RESUBMITTAL

4-06-08

Form 3160-3 (July 1992)

**UNITED STATES** DEPARTMENT OF THE INTERIOR SUBMIT IN TRIPLICATE\* (Other instructions on

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

5. LEASE DESIGNATION AND SERIAL NO. **BUREAU OF LAND MANAGEMENT** NM-63757 6. IF INDIAN, ALLOTTEE OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL OR DEEPEN R-III-POTASH 1a. TYPE OF WORK DEEPEN [ DRILL 🗷 7. UNIT AGREEMENT NAME b. TYPE OF WELL MULTIPLE \_\_\_ SINGLE X GAS WELL WELL X 8 FARM OR LEASE NAME WELL NO OTHER Sundance "9" Federal #1 2. NAME OF OPERATOR 7891 9. API WELL NO. Pogo Producing Company 30-015-3. ADDRESS AND TELEPHONE NO 10. FIELD AND POOL, OR WILDCAT P. O. Box 10340, Midland, TX 79702-7340 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*) 660' FNL & 1980' FWL, Section 9 11, SEC., T., R., M., OR BLK.) AND SURVEY OR AREA At proposed prod. zone same Section 9, T24S, R31E 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* 12. COUNTY OR PARISH 13. STATE Eddy County MM 20 miles East of Loving, NM 17. NO. OF ACRES ASSIGNED 15. DISTANCE FROM PROPOSED 16. NO. OF ACRES IN LEASE LOCATION TO NEAREST TO THIS WELL 660 40 PROPERTY OR LEASE LINE, FT (Also to nearest drig, unit line, if any) 40 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS 18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1320' 8500 Rotarv

Carisbes Controlled We 3438' GL When approved 23. PROPOSED CASING AND CEMENTING PROGRAM 5/16/06 WEIGHT PER FOOT SIZE OF HOLE GRADE, SIZE OF CASING SETTING DEPTH QUANTITY OF CEMENT 550 765 54.5# 17-1/2 13-3/8 Sufficient to circulate 8-5/8 4100' Sufficient to circulate 32 & 24 85001 1200-sx-(tie back) 5-1/2 15.5% 17

AFTER SETTING PRODUCTION CASING, PAY ZONE WILL BE PERFORATED AND STIMULATED AS NECESSARY.

SEE ATTACHED FOR:

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

SUPPLEMENTAL DRILLING DATA

BOP SKEICH

SURFACE USE AND OPERATING PLAN

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

22. APPROX. DATE WORK WILL START\*

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 locations and measured and true vertical depths. Give blowout preventer program, if any.

signed College // Myht	TITLE	Sr. Eng Tech	04/28/06
(This space for Federal or State office use)			
PERMIT NO.		APPROVAL DATE	
Application approval does not warrant or certify that the applicant holds legal	or equitable title to	o those rights in the subject lease which wo	ald entitle the applicant to conduct operations thereon.

/s/ Linda S. C. Rundell STATE DIRECTOR

JUN 1 6 2008

\*See Instructions On Reverse Side

\*See Instructions On Reverse Side APPOVAL FOR 1 YEAR
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 the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised 1-1-89

