(July 1992)		ED STATES		(01)	er instruction reverse side)	s on	OMB NO.	1004-0136 1004-0136 ruary 28, 1995
••• · · ·	DEFARIMENT	I OF THE I	VIERIO	JCD-I	HOBBS	ſ	5. LEASE DESIGNATIO	AND SERIAL NO
* -'	BUREAU OF	LAND MANAG	EMENT				LC-06193	
APPLIC	ATION FOR P	ERMIT TO D	RILL O	R DEE	PEN		6. IF INDIAN, ALLOT	TER OR TRIBE NAME
1a. TYPE OF WORK								· · · · · · · · · · · · · · · · · · ·
DRILL	. X	DEEPEN [_]				7. UNIT AGREEMENT	
b. TIPE OF WELL							COTTON DRA	W UNIT
OIL CAS WELL X WELL	OTHER		BINGLE Zone	X	MULTIPLE ZONE		8. FARM OR LEASE NAME	WELL NO. CSOIDS (
2. NAME OF OPERATOR							COTTON DRAW	UNIT # 109
POGO PRODUCING C	COMPANY (R	ICHARD WRIG	HT 432-6	85-814	40	ŀ	9. API WELL NO.	
3. ADCRESS AND TELEPHONE NO.					17895	<u> </u>	30-025-	27771
	MIDLAND, TEXA		•	-685-8		·	10. FIELD AND POOL	OR WILDCAT
4. LOCATION OF WELL (Report At surface	rt location clearly and	in accordance with	h any State r	equiremen	ats.•)		PADUCA-DELAW	ARE
1650' FNL & 2630	O' FWL SECTION	10 T25S-R	32E LEA	CO. N	M		11. SEC., T., B., M., O AND SURVEY OR	B BLK.
At proposed prod. zone		UnitF					1D- T255	-R32E
14. DISTANCE IN MILES AND	DISECTION FROM NEAP	IST TOWN OR POST	OFFICE*			i	12. COUNTY OR PARIS	IR 13. STATE
Approximately 2	5 miles West	of Jal New N	lexico				LEA CO.	NEW MEXICO
15. DISTANCE FROM PROPUSED LOCATION TO NEAREST	• •	<u> </u>	16. NO. OF .	CRES IN	LEASE 17.		ACRES ASSIGNED	
PROPERTY OR LEASE LINE, (Also to nearest drig, up	, FT. nit line, if any)	330'	-	80		то тн	40	
13. DISTANCE FROM PROFOSE		·	19. PROPOSE		20.	. ROTAR	T OR CABLE TOOLS	
TO NEAREST WELL, DRILL OR APPLIED FOR, ON THIS LI		1650'	5000	1		ROTA	ARY	
21. ELEVATIONS (Show whether	r DF, RT, GR, etc.)	2050	·		· · · · · · · · · · · · · · · · · · ·	·	22. APPROX. DATE V	VOBE WILL START"
		3456' GR.					WHEN APPROV	ED
23.		PROPOSED CASIN	G AND CEM	ENTING	PROGRAM		- 1 @ 0 xee	e
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FO	от с	ETTING DI	1 -		QUANTITY OF CEM	

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26''	Conductor 20"	· NA	40'	Cement to surface W/Redi-mix.
1.2½"	<u>J-55 8 5/8"</u>	24#	815'	300 Sx. circulate cement
7/7/8"	J-55 5 ¹ ₂ "	15.5#	5000'	725 Sx. " "
_				

- 1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
- 2. Drill 12½" hole to 815'. Run and set 815' of 8 5/8" 24# J-55 ST&C casing. Cement with 150 Sx. of Class "C" 65/35/6 POZ/GEL, tail in with 150 Sx. of Class "C" cement + 2% CaCl, + $\frac{1}{2}$ # Flocele/Sx. circulate cement to surface.
- 3. Drill 7 7/8" hole to 5000'. Run and set 5000' of 5½" 15.5# J-55 ST&C casing. Cement with 475 Sx. of Class "C" Light Weight Cement + 5% Salt mixed at 12.9 #/Gal, tail in in with 250 Sx. of Class "C" cement + 8# of Gilsonite/Sx., mixed at 14.1#/Gal. Circulate cement to surface. Slurry may have to be re-calculated after logs are run.

