

OCD-ARTESIA

30-015-35311

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

| | | |
|---|-------------------------------|---|
| 1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> | | 5. LEASE DESIGNATION AND SERIAL NO. NM-38463 |
| b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/> | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME |
| 2. NAME OF OPERATOR Pogo Producing Company | | 7. UNIT AGREEMENT NAME |
| 3. ADDRESS OF OPERATOR P.O.Box 10340, Midland, Texas 79702 | | 8. FARM OR LEASE NAME Pure Gold "B" 17241 |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 990' FSL & 2303' FWL of Section 20 At proposed prod. zone 1950' CARLSBAD CONTROLLED WATER BASIN Same | | 9. WELL NO. 18 |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 18 miles east of Loving, New Mexico | | 10. FIELD AND POOL, OR WILDCAT Sand Dunes Delaware, West |
| 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 990' | 16. NO. OF ACRES IN LEASE 640 | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 20, T-23S, R-31E |
| 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1320' | 19. PROPOSED DEPTH 8150' | 12. COUNTY OR PARISH 13. STATE Eddy Co. N.M. |
| 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3336' Ground Level | | 17. NO. OF ACRES ASSIGNED TO THIS WELL 40 |
| | | 20. ROTARY OR CABLE TOOLS Rotary |
| | | 22. APPROX. DATE WORK WILL START* Upon Approval |

| PROPOSED CASING AND CEMENTING PROGRAM | | | | |
|---------------------------------------|----------------|-----------------|---------------|-------------------------|
| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
| 17 1/2" | 13 3/8" | 54.5# | 550' | Sufficient to circulate |
| 13 3/8" | 8 5/8" | 24 & 32# | 4050' | Sufficient to circulate |
| 7 7/8" | 5 1/2" | 15.5 & 17# | 8150' | 500 sx |

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

SEE ATTACHED FOR: SUPPLEMENTAL DRILLING DATA
BOP SKETCH
SURFACE USE AND OPERATIONS PLAN

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNATURE Juan M. C. Patel Jr. TITLE Agent DATE 7/5/95
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY Linda S.C. Rundell TITLE STATE DIRECTOR DATE DEC 19 2006
CONDITIONS OF APPROVAL, IF ANY: _____

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Title 18 U.S.C. Section 1001, makes it a crime under the United States any false, fictitious or fraud

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

APPROVAL FOR 1 YEAR

to any department or agency of the within its jurisdiction.

DISTRICT I
1625 N. FRENCH DR., HORBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| | | |
|---------------|--|--|
| API Number | Pool Code S3815 | Pool Name Sand Dunes; Delaware, WEST |
| Property Code | Property Name PURE GOLD B | Well Number 18 |
| OGRID No. | Operator Name POGO PRODUCING COMPANY | Elevation 3335' |

Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| N | 20 | 23-S | 31-E | | 660 | SOUTH | 1980 | WEST | EDDY |

Bottom Hole Location If Different From Surface

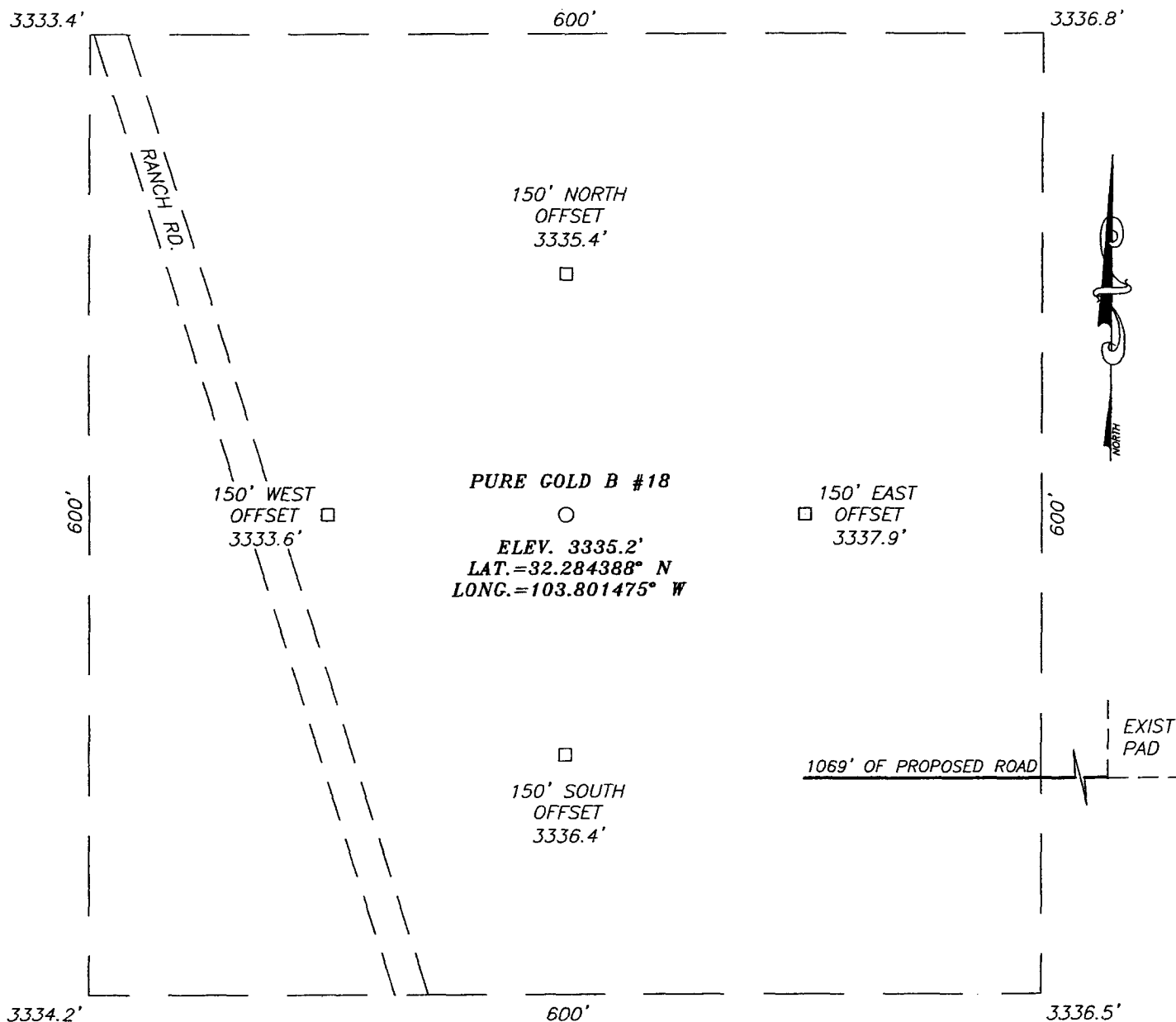
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| | | | |
|------------------------------|-----------------|--------------------|-----------|
| Dedicated Acres 40 | Joint or Infill | Consolidation Code | Order No. |
|------------------------------|-----------------|--------------------|-----------|

