RESUBMITTAL

FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995

# UNITED STATES

DEPARTIM	5. LEASE DESIGNATION AND SERIAL NO.					
BUREAU	NM-99016	, vib out in a rio.				
APPLICATION FOR	6. IF INDIAN, ALLOTTEE	OR TRIBE NAME				
1a. TYPE OF WORK  DRILL X	DEEPEN [			7. UNIT AGREEMENT NA	AME	
b. TYPE OF WELL OIL GAS WELL X O	THER RECEIVED	SINGLE ZONE	MULTIPLE ZONE	8. FARM OR LEASE NAM	1E, WELL NO. 344	
2. NAME OF OPERATOR Pogo Producing Compar		Red Man 18 Federal #1				
3. ADDRESS AND TELEPHONE NO. P. O. Box 10340, Midl	OUU-MITES Land, TX 79702-		-8100	30 015 10. FIELD AND POOL, O		
4. LOCATION OF WELL (Report location clearly and in At surface 990 FNL & 660 At proposed prod. zone same		Cemetary Mor 11. SEC., T., R., M., ORE AND SURVEY OR AR Section 18,	BLK. EA			
14. DISTANCE IN MILES AND DIRECTION FROM NE Approximately 20 miles		_		12. COUNTY OR PARISH Eddy County	13. STATE NM	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drig. unit line, if any)	660	16. NO. OF ACRES IN LEASE 198.8	17. NO. OF TO THIS	ACRES ASSIGNED 32	0	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	4000	19. PROPOSED DEPTH 9900		ROTARY OR CABLE TOOLS Rotary		
21. ELEVATIONS (Show whether DF, RT, GR, etc.)	22. APPROX. DATE WO					
23.	DDODOOED OA		20444			

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE GRADE, SIZE OF CASING WEIGHT PER FOOT QUANTITY OF CEMENT SETTING DEPTH 25 40 Cmt to surface w/ Redi-mix Conductor NA 500 550 sks - circ cmt to surface 17-1/2 13-3/8 H - 4048 J-55 600 sks - circ cmt to surface 11 8-5/8 32 2200 7-7/8 5-1/2L-80 17 9900 1000 sks - Est TOC 2000'

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cmt to surface w/ Redi-mix.

- Drill 17-1/2" hole to 500'. Run & set 500' of 13-3/8" 48# H-40 ST&C csg. Cmt w/ 550 sks Cl "C" cmt + 1/4# Flocele/sx + 2% CaCl2. Circ cmt to surface.
- Drill 11" hole to 2200'. Run & set 2200' of 8-5/8" 32# J-55 ST&C csg. Cmt w/ 600 sks Cl "C" cmt + add. Circ cmt to
- Drill 7-7/8" hole to 9900'. Run & set 9900' of 5-1/2" 17# L-80 LT&C csg. Cmt in 2 stages w/ DV tool @ ±4500'. Cmt 1st stage w/ 650 sxs Cl "H" cmt + add. Cmt 2<sup>nd</sup> stage w/ 350 sxs Cl "C" cmt + add. Est TOC 2000' FS.

# APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

# Carlsbad controlled water basin

IN ABOVE SPACE DESCRIBE PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or

deepen directionally,	give pertinent data on subsurface location	ns and measured	and true vertical depths. Give blowout p	preventer program, if any.	·
SIGNED	thy aught	TITLE	Sr Eng Tech	DATE	05/26/06
Pi in associa	hen pit(s) will be utilized tion with this work, a ust be obtained prior to uction.		APPROVAL DATE  lle to those rights in the subject lease which wo	ould entitle the applicant to condu	uct operations thereon.
APPROVED BY	/s/ Tony J. Herrell	TITLE	FIELD MANAGER	DATE JIII	1.3.2008

\*See Instructions On Reverse Side \*See Instructions On Reverse Side APPROVAL FOR 1 of YIEAR