Witness Surface Casing

POGO PRODUCING	COMPANY ACCEPTS THE RESPONSIBILITY	FOR THE OPERATION
OF THIS LEASE.	APPROVAL SUBJECT TO	
	General Requiremen	ITS AND
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If pro	posal is to deepen, give dis offer a deepen give and the second second and the verified deepen give a deepen of the second preventer program	is new productive zone. If proposal is to dail or
deepen directionally, give proment data on subsurface locations a		
		01/18/06
SIGNED DE . and	TITLE Agent	DATE
(This space for Federal or State office use)		
PERMIT NO.	APPROVAL DATY	2
	ant 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:	• • •	
:	acting	
		MAR 2 2 2006

2 Y	/S/ Russell E. Sorensen	FIELD	MANAGER	DATE	Mar 2		
3		See Instructions On		APPROVAL	FOR	1	YEAR
		••••••					1

APPROVED

					State	of New	w Mexico			
DISTRICT I 1625 N. FRENCH DR.,	, Elobbs, NM 88	1240		Energy.	Minerals an	nd Natural I	Resources Department			
DISTRICT II 1301 V. GRAND AVENI			OIL				ON DIVIS FRANCIS DR.	ION Subm	Revised J it to Appropriate D State Leas	e – 4 Copies
DISTRICT III 1000 Rio Brazos	Rd., Aztec, N	M 874 10		Santa	Fe, N	lew Mo	exico 87505		Fee Leas	e – 3 Copies
DISTRICT IV	DR., SANTA PE,	NM 87505	WELL LO	CATION	AND	ACREA	GE DEDICATI	ON PLAT	AMEND	ED REPORT
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LOCATION VERIFICATION MAP



VICINITY MAP

SEC. <u>10</u> TWP.<u>25–S</u> RGE. <u>32–E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>LEA</u> DESCRIPTION <u>1650' FNL & 2630' FWL</u> ELEVATION <u>3456'</u> OPERATOR <u>POGO PRODUCING COMPANY</u> LEASE <u>COTTON DRAW UNIT</u>

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APPLICATION TO DRILL

POGO PRODUCING COMPANY COTTON DRAW UNIT # 109 UNIT "F" SECTION 10 T25S-R32E LEA CO. NM

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

- 1. Location of well: 1650' FNL & 2630' FWL SECTION 10 T25S-R32E LEA CO. NM
- 2. Ground Elevation above Sea Level: 3456' 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: 5000'

6.	Estimated tops of geologic	al markers:		
	Rustler Anhydrite	753'	Ramsey	4680'
	Salt	1072'	Ford	4780'
	Lamar Lime	4638'	Olds	4787'
	Delaware	4662'	TD .	5000'
7.	Possible mineral bearing f	ormations:		
	Delaware	0i1	Olds	Oil
	Ramsey	Oil		
	Ford	0i1		

8. Casing Program:

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<u>Hole Size</u>	Interval	OD of Casing	Weight	Thread	Collar	Grade
26"	0-40	20"	NA	NA	NA (Conductor
121"	0-815'	8 5/8"	24#	8-R	ST&C	H-40
7 7/8"	0-5000'	511	15.5#	8-R	ST&C	J-55

9. CEMENTING & CASING SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
8 5/8"	Surface	Set 815' of 85/8" 24# J-55 ST&C casing. Cement with 150 Sx. of 65/35/6 Class "C" POX/GEL, tail in with 150 Sx. of Class "C" cement + 2% CaCl, + $\frac{1}{2}$ # Flocele/Sx. Circulate cement to sutface.
51	Production	Set 5000' of 5½" 15.5# J-55 ST&C casing. Cement with 475 Sx. of Class "C" Light weight cement with 5% salt, mixed at 12.9 PPG, tail in with 250 Sx. of Class "C" cement + 8# Gilsonite/Sx. Mix at 14.1 PPG circulate cement to surface. Cement volumes may have to be adjusted if caliper logs show more is required to circulate.