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

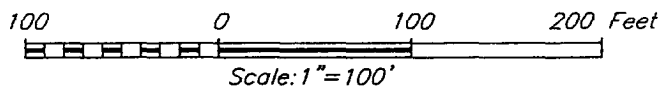
| | | | | | |
|--|--|--|--|---|--|
| <p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=467585.3 N X=664363.4 E</p> <p>LAT.=32.284388° N LONG.=103.801475° W</p> | | | | <p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>[Signature]</i> Date R. Scott McDaniel Printed Name</p> | |
| | | | | <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>JULY 25, 2006</p> <p>Date Surveyed REV: 09/26/06 JR</p> <p>Signature & Seal of Professional Surveyor <i>[Signature]</i> 9/26/06 06.11.12093</p> <p>Certificate No. GARY EIDSON 12641 RONALD J. EIDSON 3239</p> | |

SECTION 20, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #128 (JAL HWY.) AND CO. RD. #787 (TWIN WELLS RD.), GO SOUTHEAST ON ST. HWY. #128 APPROX. 1.1 MILES. TURN RIGHT (THROUGH CATTLE GUARD), AND GO SOUTH APPROX. 0.3 MILES. TURN RIGHT AND GO WEST APPROX. 0.4 MILES TO THE PURE GOLD B #1 WELL. FOLLOW PROPOSED ROAD APPROX. 1069 FEET WEST TO THIS LOCATION.



POGO PRODUCING COMPANY

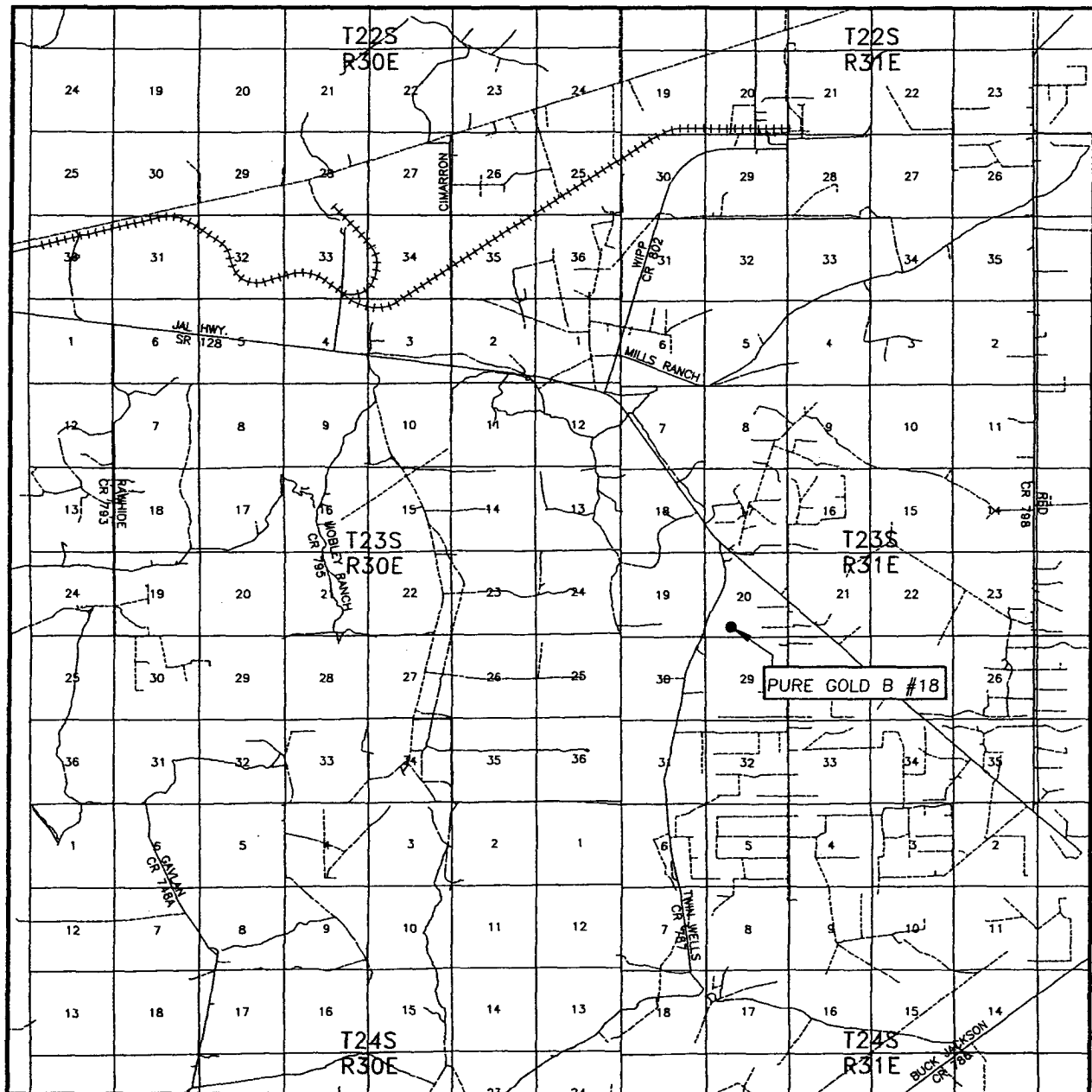
PURE GOLD B #18
 LOCATED 660 FEET FROM THE SOUTH LINE
 AND 1980 FEET FROM THE WEST LINE OF SECTION 20,
 TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

