Form 3160-3
(July 1992)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

B-111-P-POTASH

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

I-28

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

N.M. Oil Cons. Division
1625 N. French Dr.
Hobbs, NM 88240

5. LEASE DESIGNATION AND SERIAL NO.
NM-~~85932~~ 109757

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
---

7. UNIT AGREEMENT NAME

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ]

b. TYPE OF WELL
OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME, WELL NO. 34228
CABIN LAKE "31" FEDERAL #1

2. NAME OF OPERATOR
POGO PRODUCING COMPANY 17891 (RICHARD WRIGHT 432-685-8140)

9. API WELL NO.
30-025-36830

3. ADDRESS AND TELEPHONE NO.
P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (432-685-8100)

10. FIELD AND POOL, OR WILDCAT # 1
W. LOCAT ~~BLINEBRY BASIN~~ BONE SPRING

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
330' FWL & 1650' FSL SECTION 31 T21S-R32E LEA CO. NM
At proposed prod. zone SAME

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SECTION 31 T21S-R32E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately 35 miles East of Carlsbad New Mexico.

12. COUNTY OR PARISH: LEA
13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
330'	~~160~~ 167.44	~~40~~ 4370
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
NA	8700'	ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3614' GR.

22. APPROX. DATE WORK WILL START*
WHEN APPROVED

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor	NA	40'	Cement W/Redi-mix to surface
17½"	H-40 13 3/8"	48	800'	800 Sx. circulate to surface
11"	J-55 8 5/8"	32	4200'	1500 Sx. " " "
7 7/8"	J-55 5½"	17 & 15.5	8700'	1250 Sx. 2 stage DV @ 6100' 3000' FS.

1. Drill 25" hole to 40'. Set 40' of 20" conductor and cement to surface with Redi-mix.
2. Drill 17½"hole to 800'. Run and set 800' of 13 3/8" 48# H-40 ST&C casing. Cement with 800 Sx. of Class "C" cement + 2% CaCl, ¼# Flocels/Sx. Circulate cement to surface.
3. Drill 11" hole to 4200'. Run and set 4200' of 8 5/8" 32# J-55 ST&C casing. Cement with 1500 Sx. of Class "C" cement + additives, circulate cement to surface.
4. Drill 7 7/8" hole to 8700'. Run and set 8700' of 5½" casing as follows: 2700' of 5½" 17# J-55 LT&C, 5000' of 5½" 15.5# J-55 LT&C, 1000' of 5½" 17# J-55 LT&C casing. Cement in two stages with DV Tool at 6100'±. Cement 1st stage with 650 Sx. of Class "H" premium Plus cement + additives, Cement 2nd stage with 600 Sx. of Class "C" cement + additives, estimate top of cement 3000' from surface.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

24.
SIGNED [signature] TITLE Agent DATE 06/14/04

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY (S) Jamica L. Cranby TITLE Acting STATE DIRECTOR DATE 8/16/04

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-102
Revised February 10, 1994
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	Pool Name
30-025-36830	~~96955~~	Wildcat; ~~BLINEBRY BASIN~~ BONE SPRING

Property Code	Property Name	Well Number
34228	CABIN LAKE "31" FEDERAL	1

OGRID No.	Operator Name	Elevation
17891	POGO PRODUCING COMPANY	3614'

