DISTRICT I 1625 N. French Dr., Hobbs, NM 88240

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised October 12, 2005

DISTRICT II 1301 W. Grand Avenue, Artesia, NM 88210

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

Submit to Appropriate District Office State Lease - 4 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 39360	Pool Na LIVINGSTON RIDGE-DELAW	
Property Code		roperty Name ERAL "12"	Well Number
ogrid No. 017891	Operator Name POGO PRODUCING COMPANY		

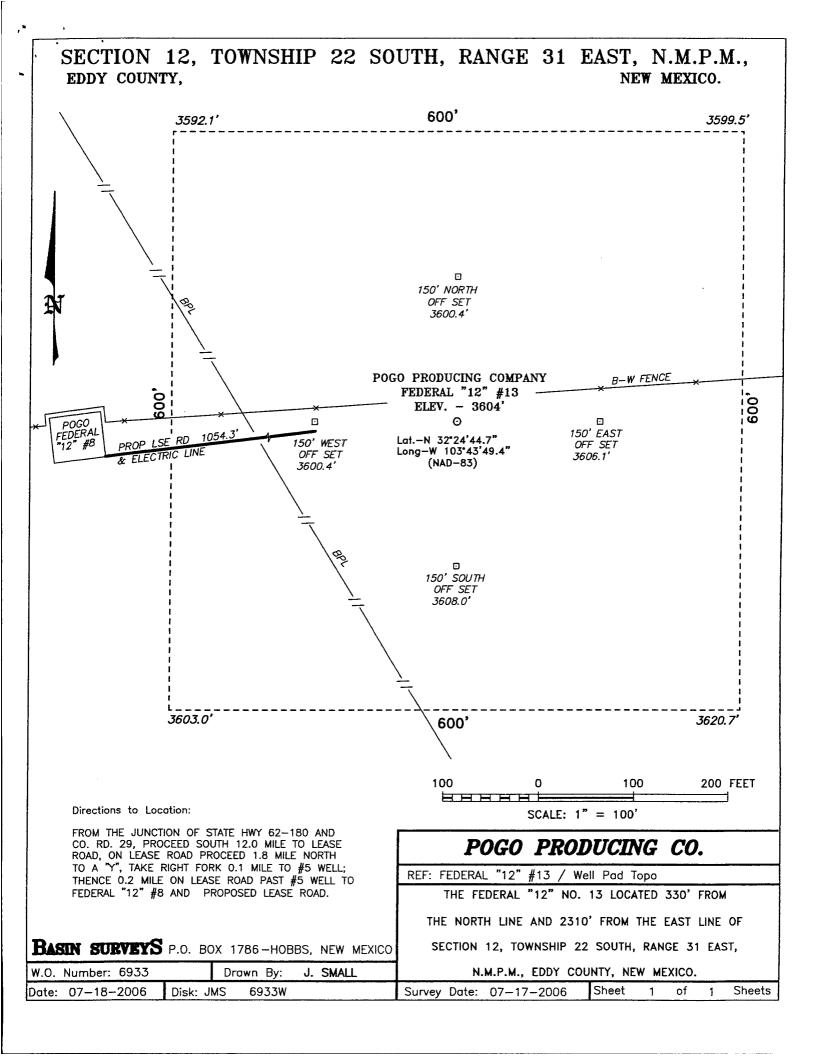
Surface Location

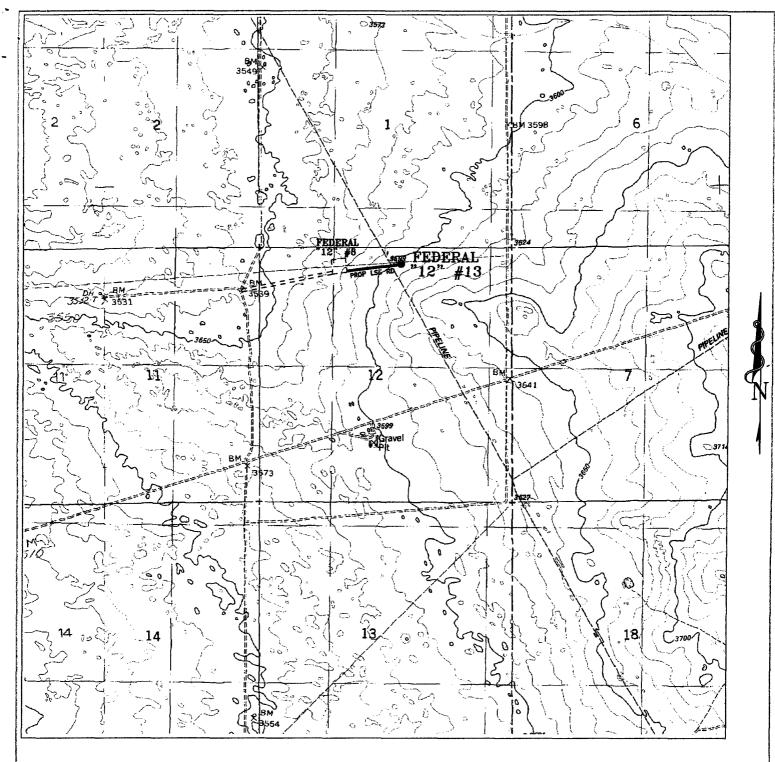
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	12	22 S	31 E		330	NORTH	2310	EAST	EDDY

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 Acre	Joint o	r Infill C	onsolidation	Code Or	der No.				
40									

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