DISTRICT | P.O. Box 1980, Hobbs, NM 88240

OIL CONSERVATION DIVISION

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT III

1000 Rio Brazos Rd., Agtec, NM 87410

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	BOCO DDODU	CINIC CO	Lease	CHNDANCE	0 EEDEDAI		Well No.
	POGO PRODUC			SUNDANCE	9 FEDERAL	1.5	
Unit Letter	Section	Township	Range	31 EAST		County	EDDY
C Actual Footage Lo	cation of Well:	24 SOUTH		31 EAS1	NMPM	L	LUUI
550		RTH line and	1980		feet from	the WES	T line
Ground Level Ele			Pool		٠		Dedicated Acreage:
3438'	Delawa	NE	Zind	Jans;	Delawari	West	40 Acres
1. Outline the	acreage dedicated to	the subject well by colore	ed pencil or hach				3815
2. If more than	one lease is dedica	ated to the well, outline e	each and identify	the ownership	thereof (both	as to working	g interest and royalty).
unitization,	one lease of differ force-pooling, etc.?				t of all owners	been consol	idated by communitization,
Yes	∐ No	If answer is "yes" typ					<u></u>
If answer is "n this form neces		nd tract descriptions which	h have actually	been consolid	ated. (Use reve	rse side of	
		the well unit all inter	ests have been	consolidated	(by commun	itization, u	nitization, forced-pooling,
otherwise) or 1	until a non-standar	rd unit, eliminating sucl	interest, has	been approved	by the Division		
	1 //	1111			——— I	OPERAT	OR CERTIFICATION
ł	1	.00					eby certify the the information etn is true and complete to the
j	3438.3	3436.8'				best of my kn	owledge and helief.
	1980'	<del>  -</del> 0				Jun	m.c. Putl-fr
	7441.1	Ļ — → <sub>3441.9</sub> ,		<u> </u>		Signature	s M.e. Ritchie. Ja
	3441.1	3441.9		!	1 1	Printed Nan	
						AGENT	
	++	++		·		Position	^ 4
	ļ.					1060	froducing Co.
	į .					2 22 9	4
]	!					Date	<u> </u>
	ļ						
İ	Į.					CHDMDA	OD CERTIFICATION
						SURVEY	OR CERTIFICATION
	<del></del>		<del></del>				ty that the well location shown
	!			] !			vas plotted from field notes of smade by me or under my
	!					supervison, e	end that the same is true and
	į,					correct to to belief.	he best of my knowledge and
	<del> </del>						
	ļ					Date Surve	uary 17, 1994
	] 1		İ	<u> </u>		Signature &	Seal of
				<del> </del>	11	Professions	SHIPMON COLOR
	l 1		:			a line	CRED LAND COM
1	! !			<b>!</b>		37.5	
	1		1				かった
]	1 1		i			W.	13439/ 17]
-	i İ		į			Certificate	JOHN WEST 676
L						11.12	2 3239
secotation un	383 N S N S N S N S N S N S N S N S N S N			BSC Englishers		1 1/4	SID GEARL DAES 7977
0 330 660	990 1320 1650	1980 2310 2640	2000 1500	1000	500 0	(	9444440090

#### SURFACE USE AND OPERATIONS PLAN

#### **FOR**

# POGO PRODUCING COMPANY SUNDANCE "9" FEDERAL, WELL # 1 660' FNL & 1980' FWL of SECTION 9, T-24S, R-31E EDDY COUNTY, NEW MEXICO

<u>LOCATED:</u> 20 miles east southeast of Loving, New Mexico.

FEDERAL LEASE NUMBER: NM-63757

LEASE DATE: November 1, 1985

ACRES IN LEASE: 40

RECORD LESSEE: Pogo Producing Company

SURFACE OWNERSHIP: Federal.

GRAZING PERMITTEE: J.R. Engineering

P.O. Box 12237 Odessa, Texas 79768

(915) 362-0373

POOL: Wildcat (Delaware)

POOL RULES: Statewide. 40 acres for oil.

EXHIBITS: A. Road Map

B. Plat showing Existing wells and Existing roads

C. Drilling Rig Layout

D. Topo Plat

#### 1. EXISTING ROADS

A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. The proposed well site can be reached by going south of Carlsbad on 285 towards Loving. Turn left on highway 31, go to Jal, New Mexico turn-off on highway 128. Turn right and go 12.8 miles east to blacktop on right. Turn right and go 3.3 miles south to Pogo Producing Company's Sundance "9" Federal # 3. From this well, turn left and go east approximately 1050' to proposed location.