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of YIEAR

United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

#### State of New Mexico

DISTRICT I 1625 N. FRENCH DR., HOBBS, NW 88240

Energy, Minerals and Natural Resources Department

Form C-102 Revised JUNE 10, 2003

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

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

# OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA PR., NM 87505	WELL LOCATION AND	ACREAGE DEDICATION PLAT	□ AMENDED REPORT
API Number	Pool Code	Pool Name	
	74640	CEMETARY-MORROW (GAS)	
Property Code	Pr	operty Name	Well Number
	REDMAN	I 18 FEDERAL	1
OGRID No.	O <sub>1</sub>	perator Name	Elevation
17891	POGO PROI	DUCING COMPANY	3568'

#### Surface Location

UL or !	ot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Peet from the	Rast/West line	County
		18	20-S	25-E		9.90	NORTH	660	WEST	EDDY

#### Bottom Hole Location If Different From Surface

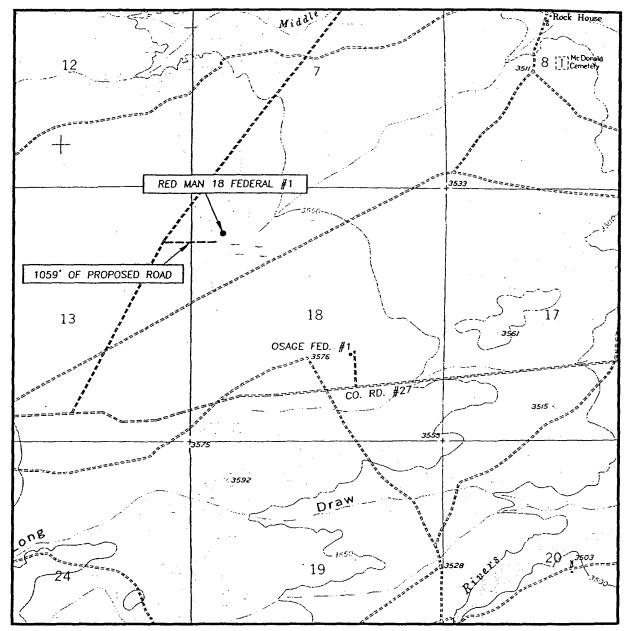
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	s Joint o	r Infill Co	nsolidation	Code Ore	der No.			`	<u></u>
320					· · · · · · · · · · · · · · · · · · ·				

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

	OR A NON-STANDARD UNIT HAS BEEN APPROVED	DI THE DIVISION
3571.9' 3565.0' 	Second location	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature
3571.7' 3565.7'	GEODETIC COORDINATES  NAD 27 NME  Y=574116.8 N  X=439315.2 E  LAT.=32*34'41.52" N  LONG.=104'31'49.22" W	Joe T. Janica  Printed Name Agent Title
LOT 3		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 betief.  SEPTEMBER 9, 2004  Date Surveyed  Date Surveyed  JR  Signature & Seal of Professional Surveyor  AND Lalara 9/11/04  Certificate No. GARY EIDSON. 12641