Surface Location

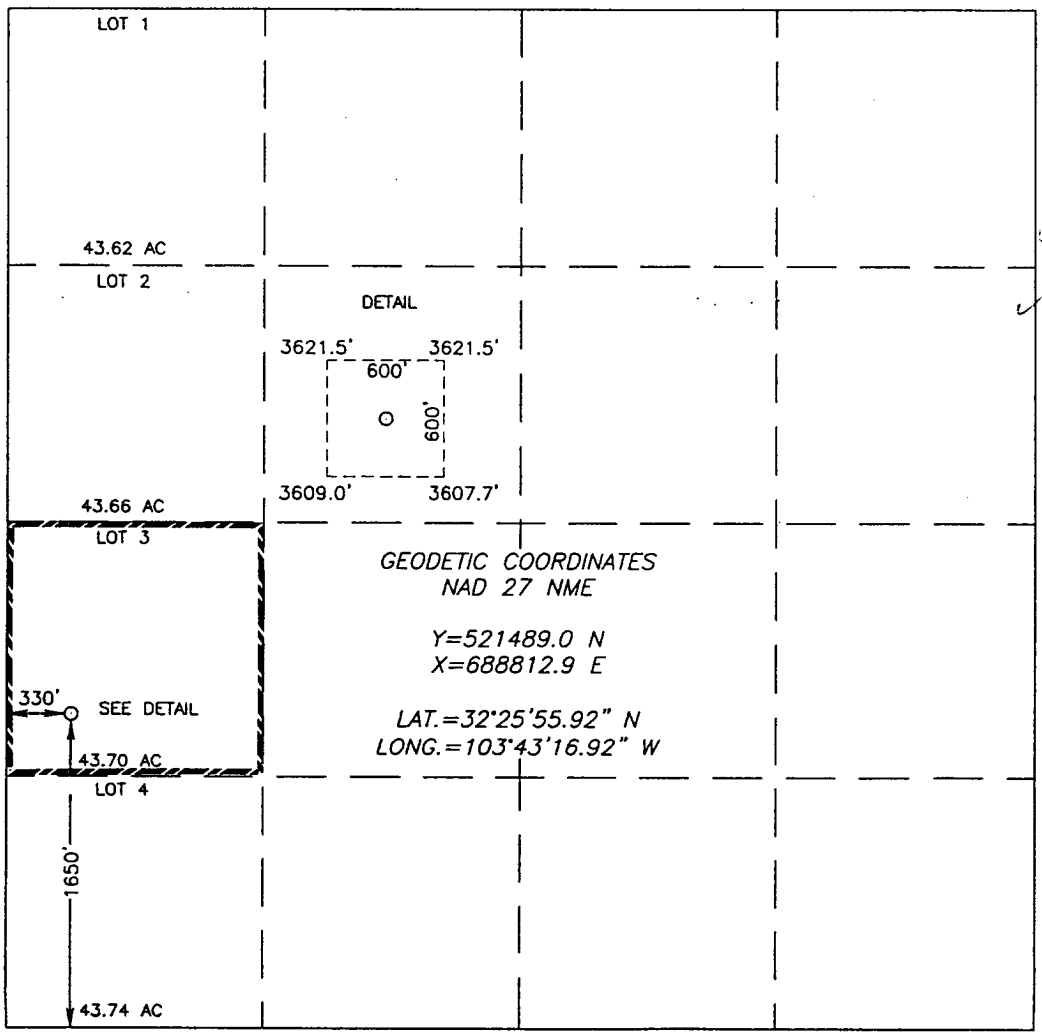
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
3/L	31	21-S	32-E		1650'	SOUTH	330'	WEST	LEA

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	Joint or Infill	Consolidation Code	Order No.
43.70 40			