| | |
|-------------------------|---------------------|
| Survey Date: 07/25/06 | Sheet 1 of 1 Sheets |
| W.O. Number: 06.11.1209 | Dr By: J.R. |
| Date: 08/03/06 | Disk: CD#6 |
| 06131540 | Scale: 1"=100' |



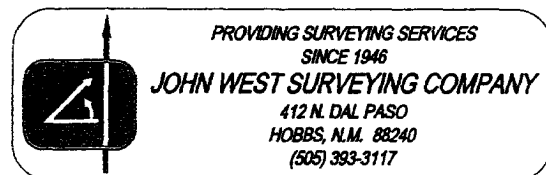
PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 393-3117

VICINITY MAP

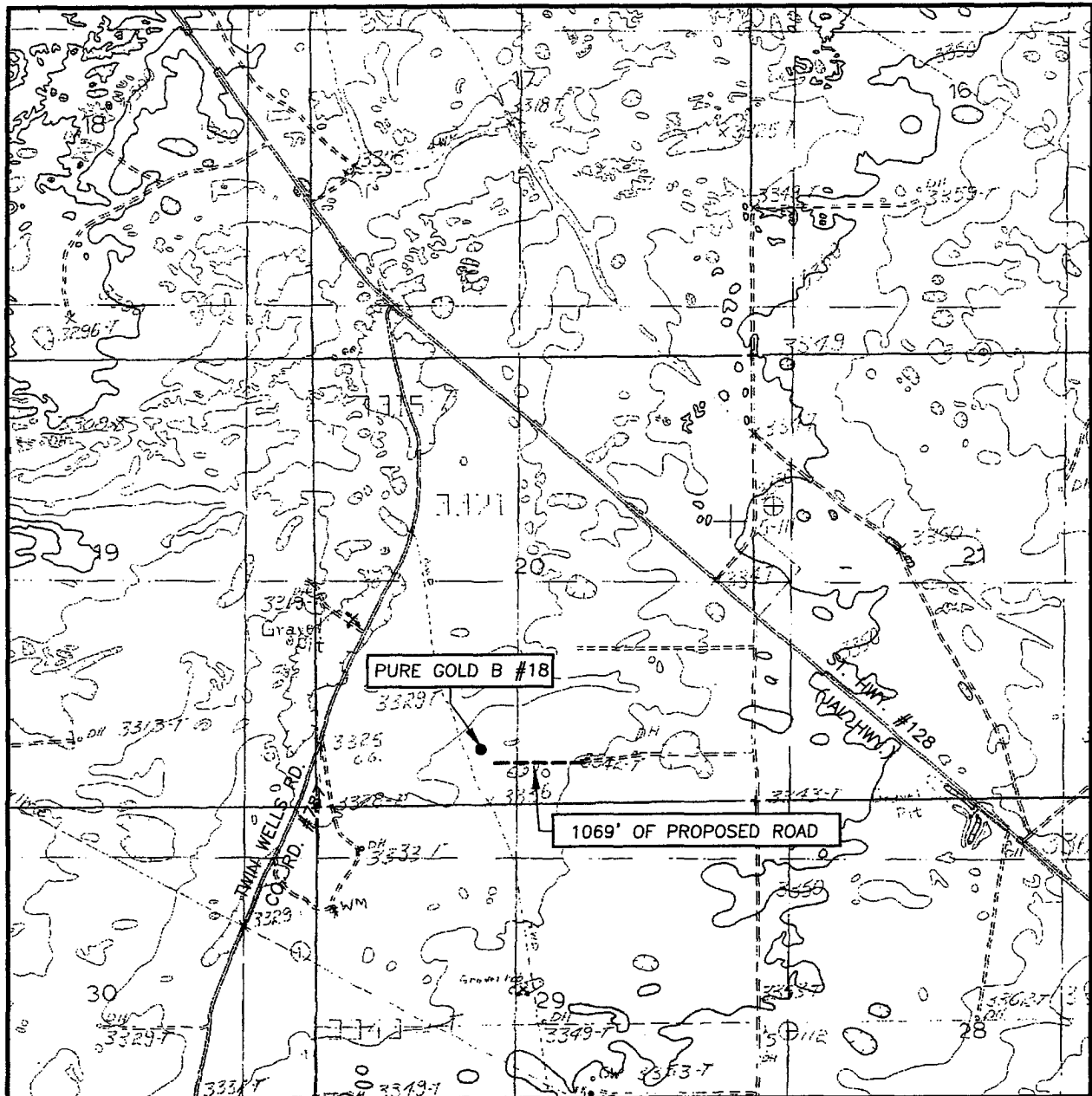


SCALE: 1" = 2 MILES

SEC. 20 TWP. 23-S RGE. 31-E
 SURVEY N.M.P.M.
 COUNTY EDDY STATE NEW MEXICO
 DESCRIPTION 660' FSL & 1980' FWL
 ELEVATION 3335'
 OPERATOR POGO PRODUCING COMPANY
 LEASE PURE GOLD B



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
LOS MEDANOS, N.M. - 10'

SEC. 20 TWP. 23-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

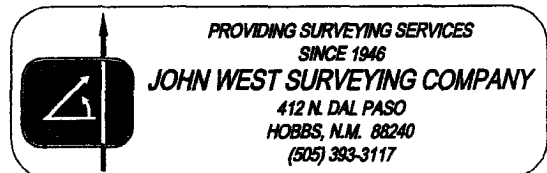
DESCRIPTION 660' FSL & 1980' FWL

ELEVATION 3335'

OPERATOR POGO PRODUCING COMPANY

LEASE PURE GOLD B

U.S.G.S. TOPOGRAPHIC MAP
LOS MEDANOS, N.M.