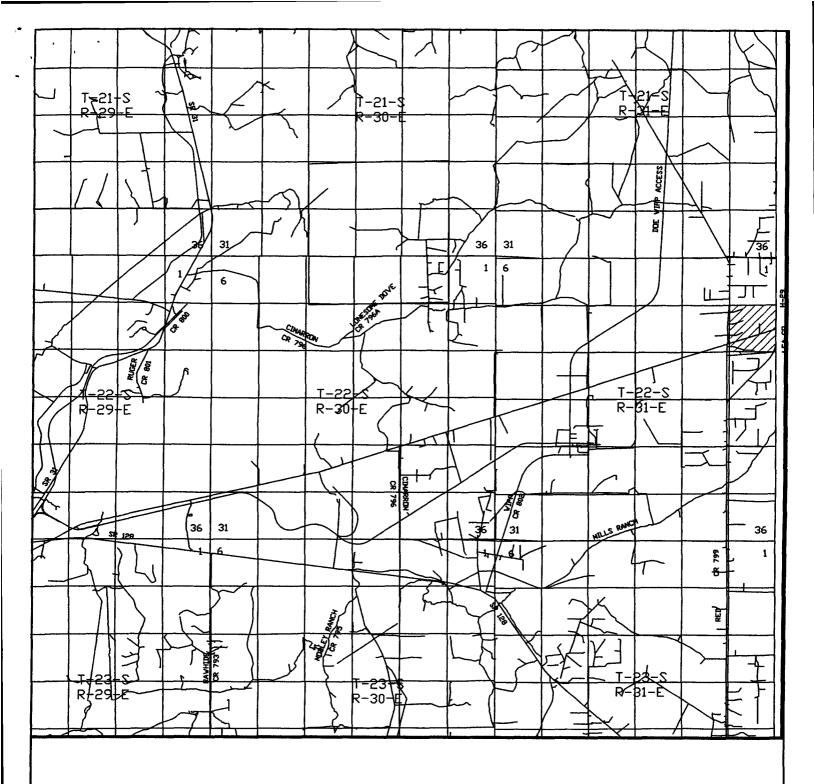
FEDERAL "12" #13 Located at 330' FNL and 2310' FEL Section 12, Township 22 South, Range 31 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 - Office (505) 392-3074 - Fax basinsurveys.com

W.O. Number: JMS 6933T Survey Date: 07-17-2006 Scale: 1" = 2000'Date: 07-18-2006

POGO PRODUCING COMPANY



FEDERAL "12" #13 Located at 330' FNL and 2310' FEL Section 12, Township 22 South, Range 31 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393—7316 — Office (505) 392—3074 — Fax basinsurveys.com

W.O. Number:	JMS 6933T
Survey Date:	07-17-2006
Scale: 1" = 2	MILES
Date: 07-18-	-2006

POGO PRODUCING COMPANY

APPLICATION TO DRILL

POGO PRODUCING COMPANY FEDERAL "12"#13 UNIT "B" SECTION 12 T22S-R31E EDDY CO. NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