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature
Joe T. Janica

Printed Name
Agent

Title
06/14/04

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

MAY 25, 2004

Date Surveyed JR

Signature & Seal of Professional Surveyor

Gary L. Eidson 6/4/04

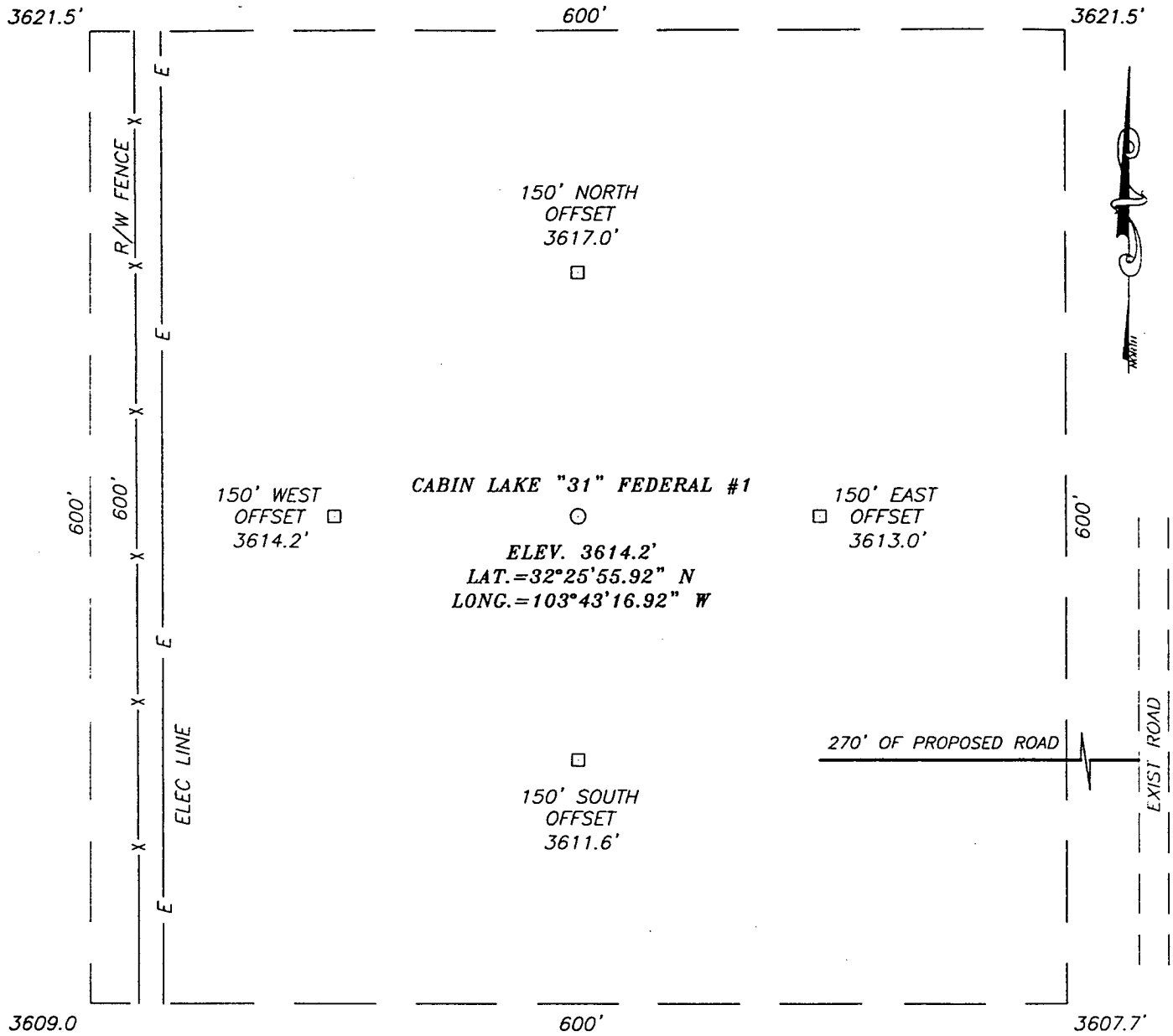
04.11.0610

Certificate No. GARY EIDSON 12641

EXHIBIT "A"

SECTION 31, TOWNSHIP 21 SOUTH, RANGE 32 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY 62-180 AND C-29 GO SOUTH APPROX. 8.5 MILES. TURN LEFT ONTO CALICHE ROAD AND GO APPROX. 750'. TURN LEFT ONTO CALICHE ROAD AND GO NORTH APPROX 0.3 MILES. PROPOSED LOCATION IS APPROX. 400' WEST.

100 0 100 200 Feet

Scale: 1"=100'