SECTION 18, TOWNS	S'"P 20 SOUTH, R		N.M.P.M.,
3571.9'	600'		3565.0*
	150' NORTH OFFSET 3568.8'		Titan.
	· -		
150' WEST OFFSET II 3569.9'	RED MAN 18 FEDERAL #  C  ELEV. 3568.2'  LAT.=32°34'41.52" N  LONG.=104°31'49.22" W	150 EAST © OFFSET 3565.6'	,009
1059' OF PROPOSED ROAD	⊡		
	150' SOUTH OFFSET 3568.5'	·.	
3571.7'	600'		3565.7'
DIRECTIONS TO LOCATION  FROM THE INTERSECTION OF U.S. HW CO. RD. #28 (WHITE PINE RD.) GO	WEST ON CO.		
RD. #28 FOR APPROX. 4.0 MILES TO #27 (PICKETT RD.) TURN RIGHT (NOI	RTH) ON CO. 100	0 100	200 Feet
RD. #27 AND FOLLOW ROAD NORTH WEST APPROX. 3.6 MILES TO A SIGN	(MOC SWD	Scale:1"=100'	
MARATHON OIL CO.) ON THE RIGHT. (NORTH) © SIGN AND GO APPROX. O A PROPOSED ROAD SURVEY ON THE	D.8 MILES TO PO	OGO PRODUCING CO	MPANY
FOLLOW PROPOSED ROAD SURVEY ON THE FOLLOW PROPOSED ROAD SURVEY AF MILES TO PROPOSED LOCATION.  PROVIDING SURVEYING SE	PPROX. 0.2  LOCATOR AND 660	RED MAN 18 FEDERAL #1 WELL CATED 990 FEET FROM THE NORTH D FEET FROM THE WEST LINE OF S SHIP 20 SOUTH, RANGE 25 EAST,	I LINE SECTION 18,
JOHN WEST SURVEYING A12 N. DAL PASO HOBBS, N.M. 88240 (526) 380-3117	Survey Date: W.O. Number:	<del></del>	of 1 Sheets  Rev 1:N/A  Scale:1 = 100
			<del></del>

# LOCATION VERIFICATION MAP



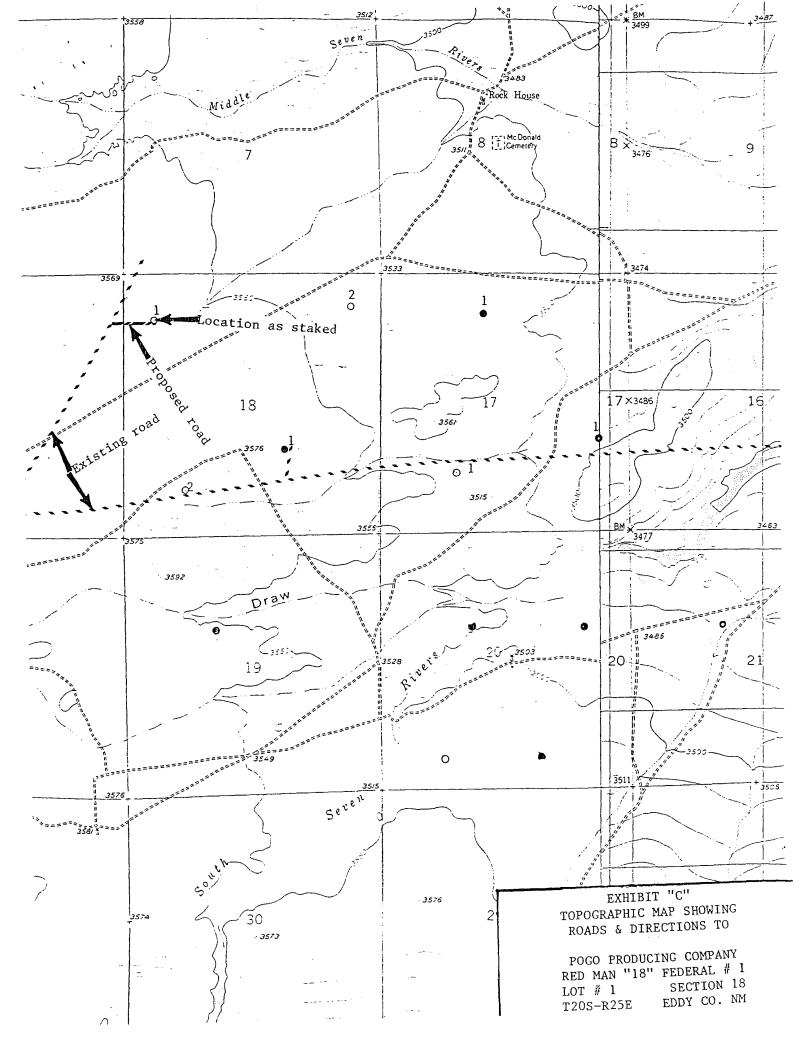
SCALE: 1" = 2000'