- 1. Location: 330' FNL & 2310' FEL SECTION 12 T22S-R31E EDDY CO.NM
- 2. Elevation above sea level: 3604' GR
- 3. Geologic name of surface formation:
- 4. Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
- 5. Proposed drilling depth: 8600
- 6. Estimated tops of geological markers:

Basal Anhydrite	4210	Cherry Canyon	5399
Delaware Lime	4499 '	Brushy Canyon	6650 '
Bell Canyon	4568 '	Bone Spring	8424

7. Possible mineral bearing formation:

Brushy Canyon 0il
Bone Spring 0il

8. Casing program:

Hole size	Interval	OD casing	Weight	Thread	Collar	Grade
26"	0-40	20"	NA	NA	NA	Conductor
17½"	0-800'	13 3/8"	48#	8-R	ST&C	H-40
11"	0-4350'	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-8600'	5½''	17# 15.5#	8-R	LT&C	J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY FEDERAL "12"#13 UNIT "B" SECTION 12 T22S-R31E EDDY CO. NM

9. CEMENTING & CASING SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 800' of 13 $3/8$ " $48\#$ H-40 ST&C casing. Cement with 700 Sx. of $65/35/6$ Class "C" POZ/GEL, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement.
8 5/8"	.Intermediate	Set 4350' of 8 $5/8$ " $32\#$ J-55 ST&C casing. Cement with 1000 Sx. of Class "C" POZ/GEL + 5% Salt, tail in with 200 Sx. of Class "C" cement + 2% CaCl circulate cement.
5½"	Production	Set 8600' of $5\frac{1}{2}$ " $17\#$ & $15.5\#$ casing as follows: 2600' of $5\frac{1}{2}$ " $17\#$ J-55 LT&C, 5000' of $5\frac{1}{2}$ " $15.5\#$ J-55 LT&C, 1000' Of $5\frac{1}{2}$ " $17\#$ J-55 LT&C casing. Cement in 3 stages DV Tools @ $5800'\pm$ & $3700'\pm$. Cement 1st stage with 650 Sx. of Class "H" Premium Plus cement, cement 2nd stage with 600 Sx. of Class "C" $+8\#$ PS of Gilsonite, cement 3rd stage with 400 Sx. of $65/35/6$ Class "C" POZ/GEL, tail in with 100 Sx. of Class "C" cement $+1\%$ CaCl, circulate cement to surface.

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 4250 PSI at total depth. Popo requests permission to 3rd party test of B.O.P., after setting intermediate casing at 4350'. 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:

less.

and casing if so reduce water loss to 10 cc or

MUD WT.	VISC.	FLUID LOSS	TYPE MUD
8.4-8.7	29-32	NC	Fresh water use paper to control seepage.
10.0-10.2	29–38	NC .	Brine water use paper to control seepage, use high viscosity sweeps to clean hole.
8.4-8.7	29-40	NC*	Fresh water use high viscosity sweeps to clean hole, and Dris/ Pac system if water loss is needed to run logs and/or casing
	8.4-8.7 10.0-10.2 8.4-8.7	8.4-8.7 29-32 10.0-10.2 29-38 8.4-8.7 29-40	8.4-8.7 29-32 NC 10.0-10.2 29-38 NC

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/or casing the viscosity and water loss may have to be adjusted in order to meet these needs.

APPLICATION TO DRILL

POGO PRODUCING COMPANY FEDERAL "12"#13 UNIT "B" SECTION 12 T22S-R31E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Induction, SNP LDT. MSFL, Gamma Ray, and Caliper from TD back to the 8 5/8" casing shoe.
- B. Run Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.
- C.Rig up mud logger on hole at 4350± and keep on hole to TD.
- D. No DST's or cores are planned at this time.

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 $4400\pm$ PSI, and Estimated BHT 185° .

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 $\frac{28}{2}$ days. If production casing is run then an additional $\frac{30}{2}$ 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>Bone Spring</u> formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

- 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.
 - D. 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. 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 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.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

- 8. Drilling contractor supervisor will be required to be familiar with the effects $\rm H_2S$ 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.