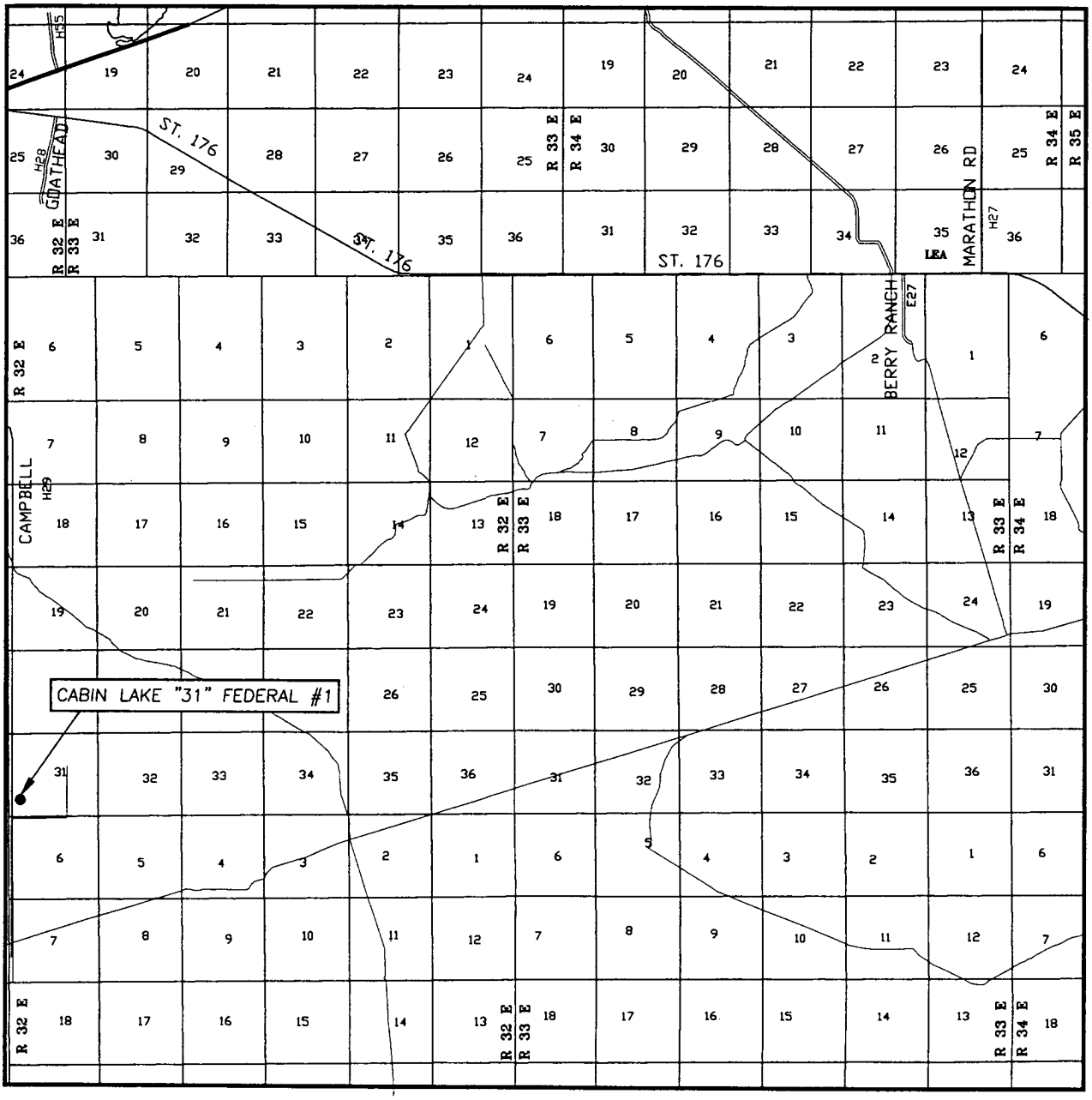
POGO PRODUCING COMPANY

CABIN LAKE "31" FED #1 WELL
LOCATED 1650 FEET FROM THE SOUTH LINE
AND 330 FEET FROM THE WEST LINE OF SECTION 31,
TOWNSHIP 21 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

Survey Date: 05/25/04	Sheet 1 of 1 Sheets		
W.O. Number: 04.11.0610	Dr By: J. RIVERO	Rev 1:N/A	
Date: 06/1/04	Disk: CD#10	04110610	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. 31 TWP. 21-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1650' FSL & 330' FWL