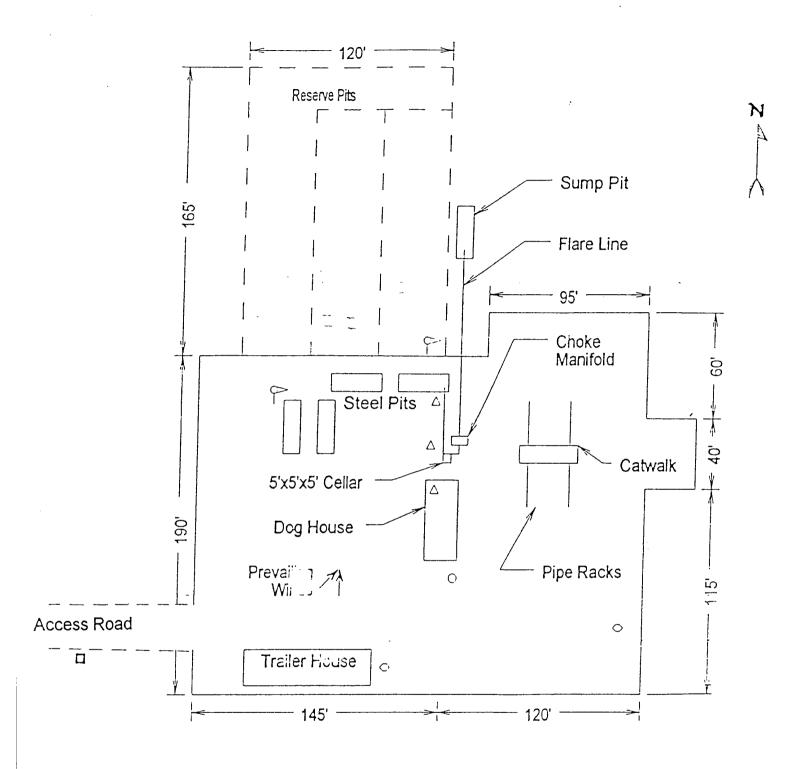
CONTOUR INTERVAL: FOSTER RANCH, N.M. - 10'

SEC. 18 TWP. 20-S RGE. 25-E					
SURVEY N.M.P.M.					
COUNTYEDDY					
DESCRIPTION 990' FNL & 660' FWL					
ELEVATION3568'					
POGO OPERATOR PRODUCING COMPANY					
LEASE RED MAN 18 FEDERAL					
U.S.G.S. TOPOGRAPHIC MAP FOSTER RANCH, N.M.					



PROVIDING SURVEYING SERVICES
SINCE 1948
JOHIN WEST SURVEYING COMPANY
412 N. DAL PASO
HO88S, N.M. 88240
(528) 383-3117

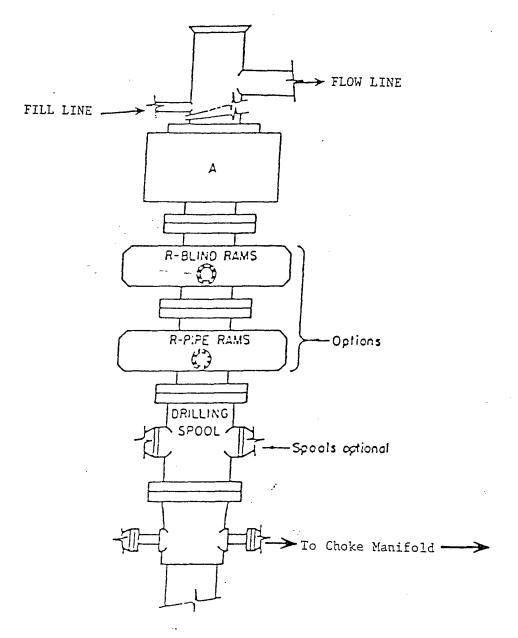




- Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- Briefing Areas
- O Remote BOP Closing Unit
- Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