SUPPLEMENTAL DRILLING DATA

POGO PRODUCING COMPANY
PURE GOLD "B" WELL No. 18

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

| | |
|---------------|-------|
| Anhydrite | 550' |
| Delaware | 4100' |
| Cherry Canyon | 5000' |
| Brushy Canyon | 6300' |

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONE:

| | |
|---------------|-----|
| Brushy Canyon | Oil |
|---------------|-----|

4. PROPOSED CASING AND CEMENTING PROGRAM:

| <u>CASING SIZE</u> | <u>SETTING DEPTH</u> | | <u>WEIGHT</u> | <u>GRADE</u> | <u>JOINT</u> |
|--------------------|----------------------|-----------|---------------|--------------|--------------|
| | <u>FROM</u> | <u>TO</u> | | | |
| 13 3/8" | 0 | 550' | 54.5# | J-55 | ST&C |
| 8 5/8" | 0 | 1000' | 32 # | J-55 | ST&C |
| " | 1000' | 2200' | 24 # | J-55 | ST&C |
| " | 2200' | 4050' | 32 # | J-55 | ST&C |
| <hr/> | | | | | |
| 5 1/2" | 0 | 1000' | 17 # | J-55 | LT&C |
| " | 1000' | 6000' | 15.5 # | J-55 | LT&C |
| " | 6000' | 8150' | 17 # | N-80 | LT&C |

MINIMUM DESIGN FACTORS: Collapse 1.25 Burst 1.1 Tension 1.7

13 3/8" casing to be cemented with 300 sacks of Light cement tailed in with 200 sacks of Class "C" cement with 1% CaCl. Cement to circulate.

8 5/8" casing to be cemented with 1000 sacks of Light cement with 10% salt, tailed in with 200 sacks of Class "C" cement with 1% CaCl. Cement to circulate.

5 1/2" casing to be cemented with approximately 500 sacks of Light cement followed by 700 sacks of Class "H" with the top of the Class "H" calculated to be at or above the shoe of the intermediate casing. If need for a stage tool is indicated, it will be positioned to best suit hole conditions at the time casing is run. Cement to circulate.

Cement may have lost circulation or other additives, depending on hole conditions when casing is run.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling the 12 1/4" hole, will be either a 3,000 psi working pressure double ram type preventer or a 3,000 psi working pressure annular type preventer.

Blowout prevention equipment, while drilling below the 8 5/8" casing seat, will be a 3,000 psi working pressure BOP stack. A BOP sketch is attached.

6. CIRCULATING MEDIUM:

Surface to 550 feet: Fresh water spud mud. Viscosity 30 to 36 as required for hole cleaning.

550 feet to 4050 feet: Brine conditioned as necessary for control of viscosity. Weight 9.8 to 10. PH -9 to 10. Viscosity 32 to 36. Paper sweeps for hole cleaning. LCM may be used for seepage.

4050 feet to TD: Water based drilling fluid conditioned as necessary for control of weight, viscosity, pH, and water-loss. Weight 9-10. Viscosity 38-45. pH 9-10. Filtrate while drilling pay zone 6-15.

7. AUXILIARY EQUIPMENT:

A mudlogging trailer will be in use while drilling below the intermediate casing.

8. TESTING, LOGGING, AND CORING PROGRAMS:

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

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

No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES, OR HYDROGEN SULFIDE GAS:

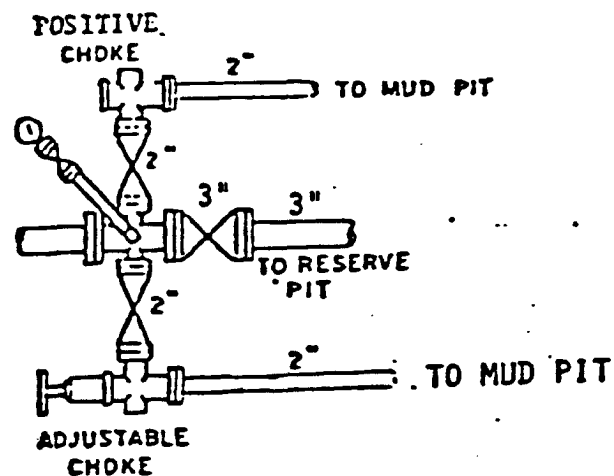
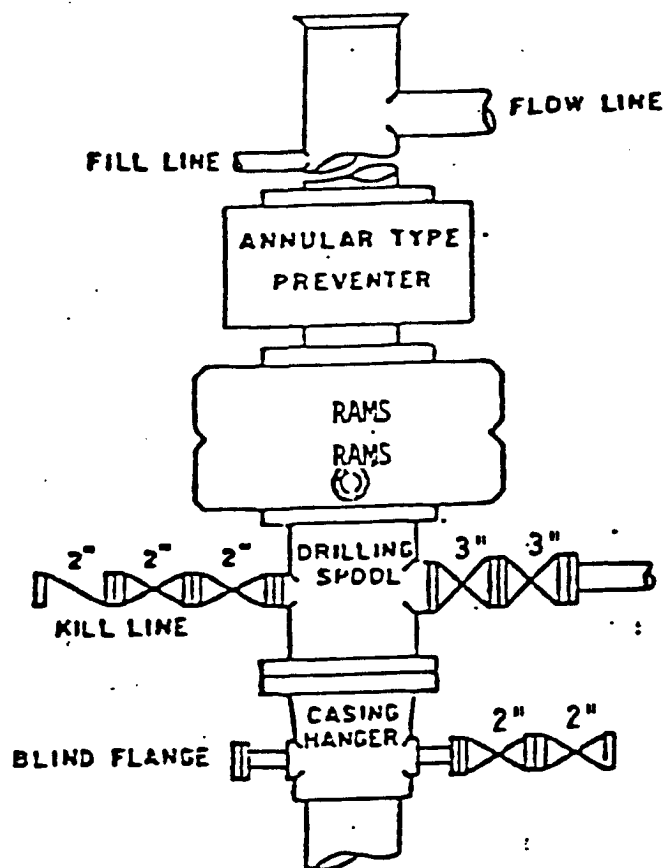
None anticipated.