POGO PRODUCING COMPANY FEDERAL "12" #13 UNIT "B" SECTION 12 T22S-R31E EDDY CO. NM

- 1. EXISTING AND PROPOSED ROADS: Area maps: Exhibit "B" is a reproduction of a County General Hi-way map showing access roads to the location. Exhibit "C" is a reproduction of a USGS Topographic map showing existing roads in close proximity to the location and the proposed access roads. All existing roads will be maintained in a condition equal to or better than their current conditions. All new roads will be constructed to BLM specifications.
 - A. Exhibit "A" shows the location of the proposed well site as staked.
 - B. From Hobbs New Mexico take U.S. Hi-way 62-180 West toward Carlsbad New Mexico, go 38± miles to CR-29, turn Left (South) go 10± miles to pipeline road, turn Right (West) follow pipeline road 1.1± miles, turn Right (North) go .75 ± miles, Right (East) follow road to well # 8, continue 1000' to location.
 - C. Exhibit "C" is a topographic map showing existing roads, proposed roads, proposed flowlines, and proposed powerlines.
- 2. PLANNED ACCESS ROADS: Approximately 1000' of new road will be required.
 - A. The access road will be crowned and ditched to a 12' wide traveled surface with a 40' Right-Of-Way.
 - B. Gradient on all roads will be less than 5% if possible.
 - C. Turn-outs will be constructed where necessary.
 - D. If needed roads will be surfaced to the BLM requirements with material obtained from a local source.
 - E. Center line of new road will be flagged.
 - F. The new road will be constructed to utilize low water crossings where drainage currently exists, and culverts will be installed where necessary.
- 3. EXHIBIT "A-1" SHOWS THE BELOW LISTED TYPE WELLS WITHIN A 1 MILE RADIUS:
 - A. Water wells Water well 2.5 miles South west of location
 - B. Disposal wells None known
 - C. Drilling wells None known
 - D. Producing wells As shown on Exhibit "A-1"
 - E. Abandoned wells As shown on Exhibit "A-1"

POGO PRODUCING COMPANY FEDERAL "12" #13 UNIT "B" SECTION 12 T22S-R31E EDDY CO. NM

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. Possible routes of pipelines, flowlines and powerlines are shown on Exhibit "C".

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.

POGO PRODUCING COMPANY FEDERAL "12" #13 UNIT "B" SECTION 12 T22S-R31E EDDY CO. NM

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 alleviate furture 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.

POGO PRODUCING COMPANY FEDERAL "12" #13 UNIT "B" SECTION 12 T22S-R31E EDDY CO. NM

11. OTHER INFORMATION:

- A. Environmental setting: This project is located on the Southwest side of a low rise. Soils are sandy with caliche lag gravel, vegetation consists of native grasses, snakeweed, and mesquite.
- B. The surface and minerals are owned by The U.S. Department of Interior and is administered by The Bureau of Land Management. The surface is used to graze livestock and for the production of oil and gas.
- C. An archaeological survey will be conducted on the roads and the location and the results will be filed in The Roswell Field Office.
- D. There are no dwellings in the near vicinity of this location.

12. OPERATOR'S REPRESENTIVES:

BEFORE CONSTRUCTION:

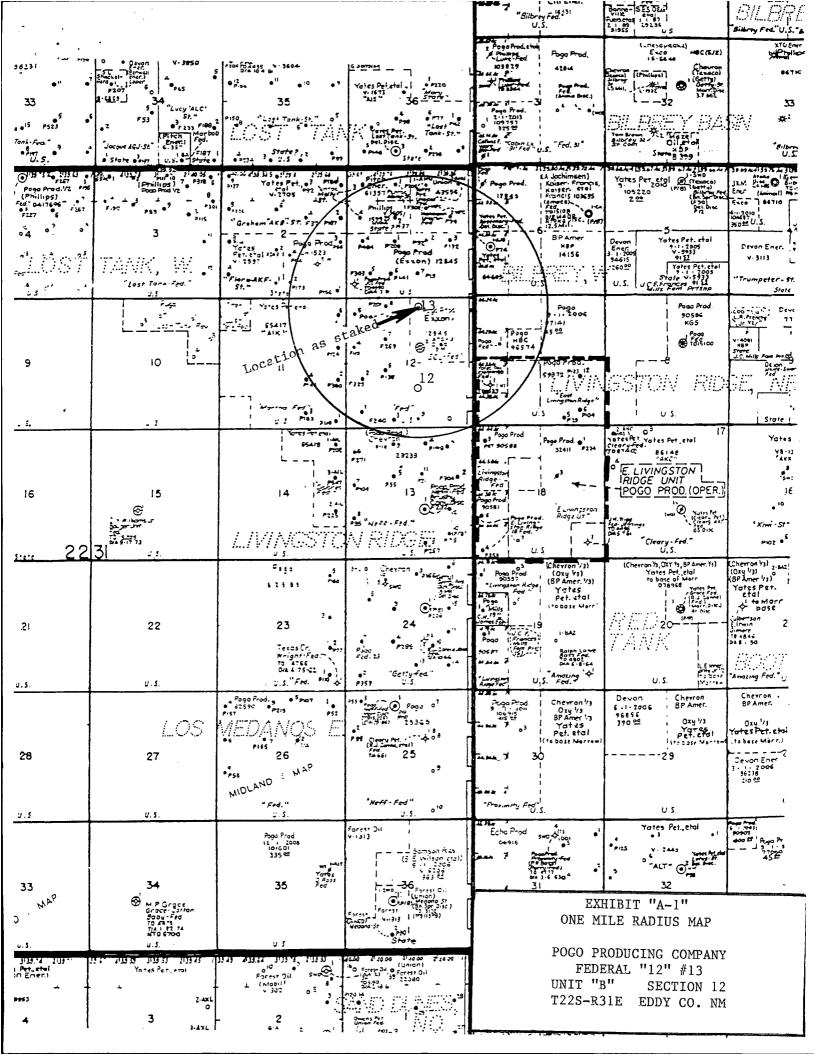
DURING AND AFTER CONSTRUCTION:

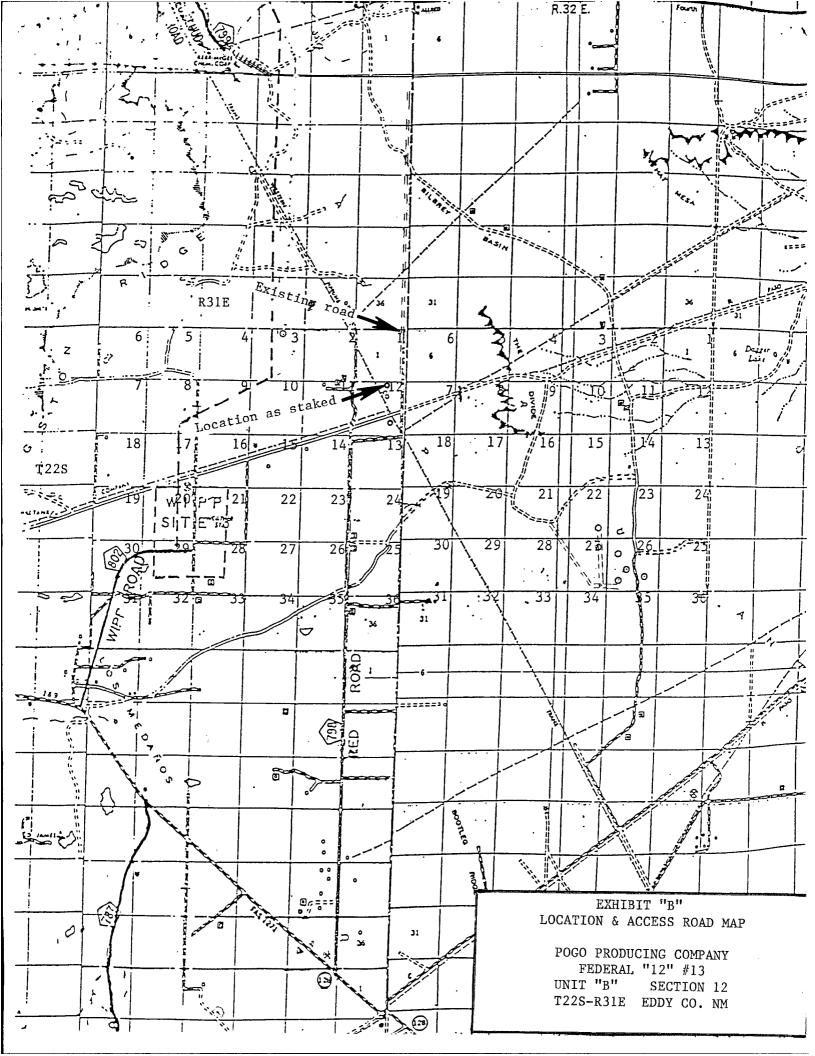
TIERRA EXPLORATION, INC
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
OFFICE PHONE 505-391-8503
CELL PHONE 505-390-1598