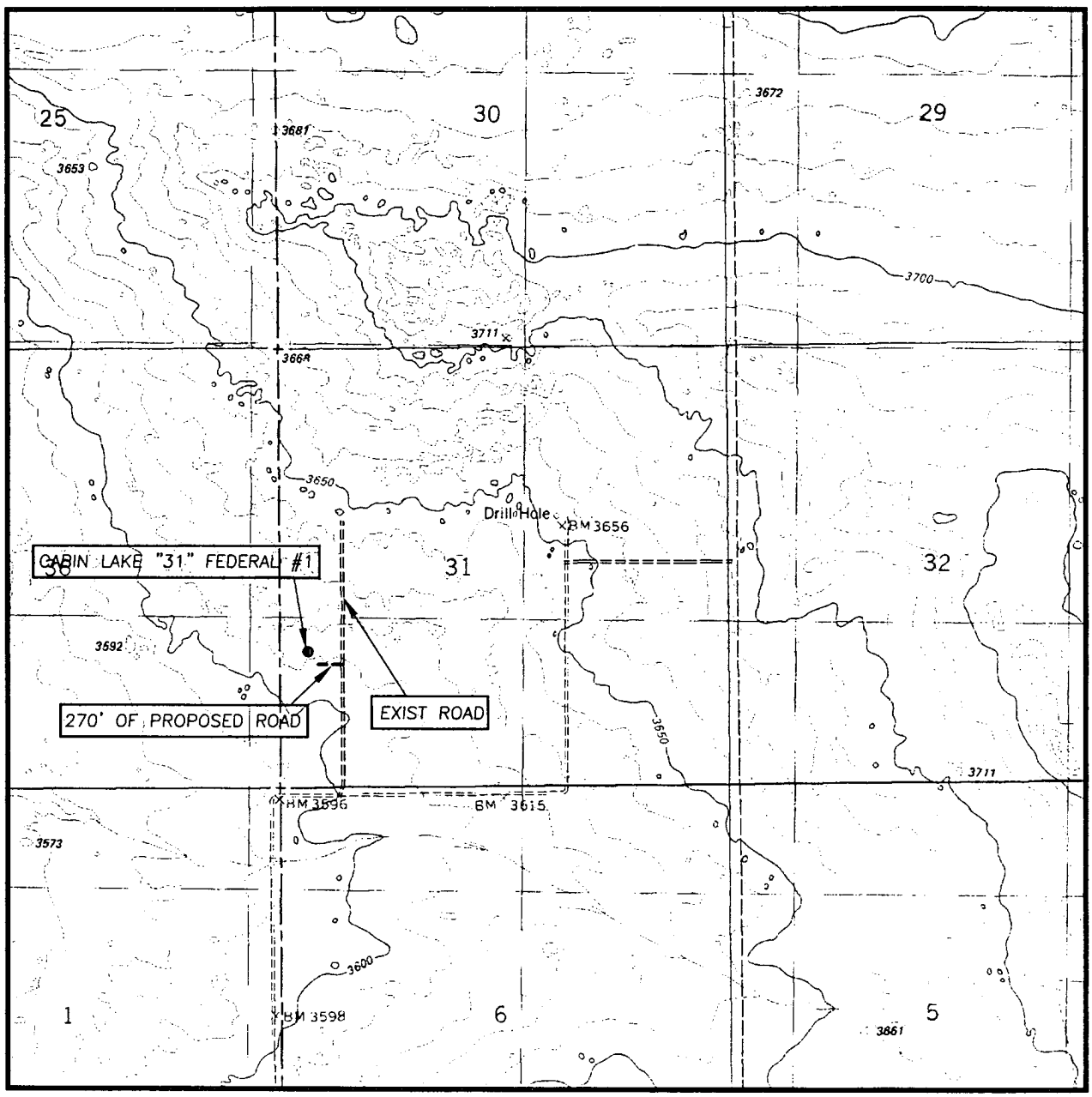
ELEVATION 3614'

OPERATOR POGO PRODUCING COMPANY

LEASE CABIN LAKE "31" FEDERAL

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
THE DIVIDE, N.M. – 10'

SEC. 31 TWP. 21-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1650' FSL & 330' FWL

ELEVATION 3614'

OPERATOR POGO PRODUCING COMPANY

LEASE CABIN LAKE "31" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
THE DIVIDE, N.M.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY
CABIN LAKE "31" FEDERAL #1
LOT "3" SECTION 31
T21S-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' FSL & 330' FWL SECTION 31 T21S-R32E LEA CO. NM

2. Ground Elevation above Sea Level: 3614' 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: 8700'

6. Estimated tops of geological markers:

Basal Anhydrite	4200'	Brushy Canyon	6700'
Delaware Lime	4500'	Bone Spring	8500'
Cherry Canyon	5400'		

7. Possible mineral bearing formations:

Bone Spring	Oil

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-800'	13 3/8"	48#	8-R	ST&C	H-40
11"	0-4200'	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-8700'	5½"	17 & 15.5	8-R	LT&C	J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY
CABIN LAKE "31" FEDERAL #1
LOT "3" SECTION 31
T21S-R32E LEA CO. NM

9. CASING CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor 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 800 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. Circulate cement to surface.
8 5/8"	Intermediate	Set 4200' of 8 5/8" 32# J-55 ST&C casing. Cement with 1500 Sx. of Class "C" cement + additives, circulate cement to surface.
5½"	Production	Set 8700' of 5½" casing as follows: 2700' of 5½" 17# J-55 LT&C, 5000' of 5½" 15.5# J-55 LT&C, 1000' of 5½" 17# J-55 LT&C. Cement in 2 stages W/DV Tool at 6100'±. Cement 1st stage with 650 Sx. of Class "H" cement + additives, Cement 2nd stage with 600 Sx. of Class "C" Cement + additives, estimate top of cement 3000' FS.