Expected bottom hole pressure is approximately 3500 psi.

Expected bottom hole temperature is approximately 125 degrees Fahr

10. ANTICIPATED STARTING DATE:

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



BOP STACK

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT

SURFACE USE AND OPERATIONS PLAN

FOR

POGO PRODUCING COMPANY
PURE GOLD "B" WELL No. 18
990'FSL & 2310' FWL OF SECTION 20,T-23S, R-31E
EDDY COUNTY, NEW MEXICO

LOCATED: 18 miles east of Loving, New Mexico.

FEDERAL LEASE NUMBER: NM-38463

LEASE DATE: January 1, 1980. Lease is in producing status.

ACRES IN LEASE: 640.

RECORD LESSEE: Pogo Producing Company

SURFACE OWNERSHIP: Federal.

GRAZING PERMITTEE: J.C. Mills
P.O. Drawer "G"
Abernathy, Texas 79311

POOL: Sand Dunes Delaware, West

POOL RULES: Statewide. 40 acres for oil.

EXHIBITS: A. Road Map
B. Plat showing Existing wells and Existing roads
C. Drilling Rig Layout
D. Topo Plat

1. EXISTING ROADS

A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. The proposed well site can be reached by going south off State highway 128. Point "A" on the plat is on State highway 128 at milepost 12.6, approximately 20 road miles east of Loving, New Mexico, where a caliche road goes south. To go to the proposed well site from this point, exit State 128 to the south on the caliche road and go 1000 feet. Turn east and go 700' to the well pad of # 14 then turn southeast and go 900', road turns south and go 3100' to location. See Exhibits "B" and "D".

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

2. PLANNED ACCESS ROADS:

A. Length and Width: The planned access road will be 12 foot wide and approximately 1200' long, and labeled and color coded red on Exhibit "B". The centerline of the access road will be staked and flagged.

B. Surfacing Material: Caliche. Watered, compacted and graded.

C. Maximum Grade: Less than one percent.

D. Turnouts: No turnouts.

E. Drainage Design: The new access road will be crowned with the drainage to the sides.

F. Culverts: None needed.

G. Cuts and Fills: None necessary.

H. Gates and Cattle Guards: Not needed. No fences involved.

3. LOCATION OF EXISTING WELLS:

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

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. Production Facilities are already located on well # 4. The existing production facilities will be utilized for further production.

5. LOCATION AND TYPE OF WATER SUPPLY:

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

6. SOURCE OF CONSTRUCTION MATERIAL:

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

7. METHODS OF HANDLING WASTE MATERIAL:

A. Drill cuttings will be disposed of in the drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.

C. All trash, junk, and other waste material will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill.

D. Water produced during test will be disposed of in the drilling pits.

E. Oil produced during tests will be stored in test tanks until sold.

8. ANCILLARY FACILITIES:

A. None necessary.

9. WELL SITE LAYOUT:

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

10. PLANS FOR RESTORATION OF THE SURFACE:

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

11. OTHER INFORMATION:

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

F. Archaeological, Historical, and Cultural Sites: An archeological reconnaissance is to be accomplished and a report furnished.

G. Land Use: Grazing and wildlife habitat.

H. Surface Ownership: Federal

12. OPERATOR'S REPRESENTATIVE:

Richard L. Wright
Division Operations Supervisor
Pogo Producing Company
P.O. Box 10340
Midland, Texas 79702
~~(915) 682-6822~~