B. Exhibit "B" shows existing pertinent roads in the vicinity of the proposed reentry. Existing roads are color coded.

#### 2. PLANNED ACCESS ROADS:

- A. <u>Length and Width:</u> The planned access road will be 12' wide and approximately 1050' long. See Exhibit "B".
- B. Surfacing Material: Caliche. Compacted and watered.
- C. <u>Maximum Grade:</u> Approximately one percent.
- D. Turnouts: Not needed.
- E. <u>Drainage Design:</u> The access road will be crowned so the water will run off to the sides.
- F. Culverts: None needed.
- G. Cuts and Fills: None necessary.
- H. Gates and Cattle Guards: Not needed. No fences involved.

#### 3. LOCATION OF EXISTING WELLS:

A. Existing wells in the immediate area are shown on Exhibit "B".

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. Production from this well will be delivered to a lease tank battery located on the well pad of well No. 3. The flowline will be 3" SDR-7 polyethylene pipe laid on the ground and extend, as shown on Exhibit "B", west to battery. Anticipated flow line pressure is about 60 psi.

#### LOCATION AND TYPE OF WATER SUPPLY:

A. It is not planned that a water well will be drilled. Water necessary for drilling operations will be purchased and trucked to the well site, or will be moved to the well site by a temporary pipeline laid on the ground alongside existing and proposed roads.

#### 6. SOURCE OF CONSTRUCTION MATERIAL:

A. Caliche needed for construction work will be taken, if present, from a pit opened on-site within the 400' X 450' work area. Otherwise, caliche will be taken from an existing pit located on Federal land in the NE1/4NE1/4 of Section 4, T-24S, R-31E, Eddy County, New Mexico, and will be trucked to the well site over existing and proposed roads. Location of caliche pit is shown on Exhibit "A".

#### METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
- C. All trash, junk, and other waste material will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill.
- D. Water produced during test will be disposed of in the drilling pits.
- E. Oil produced during tests will be stored in test tanks until sold.

#### 8. ANCILLARY FACILITIES:

A. None necessary.

#### 9. WELL SITE LAYOUT:

- A. Exhibit "C" shows relative location and dimensions of the well pad, mud pits, reserve pit and the location of major drilling rig components.
- B. Clearing and levelling of the well site will be required.
- C. The pad and pit area is staked and flagged.

#### 10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until the pits are dry.
- C. After abandonment, all equipment, trash and junk will be removed and the well site will be cleaned. Any special rehabilitation and/or special revegatation requirements of the surface management agency will be complied with and will be accomplished as rapidly as possible.

#### 11. OTHER INFORMATION:

- A. <u>Topography:</u> The land surface in the area is undulating and duny. In the immediate area of the well site, land slope is to the northeast.
- B. Soil: Top soil at the well site is sand.
- C. <u>Flora and Fauna:</u> The vegatative cover is moderate and includes mesquite, shinnery oak, yucca, weeds and range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.
- D. Ponds and Streams: There are no rivers, ponds, takes or streams in the area.
- E. <u>Residences and Other Structures:</u> There are no occupied dwellings or other structures within a mile of the proposed well site.

- F. <u>Archaeological, Historical, and Cultural Sites:</u> An archeological reconnaissance is to be accomplished and a report furnished.
- G. Land Use: Grazing and wildlife habitat.
- H. Surface Ownership: Federal

### 12. OPERATOR'S REPRESENTATIVE:

Richard L. Wright
Division Operations Manager
Pogo Producing Company
P.O. Box 10340
Midland, Texas 79702
432-685-8100