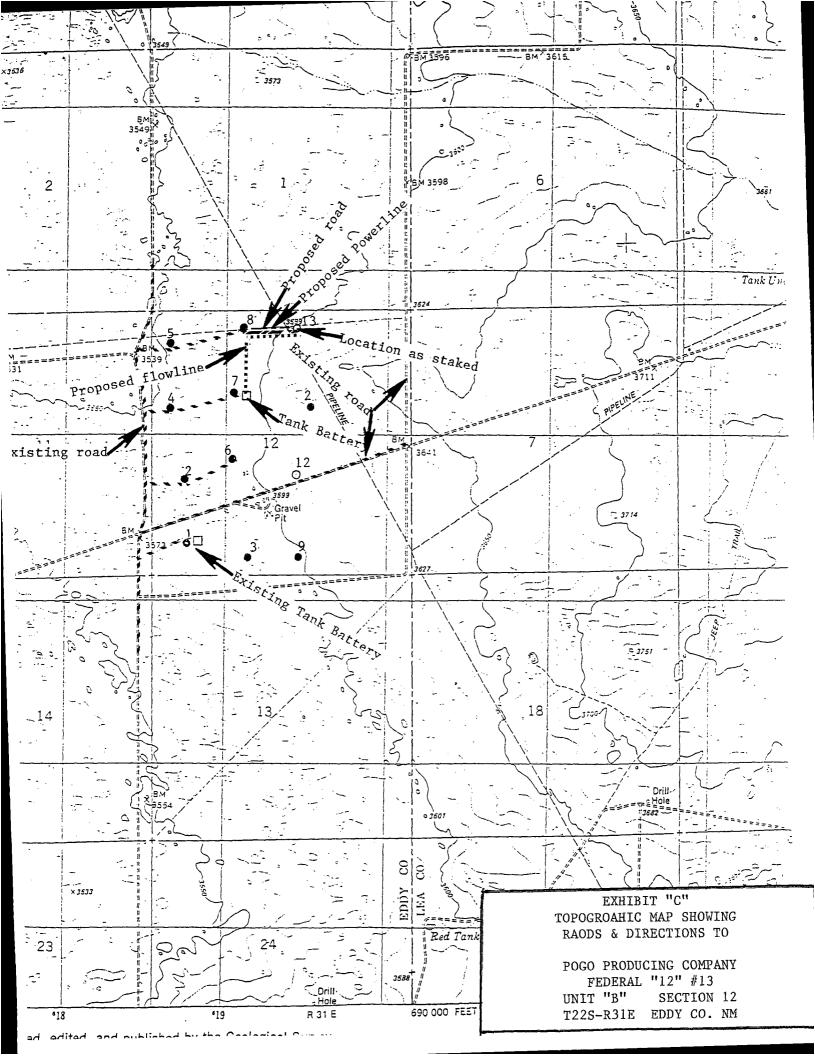
POGO PRODUCING COMPANY
P.O. BOX 10340
MIDLAND, TEXAS 79702-7340
MR. RICHARD WRIGHT 432-685-8140
OFFICE 432-685-8100

13. CERTIFICATION: I hereby certify that I or persons under my supervision have inspected the proposed drill site and access route, that I am fimiliar with the conditions which currently exist, that the statements made in this plan are to the best of my knlwledge, 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 the 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.

NAME	: Joe T. Janica Jan T. Januca
DATE	: 09/05/06
TITLE	: Agent







LOCATION SPECIFICATIONS AND RIG LAYOUT FOR EARTH PITS **OUTSIDE PIT** INSIDE PIT 100 RESERVE SHOULD BE PUSHED OUT 5' DEEP 5' DEEP MUC RIG 201.12 PUMP ECOM 1001 PIPE PACKS H ÷ POGIOUS Ε R Α̈́Ε TANK CELLAR 4X6X4 BOX (Cellar should not be dug with dozer) 1CCESS ROAD TOOL PUSHER TRAILER. Cellar can be 4X4X4 if using a screw-on wellhead Working Pits dug 5' below ground level Wind Direction Indicators (wind sock or streamers) Δ H2S Monitors (alarms at bell nipple and shale shaker) Location Spa EXHIBIT "D" O Briefing Areas RIG LAY OUT PLAT O Remote BOP Closing Unit POGO PRODUCING COMPANY Sign and Condition Flags FEDERAL "12" #13 UNIT "B" SECTION 12 T22S-R31E EDDY CO. NM