432-685-8100

13. CERTIFICATION:

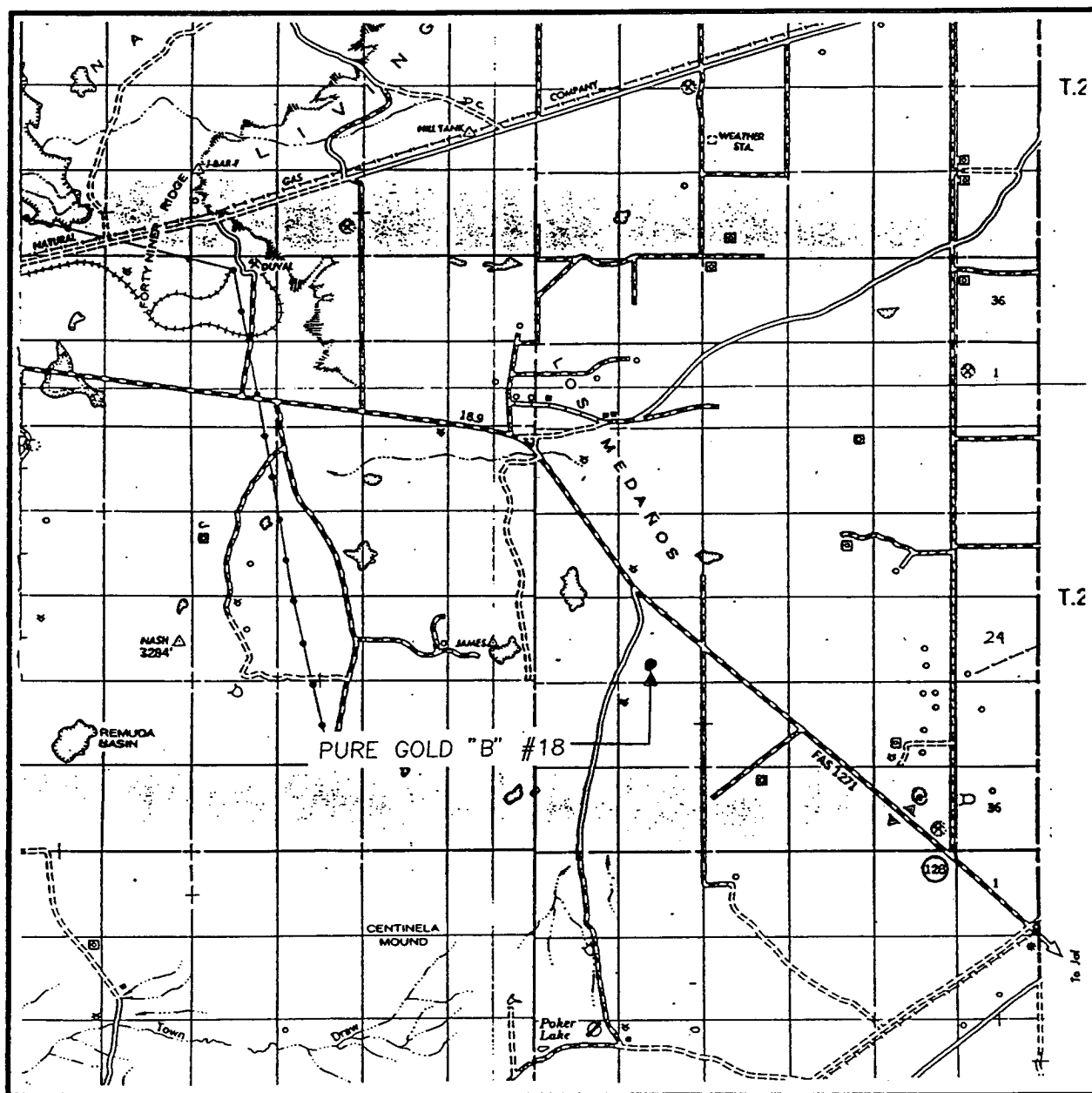
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated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

Date:

7/5/95


James M.C. Ritchie, Jr.
Agent

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 20 TWP. 23-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 100' 1980' 330' FSL & 2303' FWL

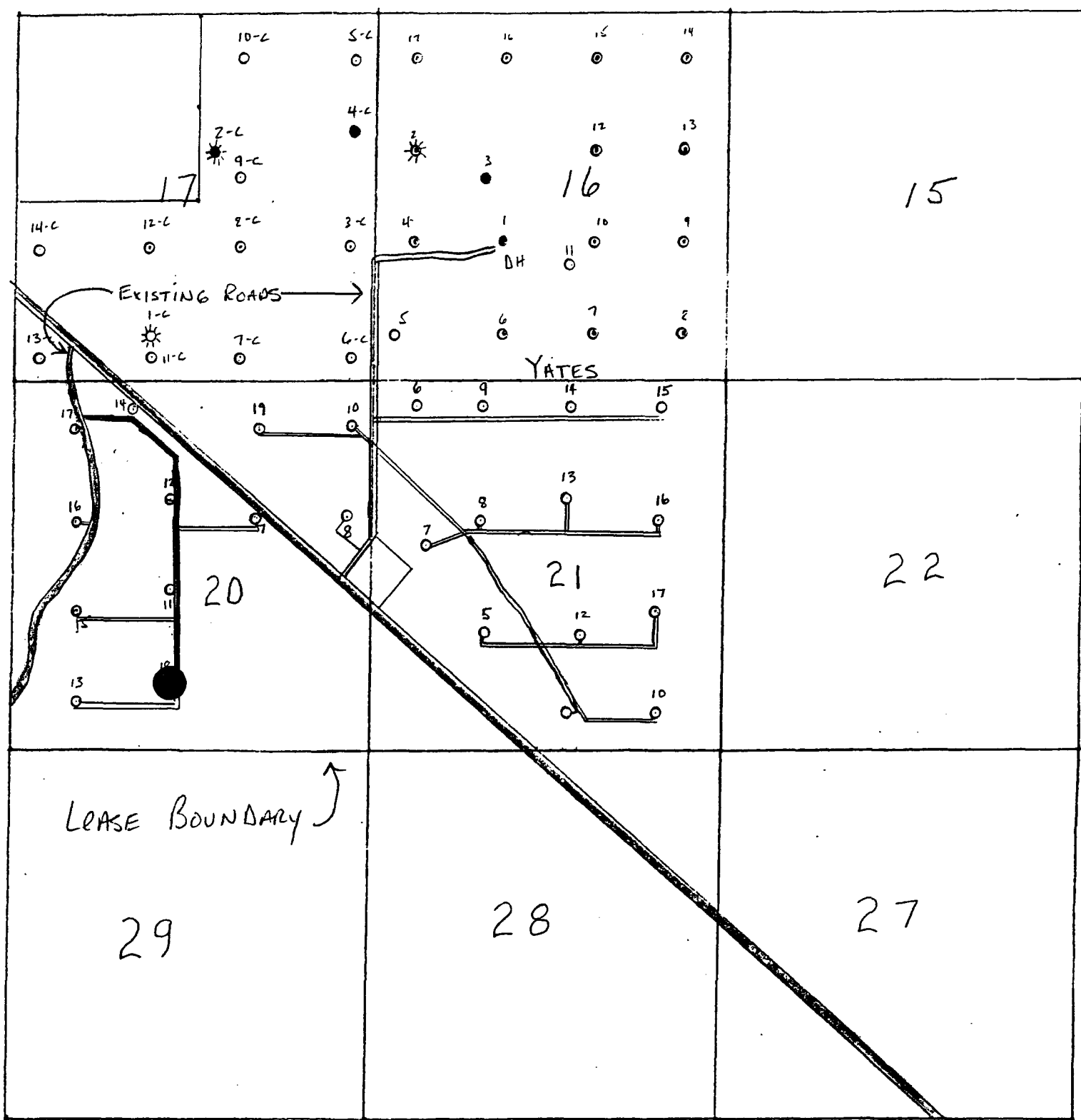
ELEVATION 3336

OPERATOR POGO PRODUCING CO.