10. PRESSURE CONTROL EQUIPMENT:

Exhibit "E" shows a 2000 PSI working pressure B.O.P., consisting of a stripper head instead of an annular preventor, blind rams, and pipe rams. This B.O.P. stack is being used because of Substructure height limitations of the drilling rig being used to drill this well. Pressures encountered during drilling are not expected to exceed 2000 PSI at total depth. Pogo requests permission to 3rd party test of B.O.P. B.O.P. will be installed after setting the 8 5/8" surface casing, The B.O.P. will be tested according to API specifications. Exhibit "E-1" shows a manually operated choke manifold , as no remote B.O.P. equipment will be necessary.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD
40-815'	8.4-8.7	29-34 -	NC	Fresh water spud mud use paper to control seepage.
815-5000'	10.0-10.2	29-38	NC*	Brine water add paper to control seepage and high viscosity sweeps to clean hole.

* Water loss control may be necessary in order to run logs and casing. Use starch to control water loss or a Polymer system.

APPLICATION TO DRILL

POGO PRODUCING COMPANY COTTON DRAW UNIT # 109 UNIT "F" SECTION 10 T25S-R32E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Laterolog, LDT, SNP, MICRO SFL, Gamma Ray, Caliper run from TD Back to 8 5/8" casing shoe.
- B. Run Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.
- C. No DST's are planned at this time.
- D. Cores may be taken at the advice of Geologist.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H^2S in this area. If 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 _____ 2000 ____ PSI, and

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 20 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 <u>Delaware</u> formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

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 hazzards
 - C. Proper use of safety equipment and life support systems.
 - Principle and operation of H2S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid. F.
 - Proper use of 30 minute pressure demand air pack.
- 2. H₂S Detection and Alarm Systems
 - A. H_2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
- Windsock and/or wind streamers 3.
 - 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"
- 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 location is near any dwelling a closed D.S.T. will be performed.

- 8. Drilling contractor supervisor will be required to be familiar with the effects H_2S has on tubular goods and other mechanical equipment.
- 9. If H₂S 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 H₂S scavengers if necessary.

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T25S-R32E

LEA CO. NM

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

> POGO PRODUCING COMPANY COTTON DRAW UNIT # 109 UNIT "F" SECTION 10 T25S-R32E LEA CO. NM

EXHIBIT "E-1" CHOKE MANIFOLD & CLOSING UNIT 1



CHOKE MANIFOLD

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- 1. <u>EXISTING ROADS</u>: Area roads, Exhibit "B" is a reproduction of a County General Hiway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
 - A. Exhibit "A" shows the proposed well site location as staked.
 - B. From Eunice New Mexico take State Road 207 South 2.6 miles to Delaware Basin Road, turn Right (West) follow Delaware Basin Road to the junction with State Hi-way 128, turn Right (West) go 9.5 miles to County Road #1, turn Left (South) go 4.7 miles, turn Left (East) go .4 miles turn Left (North) go approximately 350' and location is on the East side of road.
 - C. Exhibit shows the routes of flowlines and powerlines that will be constructed in order to produce this well.
- 2. PLANNED ACCESS ROADS: Approximately 400' of new road will be required.
 - A. The access road will be crowned and ditched to a 12' wide travel surface with a 40' Right-of-Way.
 - B. Gradient on all roads will be less than 5%.
 - C. Turnouts will be constructed as required or as directed by the BLM.
 - D. If needed roads will be surfaced with a minimum of 4" of caliche. This material will be obtained from a local source.
 - E. Center line for the new access road has been staked and flagged. Earthwork will be done as required by field and topographic conditions.
 - F. Colverts in the access road will be used where necessary. The road will be constructed to utilize low water crossings for drainage as dictated by the topography.
- 3. LOCATION OF EXISTING WELLS WITHIN A ONE-MILE RADIUS SHOWN ON EXHIBIT "A-1".

A. Water wells	- One approximately 2 miles North
B. Disposal wells	- Injection well 660' Southeast.
C. Drilling wells	- None known
D. Producing wells	- As shown on Exhibit "A-1"
E. Abandoned wells	- As shown on Exhibit "A-1"

4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's. Exhibit "C" shows proposed routes of roads, flowlines and powerlines.

5. LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the access roads or piped to location in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIAL:

If possible construction material will be obtained from the excavation of drill site, if additional material is needed it will be obtained from a local source and transported over the access roads as shown on Exhibit "C".

