93
9900.00	90.00	0.00	7935.00	2002.93N 2102.93N	359.98W 359.98W	0.00	2024.39	668206.02 668206.02	483658.93
10000.00	90.00	0.00	7935.00	2202.93N 2202.93N	359.98W	0.00	2223.82	668206.02	483758.93 483858.93
10100.00	90.00	0.00	7935.00	2302.93N	359.90W	0.00	2323.53	668206.02	483958.93
					222.27.11				.0000.93
10200.00	90.00	0.00	7935.00	2402.93N	359.97₩	0.00	2423.25	668206.03	484058.93
10300.00	90.00	0.00	7935.00	2502.93N	359.97 W	0.00	2522.96	668206.03	484158.93
10400.00	90.00	0.00	7935.00	2602.93N	359.97W	0.00	2622.68	668206.03	484258.93
10500.00	90.00	0.00	7935.00	2702.93N	359.97W	0.00	2722.39	668206.03	484358.93
10600.00	90.00	0.00	7935.00	2802.93N	359.97W	0.00	2822.11	668206.03	484458.93

All data in feet unless otherwise stated. Calculation uses minimum curvature method.

Coordinates from structure and TVD from rotary table.

Bottom hole distance is 4772.60 on azimuth 355.67 degrees from wellhead.

Vertical section is from N 0.00 E 0.00 on azimuth 355.67 degrees.

Grid is mercator - New Mexico East (3001).

Grid coordinates in FEET and computed using the Clarke - 1866 spheroid

Presented by Baker Hughes INTEQ

DEVON ENERGY North Pure Gold 4 Fed 2H,slot #1 ,Eddy County New Mexico

PROPOSAL LISTING Page 2 Your ref : Plan 4 Last revised : 27-Oct-2005

Measured		Azimuth	True Vert	RECTANG		3 3	/ert		OORDS
Depth	Degrees	Degrees	Depth	COORDIN	ATES	Deg/100ft	Sect	Easting	Northing
10700.00	90.00	0.00	7935.00	2902.93N	359.97W	0.00 292	L . 82	668206.03	484558.93
10800.00	90.00	360.00	7935.00	3002.93N	359.97W	0.00 302	L.54	668206.03	484658.93
10900.00	90.00	360.00	7935.00	3102.93N	359.97W	0.00 312	1.25	668206.03	484758.93
11000.00	90.00	360.00	7935.00	3202.93N	359.97W	0.00 322	0.97	668206.03	484858.93
11100.00	90.00	360.00	7935.00	3302.93N	359.97W	0.00 332	0.68	668206.03	484958.93
11200.00	90.00	360.00	7935.00	3402.93N	359.97W	0.00 342	0.39	668206.03	485058.93
11300.00	90.00	360.00	7935.00	3502.93N	359.97W	0.00 352	0.11	668206.03	485158.93
11400.00	90.00	360.00	7935.00	3602.93N	359.97W	0.00 361	9.82	668206.03	485258.93
11500.00	90.00	360.00	7935.00	3702.93N	359.98W	0.00 371	9.54	668206.02	485358.93
11600.00	90.00	360.00	7935.00	3802.93N	359.98W	0.00 381	9.25	668206.02	485458.93
11700.00	90.00	360.00	7935.00	3902.93N	359.98W	0.00 391	3.97	668206.02	485558.93
11800.00	90.00	360.00	7935.00	4002.93N	359.98W	0.00 401	3.68	668206.02	485658.93
11900.00	90.00	360.00	7935.00	4102.93N	359.98W	0.00 411	3.40	668206.02	485758.93
12000.00	90.00	360.00	7935.00	4202.93N	359.98W	0.00 421	3.11	668206.02	485858.93
12100.00	90.00	360.00	7935.00	4302.93N	359.99W	0.00 431	7.83	668206.01	485958.93
12200.00	90.00	360.00	7935.00	4402.93N	359.99W	0.00 441	7.54	668206.01	486058.93
12300.00	90.00	360.00	7935.00	4502.93N	359.99W	0.00 451	7.26	668206.01	486158.93
12400.00	90.00	360.00	7935.00	4602.93N	360.00W	0.00 461	5.97	668206.00	486258.93
12500.00	90.00	360.00	7935.00	4702.93N	360.00W	0.00 471	5.69	668206.00	486358.93
12556.07	90.00	360.00	7935.00	4759.00N	360.00W	0.00 477	2.60	668206.00	486415.00