LEASE PURE GOLD "B"

EXHIBIT "A"

ROAD MAP



LEGEND:

- OIL Well
- ☀ GAS Well
- PROPOSED wells
- Highway 128
- EXISTING ROAD
- PROPOSED ACCESS ROAD

Exhibit "B"

Pogo Producing Company
 Pure Gold "B" No. 18
 Eddy County, New Mexico

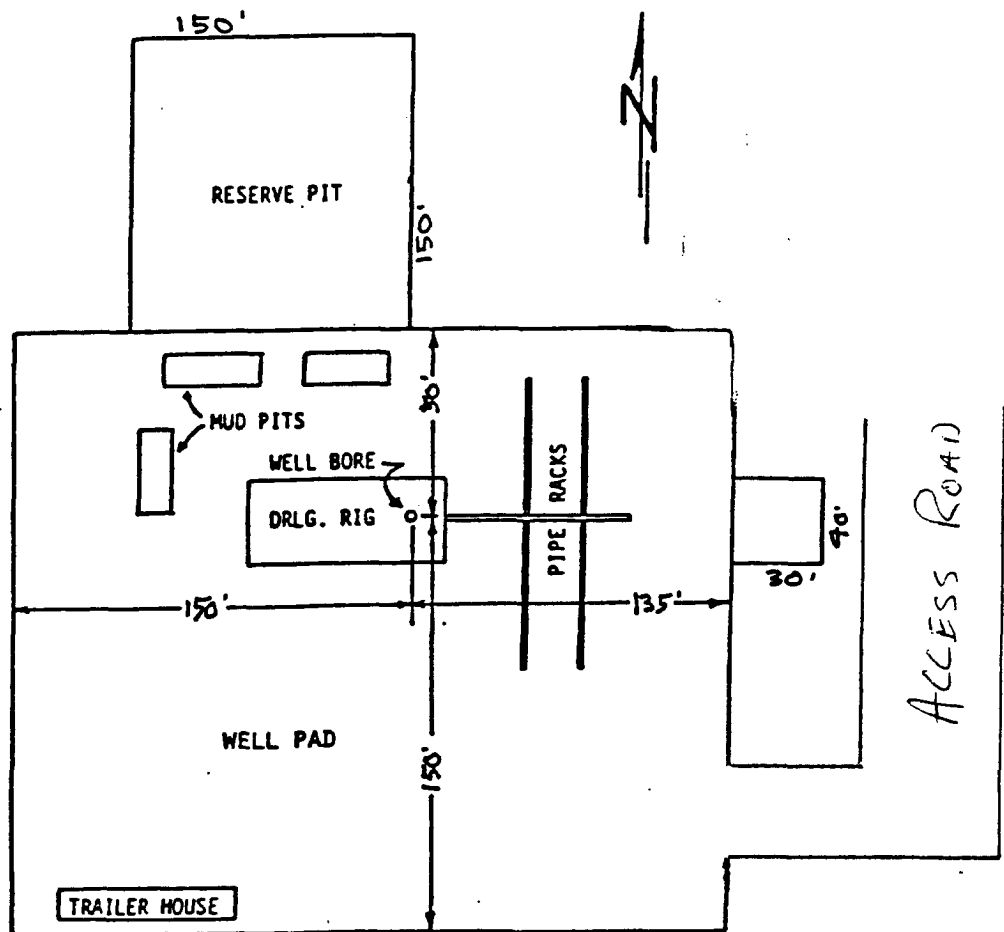
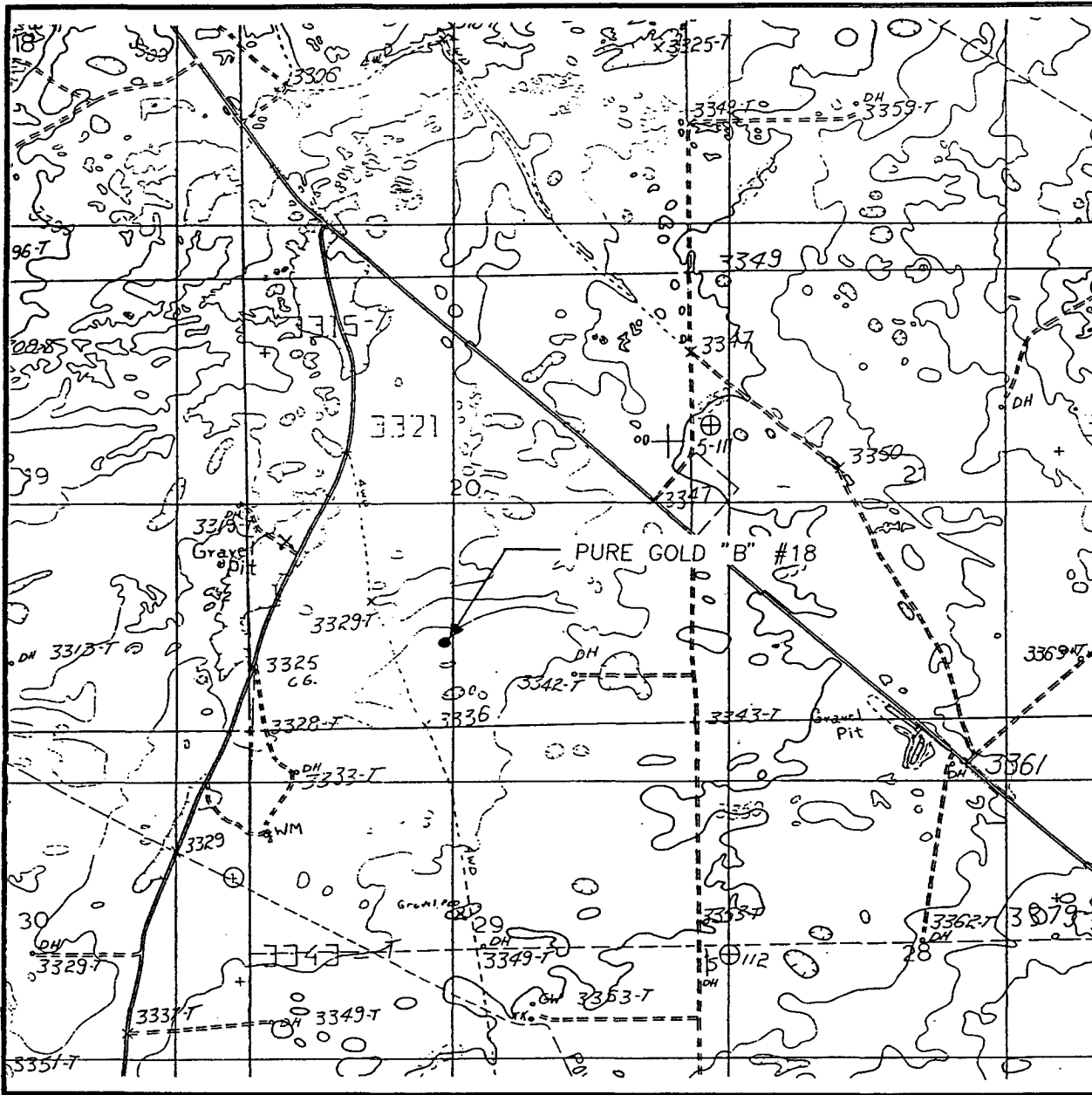