7. 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 a approved sanitary land fill:
- C. Salts remaining after completion of well will be picked up by the supplier, including broken sacks.
- D. Waste water from living quaters will be drained into holes with a minium 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 furthed drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approve disposal site. Later pips will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

8. ANCILLARY FACILITIES:

A. No camps or air strips will be constructed on location.

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the proposed well site layout.
- B. This Exhibit shows the location of reserve pit, sump pits, and living facilities.
- C. Mud pits in the active circulating system will be steel pits and the reserve pits will be unlined unless subsurface conditions encontered during pit construction indicate that a plastic liner is required to contain lateral migration.
- D. If needed the reserve pits will be lined with polyethelene. The pit liner will be no less than 6 mils thick and the liner will be extended at least 3 feet over the top of the dikes and secured in place to keep edge of liner in place.
- E. The reserve pit will be fenced on three sides and fenced with four strands of barbed wire during drilling and completionphases. The 4th side will be fenced after drilling operations are complete and the drilling rig has moved out. If the well is a producer the mud pits will remain fenced in until the mud has dried up enough to break out the pits and reclaimed according to BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE:

Rehabilitation of the location and reserve pits will be allowed to dry properly, fluids may be moved and disposed of in accordance with article 7-E as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any will be reshaped to the original configuration with provisions made to alle interfuture erosion. In case of the well completed as a producer the drilling pad will be necessary to construct production facilities. After the area has been shaped and contoured top soil from the spoil pile will be placed over the disturbed area to the extent possible so that revegetation procedures can be accomplished to comply with the BLM specifications.

If the well is a dry hole the pad and road area will be contoured to match the existing terrain. Top soil will be spread to the extent possible and revegetation will be carried out according to the BLM specifications.

Should the well be a producer the previously noted procedures will apply to those areas which are not required for production facilities.

11. OTHER INFORMATION:

- A. Topography is relatively flat with a slight dip to the Southwest withshallow drainage patterns. Vegetation consists of creosote bush, little leaf sumac, broom-snakeweed, and native grasses.
- B. Surface is owned by the U.S. Department of Interior and is administered by the Bureau of Land Management. The surface is leased to ranchers for grazing of live stock and the minerals are owned by the U.S. Government and used by oil companies for the production of oil and gas.
- C. An archaeological survey will be conducted and the results will be filed with The Bureau of Land Management Carlsbad Field office in Carlsbad NM.
- D. There are no domestic dwellings located within one mile of the location.

12. OPERATORS REPRESENTIVE:

Before construction:

During and after construction:

TIERRA EXPLORATION, INC. P.O. BOX 2188 HOBBS, NEW MEXICO 88241 JOE T. JANICA OFFICE PHONE 505-391-8503

POGO PRODUCING COMPANY P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 RICHARD WRIGHT OFFICE PHONE 432-685-8140

13. <u>CERTIFICATION</u>: 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, are true and correct, and that the work associated with the operations proposed herein will be performed by POGO PRODUCING COMPANY it's contractors/subcontractors is in the conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

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THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: POGO Producing Company Well Name & #: Cotton Draw Unit # 109

Location 1650'	_FNL& <u>2630'</u> F'	W L; Sec. <u>10</u> , T. <u>25</u> S., R. <u>32</u> E.
Lease #: <u>LC-061936</u>	County: Lea	State: <u>New Mexico</u>

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

() Lesser Prairie Chicken (stips attached)	() Flood plain (stips attached)
() San Simon Swale (stips attached)	() Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(X) The BLM will monitor construction of this drill site. Notify the (X) Carlsbad Field Office at (505) 234-5972 () Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

(X) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche upon completion of well and it is determined to be a producer.

() All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately ______inches in depth. Approximately ______ cubic yards of topsoil material will be stockpiled for reclamation.

() Other.