DEVON ENERGY North Pure Gold 4 Fed 2H,slot #1 ,Eddy County New Mexico

PROPOSAL LISTING Page 3 Your ref : Plan 4 Last revised : 27-Oct-2005

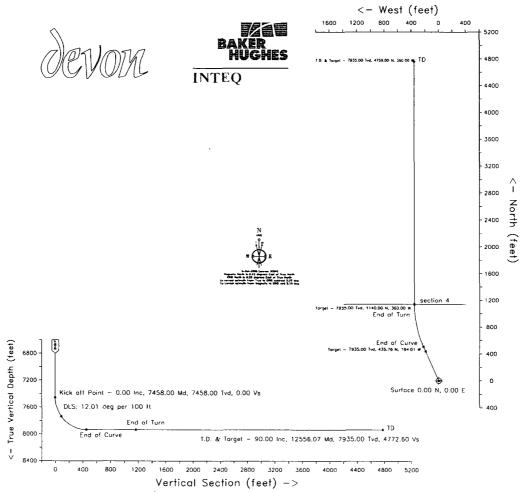
Comments in wellpath

MD	TVD	Rectangular		Comment
8207.27 8937.07 12556.07	7935.00 7935.00	435.76N 1140.00N 4759.00N	194.01W 360.00W	End of Curve End of Turn

Targets associated with this wellpath

Target		Geographic Location		Rectangular		Revised	
End of			7935.00	435.76N		27-Oct-2005	
End of	Turn		7935.00	1140.00N	360.00W	27-Oct-2005	
TD			7935.00	4759.00N	360.00W	27-Oct-2005	

DE Structure : North Pur	Coordinates	Created by adrya e plotted: 27-Do lot Reference is P s are in feet refer of Depths are refer	1-2005 Ion 4, ence structure,					
Field :	Lo	Location : Eddy County New Mexico				Boker Hughes INTEQ		
-		WELL	PROF	ILE DA	ATA -			
Point	МĐ	Inc	Dir	TVD	North	East	V. Sect	Deg/100
Tie on	0.00	0.00	336.00	0.00	0.00	0.00	0.00	0.00
KOP	7458.00	0.00	336.00	7458.00	0.00	0.00	0.00	0.00
Target End of Curve	8207.27	90.00	336.00	7935.00	435.76	-194.01	449.16	12.01
KOP	8284.00	90.00	336.00	7935.00	505.86	~225.22	521.42	0.00
Target End of Turn	8937.07	90.00	0.00	7935.00	1140.00	-360.00	1163.93	3.68
T.D. & Target TD	12556.07	90.00	360.00	7935.00	4759.00	-360.00	4772.60	0.00



Azimuth 355.67 with reference 0.00 N, 0.00 E from structure

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: <u>Devon Energy Production Company</u> Well No. 2 - <u>North Pure Gold 4 Fed.</u>
Location: <u>SHL: 1140' FNL & 840' FWL</u> Sec. 9, <u>BHL: 1650' FNL & 600' FWL</u> Sec. 4, T. 23S. R. 31E.

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Lease: <u>NM-81953</u>

I. DRILLING OPERATIONS REQUIREMENTS:

- 1. The Bureau of Land Management (BLM) is to be notified at (505) 234-5972 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
- 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. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.
- 4. A Hydrogen Sulfide Contingency Plan should be activated prior to drilling in the <u>Delaware</u> formation. A copy of the plan shall be posted at the drilling site.
- 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. 13-3/8 inch surface casing should be set at approximately 430 feet, below usable water and circulate cement to the surface. If cement does not circulate to the surface the Carlsbad BLM office shall be notified at (505) 234-5972 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. Minimum required fill of cement behind the <u>9-5/8</u> inch salt protection casing is <u>sufficient to circulate to the surface</u>.
- 3. Minimum required fill of cement behind the 7 inch production casing is sufficient to tie circulate to the surface.
- 4. Minimum required fill of cement behind the 4-1/2 inch production liner is sufficient to tie back to the top of the liner.
- 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. Before drilling below the 13-3/8 inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.
- 3. The BOPE shall be installed before drilling below the <u>9-5/8</u> inch salt protection casing and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- A. The results of the test will be reported to the BLM Carlsbad Resource Area office at 620 East Greene Street, Carlsbad, New Mexico 88220-6292.
- B. 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.
- C. Testing must be done in a safe workman like manner. Hard line connections shall be required.
- D. A variance to test the BOPE to a reduced pressure of $\underline{1200}$ psi using the rig pumps before drilling below the $\underline{13-3/8}$ inch surface casing string is approved.