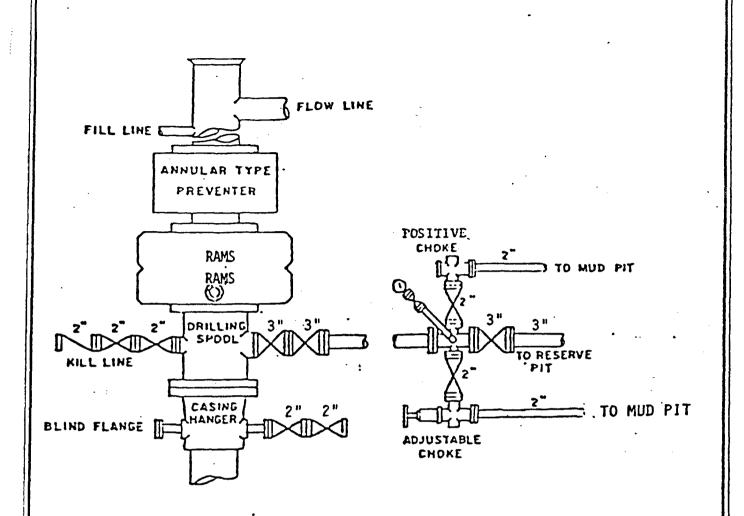
#### 13. **CERTIFICATION**:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in 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 Pogo Producing Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 19 U.S.C. 1001 for the filing of a false statement.

<u>4-18-06</u> Date:

Richard L. Wright

Division Operations Manager



BOP STACK

3000 PSI WORKING PRESSURE

#### SUPPLEMENTAL DRILLING DATA

#### POGO PRODUCING COMPANY SUNDANCE "9" FEDERAL WELL NO. 1

1. SURFACE FORMATION:

Quaternary.

#### 2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	550'
Delaware	4100'
Cherry Canyon	5000'
Brushy Canyon	6300'

#### 3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONE:

Brushy Canyon

Oil

#### 4. PROPOSED CASING AND CEMENTING PROGRAM:

	SETTING DEPTH					
CASING SIZE	FROM	<u>TO</u>	WEIGHT	GRADE	<u>JOINT</u>	
13 3/8"	0	550 745	54.5#	J-55	STC	
8 5/8"	0	1000'	32#	J-55	STC	
H	1000'	2200'	24#	J-55	STC	
Ħ	2200'	4100'	32#	J-55	STC	
5 1/2"	0	1000'	17#	J-55	LTC	
н	1000'	6000'	15.5#	J-55	LTC	
н	6000'	8500'	<b>1</b> 7#	N-80	LTC	

MINIMUM DESIGN FACTORS: Collapse 1.125 Burst 1.1 Tension 1.7

<sup>13 3/8&</sup>quot; casing is to be set at approximately 550' in 17-1/2" hole. Casing to be cemented with 300 sacks of Light cement tailed in with 200 sacks of Class "C", 2% CaCl. Cement to circulate.

<sup>8 5/8&</sup>quot; casing is to be set at approximately 4100' in 11" hole. Casing is to be cemented with 1000 sacks of Light cement tailed in with 200 sacks of Class "C", 1% CaCl. Cement to circulate.

<sup>5 1/2&</sup>quot; casing is to be set at 8500' in 7 7/8" hole. Casing is to be cemented with 300 sx of Light cement followed by 900 sacks of Class "H" cement. Cement to tie back to 8 5/8" casing.

#### 5. PRESSURE CONTROL EQUIPMENT;

Blowout prevention equipment, while drilling the 1.1" hole, will be either a 3000 psi working pressure double ram type preventer or a 3000 psi working pressure annular type preventer.

Blowout prevention equipment, while drilling below the 8 5/8" casing seat, will be a 3000 psi working pressure BOP stack. A BOP sketch is attached.

#### 6. CIRCULATING MEDIUM:

Surface to 550 feet:

Fresh water spud mud. Viscosity 30 to 36 as required for

hole cleaning.

767 **550 feet to 4100 feet**:

Brine conditioned as necessary for control of viscosity. Weight 9.8 to

10.0. PH 9 to 10. Viscosity 32 to 36.

4100 feet to T.D.:

Water based drilling fluid conditioned as necessary for control of weight, viscosity, ph and water-loss. Weight 9 to 10. Visocity

38 - 45. ph 9-10. Filtrate while drilling pay zone 6-15.