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

POGO PRODUCING COMPANY FEDERAL "12" #13 UNIT "B" SECTION 12 T22S-R31E EDDY CO. NM

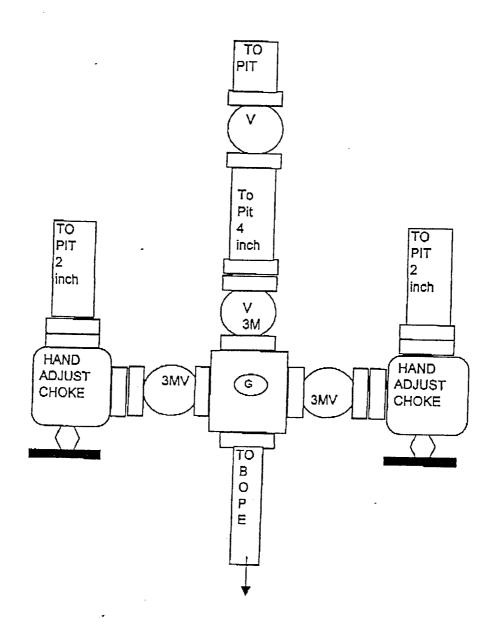


EXHIBIT "E-1"
CHOKE MANIFLOD & CLOSING UNIT

POGO PRODUCING COMPANY FEDERAL "12" #13 UNIT "B" SECTION 12 T22S-R31E EDDY CO. NM

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

	Vell Name & #: <u>Federal 12 #13</u> 12, T22S., R31E.
Lease #: NM-12845 County: Eddy State: New Mexico	
The Special stipulations check marked below are applicable to the abconditioned upon compliance with such stipulations in addition to the General Requirements, a copy of which is available from a Bureau of OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PU	General Requirements. The permittee should be familiar with the Land Management office. EACH PERMITTEE HAS THE RIGHT
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	
(x) Lesser Prairie Chicken (stips attached) () Flood () San Simon Swale (stips attached) () Other	d plain (stips attached)
II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO D	RILLING
(x) The BLM will monitor construction of this drill site. Notify the (505) 393-3612, at least 3 working days prior to commencing constru	
(\mathbf{x}) Roads and the drill pad for this well must be surfaced with $\underline{}$ determined to be a producer.	inches of compacted caliche upon completion of well and it is
() All topsoil and vegetation encountered during the construction of resurfacing of the disturbed area after completion of the drilling opera in depth. Approximatelycubic yards of topsoil material will be	ation. Topsoil on the subject location is approximatelyinches
(x) Other. V-Door West Southwest (Reserve pits to the South So	outheast).
III. WELL COMPLETION REQUIREMENTS	
() A Communitization Agreement covering the acreage dedicated to date of the agreement must be prior to any sales.	the well must be filed for approval with the BLM. The effective
(x) Surface Restoration: If the well is a producer, the reserve pit(s) to a slope of 3:1 or less. All areas of the pad not necessary for production surrounding terrain, and topsoil must be re-distributed and re-seeded with the following seed mixture, in pounds of Pure Live Seed (PLS),	ction must be re-contoured to resemble the original contours of the with a drill equipped with a depth indicator (set at depth of ½ inch)
() A. Seed Mixture 1 (Loamy Sites) Side Oats Grama (Bouteloua curtipendula) 5.0 Sand Dropseed (Sporobolus cryptandrus) 1.0 Plains lovegrass (Eragrostis intermedia) 0.5	(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 (Bouteloua curtipendula) 5.0 Green Spangletop (Leptochloa dubia) 2.0 Plains Bristlegrass (Setaria magrostachya) 1.0	() D. Seed Mixture 4 (Gypsum Sites) Alkali Sacaton (Sporobolus 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 - Novembake advantage of available ground moisture.	ber 15, before freeze up, or early as possible the following spring to
() 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.

PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

On the lands described below:

T. 22 S., R. 31 E Section 12: ALL

For the purpose of: Protecting Prairie Chickens:

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 15 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a.m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks know at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

CONDITIONS OF APPROVAL - DRILLING

Well Name & No.