POGO PRODUCING COMPANY
RED MAN "18" FEDERAL # 1
LOT # 1 SECTION 18
T20S-R25E EDDY CO. NM

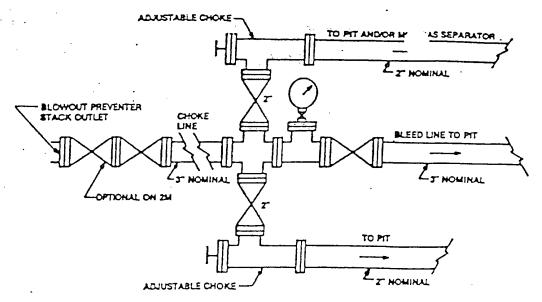


# ARRANGEMENT SRRA

900 Series 3000 PSI WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

POGO PRODUCING COMPANY
RED MAN "18" FEDERAL # 1
LOT # 1 SECTION 18
T20S-R25E EDDY CO. NM



Typical choke manifold assembly for 3M WP system

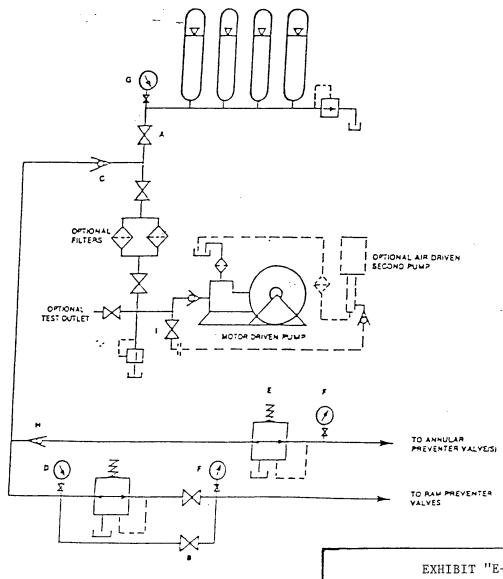


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
RED MAN "18" FEDERAL # 1
LOT # 1 SECTION 18
T20S-R25E EDDY CO. NM

## APPLICATION TO DRILL

POGO PRODUCING COMPANY
RED MAN "18" FEDERAL # 1
LOT # 1 SECTION 18
T20S-R25E EDDY CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

- 1. Location of well: 990' FNL & 660' FWL SECTION 18 T20S-R25E EDDY CO. NM
- 2. Ground Elevation above Sea Level: 3568' GR.
- 3. Geological age of surface formation: Quaternary Deposits:
- 4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium to remove solids from hole.
- 5. Proposed drilling depth: 9900'

# 6. Estimated tops of geological markers:

	Queen	600.	3rd Bone Spring Sd.	6570
	Grayburg .	910'	Wolfcamp Lime	7020 <b>'</b>
	San Andres	1310'	Cisco	7850 <b>'</b>
	Bone Spring Lime	2230 <b>'</b>	Morrow Clastics	9420'
7.	Possible mineral bea	ring formations:	Mississippian	9800'
	Wolfcamp	Gas		*
	Cisco	Gas		N.
	Morrow	Gas		

## 8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade_
25"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-500'	13 3/8"	48	8-R	ST&C	H-40
11"	0-22001	8 5/8"	32	8-R	ST&C	J-55
7 7/8"	0-9900'	5½"	17	8-R	LT&C	J∸55