III. WELL COMPLETION REQUIREMENTS

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

(x) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

() A. Seed Mixture 1 (Loamy Sites) Side Oats Grama (<i>Bouteloua curtipendula</i>) 5.0 Sand Dropseed (<i>Sporobolus cryptandrus</i>) 1.0	 (X) B. Seed Mixture 2 (Sandy Sites) Sand Dropseed (Sporobolus crptandrus) 1.0 Sand Lovegrass (Eragostis trichodes) 1.0 Plains Bristlegrass (Setaria magrostachya) 2.0
() C. Seed Mixture 3 (Shallow Sites) Side oats Grama (<i>Boute curtipendula</i>) 1.0	 () D. Seed Mixture 4 (Gypsum Sites) Alkali Sacaton (Sporobollud airoides) 1.0 Four-Wing Saltbush (Atriplex canescens) 5.0

() OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

() Other

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic. Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

<u>Reclamation</u>: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

(1) Lined as specified above and

(2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be re-contoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

BLM SERIAL #: LC-061936 COMPANY REFERENCE: POGO Producing Company WELL # & NAME: Cotton Draw Unit # 109

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The see mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

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Species to be planted in pounds of pure live seed* per acre:

Species	l <u>b/acre</u>
Sand dropseed (Sporobolus cryptandrus) Sand love grass (Eragrostis trichodes)	$1.0\\1.0$
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:	POGO PRODUCING COMPANY
Well Name & No.	109 COTTON DRAW UNIT
Location:	1650' FNL & 2630' FWL – SEC 10 – T25S – R32E – LEA COUNTY
Lease:	LC-061936

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 (Setting of a conductor pipe does not constitute the spudding of a 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
 - Lea County call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612

B. There is no reported occurrence of Hydrogen Sulfide (H2S) gas in Sec 22 – T25S – R32E. The operator will have a H2S Drilling Plan in effect as a precautionary measure.

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 at <u>815</u> feet and cemented to the surface.

- 1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey (an electronic type temperature survey will be used) or 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, or 24 hours in the potash area.
- 3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours or 500 psi compressive strength (which ever is greater) after bringing cement to surface.
- 4. If cement falls back, remedial action will be done prior to drilling out that string.
- B. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>circulate cement to the surface</u>.

C. No "new" hardband drill pipe will be rotated inside the casing. Hardband drill pipe will be considered new until it has a smooth surface.

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 and API RP 53.

B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface shoe shall be <u>2M</u> 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 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.

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Pico Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office

Form C-144

June 1, 2004

Is pit or below-grade tan	ide Tank Registration or Closur k covered by a "general plan"? Yes ☐ No or below-grade tank	$\overline{\boxtimes}$
Operator: <u>POGO PRODUCING COMPANY</u> Telephon Address: <u>P. O. Box 10340</u> , Midland, TX 79702-7340	e: <u>432-685-8100</u> e-mail address: <u>wright</u>	tc@pogoproducing.com
Facility or well name: <u>Cotton Draw Unit 109</u> AP1#: <u>30-0</u>	025-37776 U/L or Otr/Otr F Sec	: 10 T 25S R 32E
County: Lea County Latitude	÷	
Surface Owner: Federal 🛛 State 🗌 Private 🗋 Indian 🗍	<u>22.00.01211</u> E0161000_ <u>102.07</u>	
<u>Pit</u>	Below-grade tank	
<u>Type:</u> Drilling X Production Disposal	Volume:bbl Type of fluid:	
Workover Emergency	Construction material:	
Lined 🖸 Unlined 🗋	Double-walled, with leak detection? Yes [] If not	
Liner type: Synthetic \square Thickness <u>12</u> mil Clay \square		, oxplain why not.
Pit Volume 16000 bbl		
······································	Less than 50 feet	(20 points)
Depth to ground water (vertical distance from bottom of pit to seasonal	50 feet or more, but less than 100 feet	(10 points)
high water elevation of ground water.)	100 feet or more X	(0 points) 0
		· · ·
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water sources.)	No X	(0 points) 0
· · · · · · · · · · · · · · · · · · ·	Less than 200 feet	(20 points)
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points)
irrigation canals, ditches, and perennial and ephemeral watercourses.)	1000 feet or more X	(0 points) 0
		0
a and 70 km	Ranking Score (Total Points)	
If this is a pit closure: (1) Attach a diagram of the facility showing the pit's your are burying in place) onsite offsite If offsite, name of facilityemediation start date and end date. (4) Groundwater encountered: No		lescription of remedial action taken includingft. and attach sample resultsft he above-described pit or below-grade tank tive OCD-approved plan of the pit or tank contaminate ground water or
Approval: PETROLEUM ENGINEER	Signature	Date: MAR 3 1 2006



Water Resources

Data Category:	Geographic Area:	
Site Information	New Mexico 🔄	go

Site Map for New Mexico

USGS 321005103402301 24S.32E.33.42241



Questions about dataNew Mexico NWISWeb Data InquiriesFeedback on this websiteNew Mexico NWISWeb MaintainerNWIS Site Inventory for New Mexico: Site Maphttp://waterdata.usgs.gov/nm/nwis/nwismap?