#### 7. AUXILIARY EQUIPMENT:

A mudlogging trailer will be used while drilling below Intermediate casing.

#### 8. TESTING, LOGGING, AND CORING PROGRAMS:

Drill Stem tests will be made when well data indicate a test is warranted.

It is planned that electric logs will include GR-CNL- Density logs and GR-DLL logs.

No coring is planned.

#### 9. ABNORMAL PRESSURES, TEMPERTURES, OR HYDROGEN SULFIDE GAS:

None anticipated.

Expected bottom hole pressure is approximately 3500 psi.

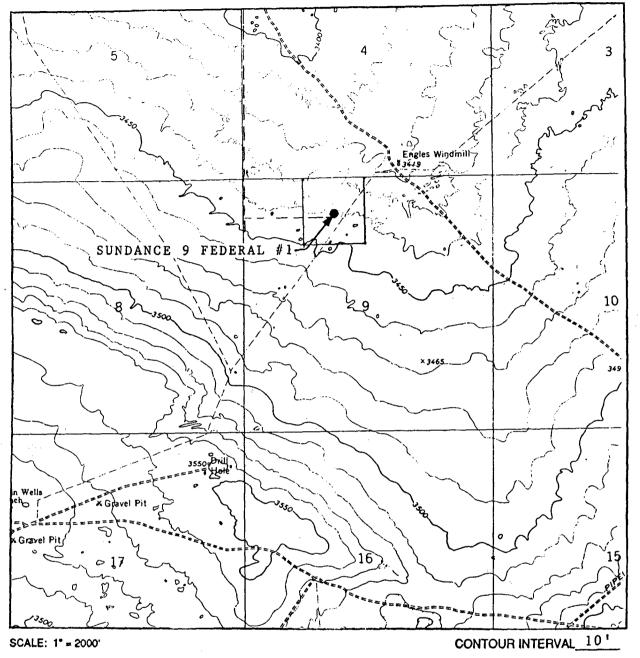
Expected bottom hole temperture is approximately 125 degrees Fahr

#### 10. ANTICIPATED STARTING DATE:

It is planned that operations will commence upon approval of this application, with drilling and completion operations lasting about 30 days.

## LOCATION VERIFICATION MAP

Exhibit "D"



SEC. 9 TWP. 24-S RGE. 31-E

SURVEY\_N.M.P.M.

COUNTY\_EDDY STATE\_N.M.

DESCRIPTION\_660' FNL & 1980' FWL

ELEVATION\_3438'

OPERATOR POGO PRODUCING COMPANY
LEASE SUNDANCE 9 FEDERAL #1

U.S.G.S. TOPOGRAPHIC MAP

BIG SINKS QUADRANGLE



#### CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Pogo Producing Company Well No. 1 - Sundance 9 Federal

Location: 660' FNL & 1980' FWL sec. 9, T. 24 S., R. 31 E.

Lease: NM-63757

.....

#### 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: <u>13-3/8</u> inch <u>8-5/8</u> inch <u>5-1/2</u> 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. 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 765 feet in the Rustler Anhydrite above the top of the Salt, below usable water and circulate cement to the surface. If cement does not circulate to the surface, the BLM Carlsbad Field 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. Minimum required fill of cement behind the <u>8-5/8</u> inch salt protection casing is <u>sufficient to circulate to the surface</u>.
- 3. Minimum required fill of cement behind the 5-1/2 inch production casing is sufficient to circulate to the surface.
- 4. 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. Before drilling below the 8-5/8 inch salt protection casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve.
- 2. Before drilling below the 13-3/8 inch surface casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi. Before drilling below the 8-5/8 inch salt protection casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3000 psi.
- 3. The BOPE shall be installed before drilling below the <u>8-5/8</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 Field 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.