#### APPLICATION TO DRILL

POGO PRODUCING COMPANY
RED MAN "18" FEDERAL # 1
LOT # 1 SECTION 18
T20S-R25E EDDY CO. NM

# 9. CASING CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 500' of 13 3/8" 48# H-40 ST&C casing. Cement with 550 Sx. of Class "C" cement + additives, circulate cement to surface.
8 5/8"	Intermediate	Set 2200' of 8 5/8" 32# J-55 ST&C casing. Cement with 600 Sx of Class "C" cement + $\frac{1}{4}$ # Flocele/Sx., + 2% CaCl, circulate cement to surface.
5½"	Production	Set 9900' of $5\frac{1}{2}$ " $17\#$ L-80 LT&C casing. Cement in 2 stages set DV Tool at $4500'\pm$ . Cement 1st stage with 650 Sx. of Class "H" Premium Plus cement + additives, cement 2nd stage with 350 Sx. of Class "C" cement + additives, estimate top of cement 2000' from surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 series 3000 PSI working perssure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nippled up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once each 24 Hr. period and the blind rams will be operated when the drill pipe is out of on trips. Full opening stabbing valve and upper kelly cock will be available in case if needed. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 3000 PSI choke manifold with adjustable chokes. No abnormal pressures or temperatures are expected while drilling this well. No problems in offset wells.

#### 11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-500'	8.4-8.7	29–38	NC	Fresh water spud mud use paper to control
500-2200'	10-10.2	29–40	ne g dd	Brine water use paper to control seepage and high viscosity sweeps to clean Hole.
2200-8700'	8.4-8.7	29-40	NC	Fresh water use Gel for viscosity control and high viscosity sweeps to clean hole.
8700-9900 <b>'</b>	8.4-8.7	32-40	6-10 cc or less	Same as above use Gel for viscosity control and Dris-Pac for water loss control.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing, viscosity, and water loss may have to be adjusted to meet these needs.

# APPLICATION TO DRILL

POGO PRODUCING COMPANY
RED MAN "18" FEDERAL # 1
LOT # 1 SECTION 18
T20S-R25E EDDY CO. NM

# 12. LOGGING , CORING, AND TESTING:

- A. Open hole logs: Dual induction, SNP, LDT, Gamma Ray, and Caliper from TD Back to 8 5/7" casing shoe.
- B. Cased hole logs: Gamma Ray, Neutron from 8 5/8" casing shoe to surface.
- C. Mud logger may be rigged up on hole at 2200' and remain on hole to TD.
- D. DST's may be taken as shows dictate. Cores may be taken as geologist determines.

## 13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of  $\rm H^2S$  in this area. If  $\rm H^2S$  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 4500 PSI, and Estimated BHT  $170^\circ$ 

## 14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

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 operation and drilling is expected to take 25 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

# 15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The  $\underline{\text{MORROW}}$  formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as a gas well.

#### HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

- 1. All Company and Contract personnel admitted on location must be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S
  - B. Physical effects and hazzards
  - C. Proper use of safety equipment and life support systems.
  - D. Principle and operation of  $H_2S$  detectors, warning system and briefing areas.
  - E. Evacuation procedure, routes and first aid.
  - F. Proper use of 30 minute pressure demand air pack.
- 2.  $H_2S$  Detection and Alarm Systems
  - A. H<sub>2</sub>S 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 mudpit 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 telephoned will be available at most drilling foreman's trailer or living quarters.
- 7. Drillstem Testing
  - A. Exhausts will be watered.
  - B. Flare line will be equipped with an electric ignitor 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.
- 9. If  $H_2S$  is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with  $H_2S$  scavengers if necessary.

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Pogo Producing Company Well Name & No: Red man 18 Federal No 01

Location: Surface 990' FNL & 660' FWL, Sec.18, T. 20 S., R. 25 E.

Lease: NMNM 99016 Eddy County, New Mexico

#### 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) 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 % inch; 8 % inch; 5 ½ inch.
- C. BOP Tests
- 2. A Hydrogen Sulfide (H2S) Drilling Plan is not required for this well bore.
- 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 must be filed in this office for approval prior to any sales from this well.

#### II. CASING:

- 1. The 13 % inch shall be set at 500 Feet with 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 % inch Intermediate casing is to circulate to surface.
- 3. The minimum required fill of cement behind the 5 ½ inch Production casing is to Tie Back to 8 % inch shoe by at least 200 ft.

# **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 ½ 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.

# (III Cont):

- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3 M psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the test.
- -The test 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 safe workman-like manner. Hard line connections shall be required.
- -Both low pressure and high pressure testing of BOPE is required.

# G. Gourley RFO 06/06/2006