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

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-800'	8.4-8.7	29-38	NC	Fresh water Spud mud use paper to control seepage.
800-4200'	10.0-10.2	29-38	NC	Brine water using paper to control seepage and high viscosity sweeps to clean hole.
4200-8700'	8.4-8.7	29-40	NC*	Fresh water use paper to control seepage & high viscosity sweeps to clean hole.

* Water loss may have to be controled in order to run open hole logs, casing and/or DST's, if water loss is to be controle go to a Polymer mud system.

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

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H_2S safety instructor to the following:

   A. Characteristics of H_2S
   B. Physical effects and hazzards
   C. Proper use of safety equipment and life support systems.
   D. Principle and operation of H_2S detectors, warning system and briefing areas.
   E. Evacuation procedure, routes and first aid.
   F. Proper use of 30 minute pressure demand air pack.

2. H_2S Detection and Alarm Systems

   A. H_2S 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, H_2S present in dangerous concentration. Only emergency personnel admitted to location.

5. Well control equipment

   A. See exhibit "E" & "E-1"

6. Communication

   A. While working under masks chalkboards will be used for communication.
   B. Hand signals will be used where chalk board is inappropriate.
   C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.

7. Drillstem Testing

   A. Exhausts will be watered.
   B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
   C. If the location is near to a dwelling a closed DST will be performed.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

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 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.

SURFACE USE PLAN

POGO PRODUCING COMPANY
CABIN LAKE "31" FEDERAL #1
LOT "3" SECTION 31
T21S-R32E LEA CO. NM

1. EXISTING ROADS & PROPOSED ROADS: Area maps; Exhibit "B" is a reproduction of a County General Hi-way Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing 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 as staked.

   B. From Hobbs New Mexico take U.S. Hiway 62-180 West toward Carlsbad New Mexico go 38± miles to Mile post 67. Turn South on CR-29 go approximately 8.5 miles turn Left (East) go 750'±. turn Left (North) on caliche lease road go .3± miles turn Left (West) go 400'± to location.

   C. Tank battery will be constructed on location. Powerline is approximately 255' West of location, connection can be made there.

2. PLANNED ACCESS ROADS: Approximately 400' of new road will be constructed.

   A. The access roads will be crowned and ditched to a 12' wide travel surface with a 40' Right-of-Way.

   B, Gradient of all roads will be less than 5.00%.

   C. If turn-outs are necessary they will be constructed.

   D. If needed roads will be surfaced with a mimimum of 4" of caliche. This material will be obtained from a local source.

   E. Center-line for new roads will be flagged. Earth-work will be will be done as field conditions require.

   F. Culverts will be placed in the access road if they are necessary. The roads will be constructed to utilaze low water crossings for drainage as required by topography.

3. LOCATIONS OF EXISTING WELLS IN A ONE MILE RADIUS. EXHIBIT "A-1"

   A. Water wells - None known

   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"

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.

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 indicated proposed location of reserve and sump pits and living facilities.

C. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.

12 mil.

D. If needed, the reserve pit is to be lined with polyethelene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.

E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B 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 erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

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

SURFACE USE PLAN

POGO PRODUCING COMPANY
CABIN LAKE "31" FEDERAL #1
LOT "3" SECTION 31
T21S-R32E LEA CO. NM

11. OTHER INFORMATION:

A. Topography consists of sand dunes with a slight dip to the West. Deep sandy soil supports shinnery oak, native grasses, and an occasional mesquite tree.

B. Surface is owned by the U.S. Government and is administered by the Bureau of Land Management. The surface is used for grazing livestock and the production of oil and gas.

C. An archaeological survey will be conducted on the location and access roads. This report will be filed with The Bureau of Land Management in the Carlsbad field office.