EXHIBIT "C"

Pogo Producing Company
Pure Gold "B" No. 18

DRILLING RIG LAYOUT
SCALE: None

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
LOS MEDANOS - 10'

SEC. 20 TWP. 23-S RGE. 31-E

SURVEY _____ N.M.P.M.

COUNTY _____ EDDY

DESCRIPTION 660 1990 FSL & 2503 FWL

ELEVATION _____ 3336

OPERATOR POGO PRODUCING CO.

LEASE _____ PURE GOLD "B"

U.S.G.S. TOPOGRAPHIC MAP

LOS MEDANOS, N.M.

EXHIBIT "D"

TOPO MAP

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: POGO Producing Company Well Name & #: Pure Gold "B" # 18
Location: 660' F S & 1980' F W L Sec. 20, T. 23 S., R. 31 E.
Lease: NM-38463 County: Eddy State: New Mexico

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

- (X) 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.

() 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.

(X) Other: Pits North V-Door East

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. 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. **See attached seed mixture.**

() 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

() 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

(x) OTHER Lesser Prairie Chicken Seed Mix

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.

Reclamation: 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 #: NM-38463, NM-38463
Company Reference: POGO Producing Company
Well Name and Number: Pure Gold "B" # 18

Seed Mixture for LPC Sand/Shinnery 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 no 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 seed 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.

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

| <u>Species</u> | <u>lb/acre</u> |
|---------------------|----------------|
| Plains Bristlegrass | 5lbs/A |
| Sand Bluestem | 5lbs/A |
| Little Bluestem | 3lbs/A |
| Big Bluestem | 6lbs/A |
| Plains Coreopsis | 2lbs/A |
| Sand Dropseed | 1lbs/A |

**Four-winged Saltbush 5lbs/A

* This can be used around well pads and other areas where caliche cannot be removed.

*Pounds of pure live seed:

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

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: All of Section 20 & 21, Township 23 S. Range 31 E.

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 known 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. 18-Pure Gold B
Operator's Name: POGO Producing Co.
Location: 0660FSL, 1980FWL, Section 20, T-23-S, R-31-E
Lease: NM-38463

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) 234-5972 or (505) 361-2822 - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:
 - A. Spudding
 - B. Cementing casing: 13-3/8 inch 8-5/8 inch 5-1/2 inch
 - C. BOP tests
2. Although no Hydrogen Sulfide (H₂S) has been reported, it is always a potential hazard.
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 13-3/8 inch surface casing shall be set **a minimum of 25 feet into the Rustler Anhydrite approximately 550 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.

Possible lost circulation in the Delaware and Bone Spring formations.

Possible water flow in the Chinle, Salado, Castile, Delaware, and Bone Spring formations.

2. The minimum required fill of cement behind the 8-5/8 inch salt protection casing is **circulate cement to the surface. Casing to be set not less than 100' below salt and not more than 600'.**
3. The minimum required fill of cement behind the 5-1/2 inch production casing is **cement shall circulate to surface.**
4. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

III. PRESSURE CONTROL:

1. 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) required for drilling the surface and intermediate casing shall be 3M psi (**3M system per Onshore Order 2.III.A.2.a.iii**). Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 8-5/8 inch casing shall be 3M psi.
3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
 - 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.

IV. DRILLING MUD:

Fresh water mud to be used down to Rustler Anhydrite and setting of surface casing.

Saturated brine water mud to be used until salt protection string is set.

Engineer on call phone: (505) 706-2779

WWI 101906