Retrieved on 2006-03-28 12:01:11 EST Department of the Interior, U.S. Geological Survey USGS Water Resources of New Mexico Top Explanation of terms



Water Resources

Data Category: Geographic Area: Ground Water 💉 New Mexico 🗴 go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site no list = • 321005103402301

Save file of selected sites to local disk for future upload

USGS 321005103402301 24S.32E.33.42241



Ground-water: Levels

GO



Questions about dataNew Mexico NWISWeb Data InquiriesFeedback on this websiteNew Mexico NWISWeb Maintainer

Top Explanation of terms

http://nwis.waterdata.usgs.gov/nm/nwis/gwlevels/?site_no=321005103402301

Great Circle Calculator.

By Ed Williams

You need Javascript enabled if you want this page to do anything useful! For Netscape, it's under Options/Network Preferences/Languages.

Compute true course and distance between points.

Enter lat/lon of points, select distance units and earth model and click "compute". Lat/lons may be entered in DD.DD, DD:MM.MM or DD:MM:SS.SS formats.

Note that if either point is very close to a pole, the course may be inaccurate, because of its extreme sensitivity to position and inevitable rounding error.

	mpu		
Lat1		Lon1	
32:10:05	N	103:40:23	W
Lat2		Lon2	
32:08:51.24	N	103:39:44.89	W

Innut Data

Output

Course 1-2	Course 2-1	Distance
156.372130	336.377764	1.341792165

Distance Units: nm 🖸 Earth model: Spherical (1'=1nm)

Compute Reset

Compute lat/lon given radial and distance from a known point

Enter lat/lon of initial point, true course and distance. Select distance units and earth model and click "compute". Lat/lons may be entered in DD.DD, DD:MM.MM or DD:MM:SS.SS formats.

Note that the starting point cannot be a pole.

	Inpu	t data	
Lat1		Lon1	
0:00.00	NV	0:00.00	W
Course 1-2		Distance 1-2	
360			

POGO Producing Company Cotton Draw Unit 109 Approximate Pit Dimensions

F/10/25S/32E, Lea County, New Mexico



Pit will be lined with 12 mil Black plastic w/ UV protection. Pit walls are 6 ft to 8 ft wide. Pit is 8 ft deep below ground level plus 2 ft walls Pit walls are 2 ft above ground level. Caliches mined from pit used to make Well Pad. Fresh Water volume to ground level = ± 7950 bbls Brine Water volume to ground level = ± 7730 bbls 12 inch Flare line laid on gradual descending graded ROW away from rig to avoid fluid trapping Fresh water well = (Nad 27) 32° 10' 05" N & 103° 40' 23" W "Published data" This well produces from a depth greater than 100 ft.

Pit equals approx 16000 bbls

•

Mull, Doni	na, EMNRD	
From:	Phillips, Dorothy, EMNRD	Sent: Fri 3/31/2006 10:14 AM
То:	Mull, Donna, EMNRD	
Cc:		
Subject:	RE: Financial Assurance Requirement	
Attachmen	ts:	

From: Mull, Donna, EMNRD
Sent: Friday, March 31, 2006 7:54 AM
To: Phillips, Dorothy, EMNRD
Cc: Macquesten, Gail, EMNRD; Sanchez, Daniel J., EMNRD
Subject: Financial Assurance Requirement

Dorothy, Is the Financial Assurance Requirements OK for these Operators?

Range Operating NM Inc (224588) BTA Oil Producers (3002) Marbob Energy Corp (14049) ROCA Operating Inc (152374) McGowan Working Partners Inc (220397) Apache Corp (873) Manzano LLC (231429) Pogo Producing Co (17891)

Please let me know. Thanks and have a nice day. Donna