Federal 12 # 13

Operator's Name:

POGO Producing Co

Location:

2310' FEL, 330' FNL, SEC 12, T22S, R31E, Eddy County, NM

Lease:

NM-12845

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at 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: 20 inch 13 3/8 inch 8 5/8 inch, 5 1/2 inch
- C. BOP tests
- 2. A Hydrogen Sulfide (H2S) Drilling Plan should be activated prior to drilling into the N/A Formation. A copy of the plan shall be posted at the drilling site.
- 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 covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.
- 7. 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. The ____inch surface casing shall be set _ABOVE THE SALT, AT LEAST 25 feet INTO THE RUSTLER ANHYDRITE @ APPROXIMATELY 800 FEET , below usable water and 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 5/8 inch salt protection casing is <u>CIRCULATE</u> <u>CEMENT TO THE SURFACE</u>. This casing string will be set no less than 100 feet below the base of the salt, 25 feet into the Lamar limestone @ approximately 4475 and no more than 600 feet below the base of the salt, but above any productive reservoirs.
- 3. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>cement shall</u> <u>CIRCULATE TO THE SURFACE.</u>
- 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. 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 3/8 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.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) is 2000 psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- A variance to test the _____ to the reduced pressure of ____psi with the rig pumps is approved.
- The tests 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 a safe workman-like manner. Hard line connections shall be required.

Engineers can be reached at 505-706-2779 for any variances that might be necessary.

BLM Lease #: NM-12845

Company Reference: Pogo Producing Well # & Name: Federal 12 #13

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS CARLSBAD FIELD OFFICE

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

- A. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- B. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
- C. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et. seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- D. If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil of other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all

damages to Federal lands resulting there from the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

E. The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times.

The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

F. The Holder shall ensure that the entire right-of-way, including the driving surface, ditching and drainage control structures, road verges and any construction sites or zones, will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle and salt cedar. The Holder agrees to comply with the following stipulations:

ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

<u>X</u>	_Ditching will be required on both sides of the roadway as shown on the
	attached map or as staked in the field.
	Flat-blading is authorized on segment(s) delineated on the attached map

3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, out-sloping, in-sloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL FOR TURNOUT DITCHES

Percent slope	Spacing interval				
0% - 4%	400' - 150'				
4% - 6%	250' - 125'				
6% - 8%	200' - 100'				
8% - 10%	150' - 75'				

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

 \square 400 foot intervals.

X 200 foot intervals.

locations staked in the field as per spacing intervals above.

locations delineated on the attached map.

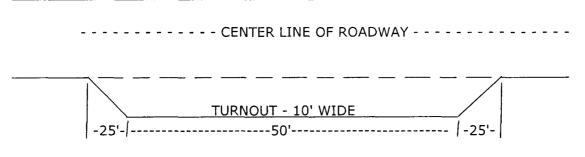
B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).

C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

Example: 4% slope: spacing interval = 400 + 100 = 200 feet

4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



STANDARD TURNOUT - PLAN VIEW

5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

A sales contract for the removal of mineral materials (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to using any such mineral material from public lands. Contact the BLM solid minerals staff for the various options to purchase mineral material.

6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

10. SPECIAL STIPULATIONS:

BLM Lease Number: NM-12845 Company Reference: Pogo Producing Well # & Name: Federal 12 #13

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
- a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
- b. Activities of other parties including, but not limited to:

- (1) Land clearing.
- (2) Earth-disturbing and earth-moving work.
- (3) Blasting.
- (4) Vandalism and sabotage.
- c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6.	All	consti	ruction and	l maintenance	activity will	be cor	nfined to	the aut	horized	right-o	f-way
wi	dth	of	25	feet.							

- 7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.
- 8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline will be "snaked" around hummocks and dunes rather then suspended across these features.
- 9. The pipeline shall be buried with a minimum of <u>24</u> inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.
- 10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a

fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

- 11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
- 12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
- 13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
- 14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
- 15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his hehalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.
- 16. Special Stipulations:

BLM Lease Number: NM-12845 Company Reference: Pogo Producing Well No. & Name: Federal 12 #13

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
- 5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines," Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large

perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

- 6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
- 8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.
- 9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.
- 10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.