D. No dwellings located within 2 miles of location.

12. OPERATORS REPRESENTIVES:

Before construction:

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

During and after construction:

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

13. CERTIFICATION: I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access roads, and that I am fimiliar 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 it's contractors/subcontractors is in compformity 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 report.

NAME : Joe T Janica
DATE : 06/14/04
TITLE : Agent

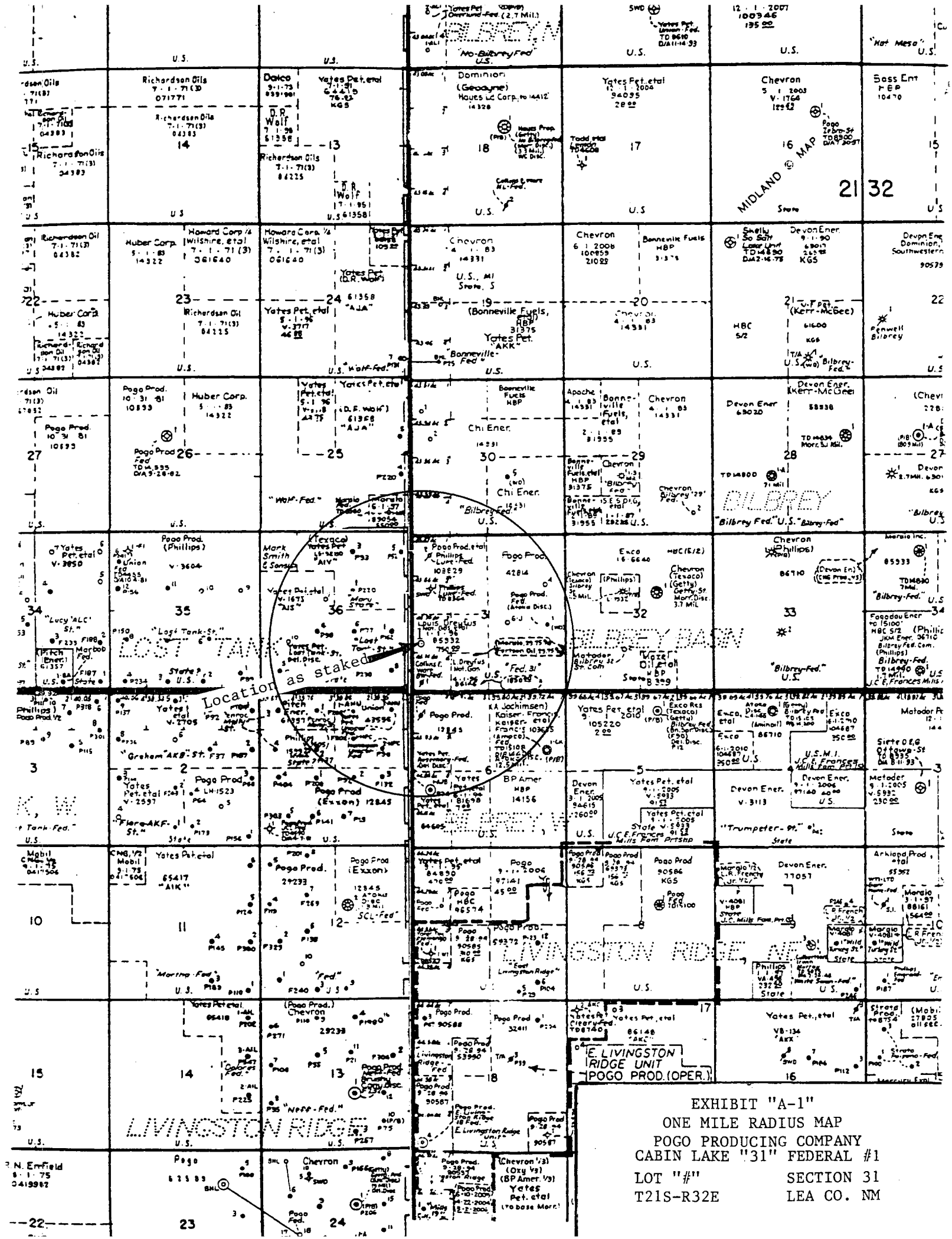


EXHIBIT "A-1"
ONE MILE RADIUS MAP
POGO PRODUCING COMPANY
CABIN LAKE "31" FEDERAL #1
LOT "#" SECTION 31
T21S-R32E LEA CO. NM

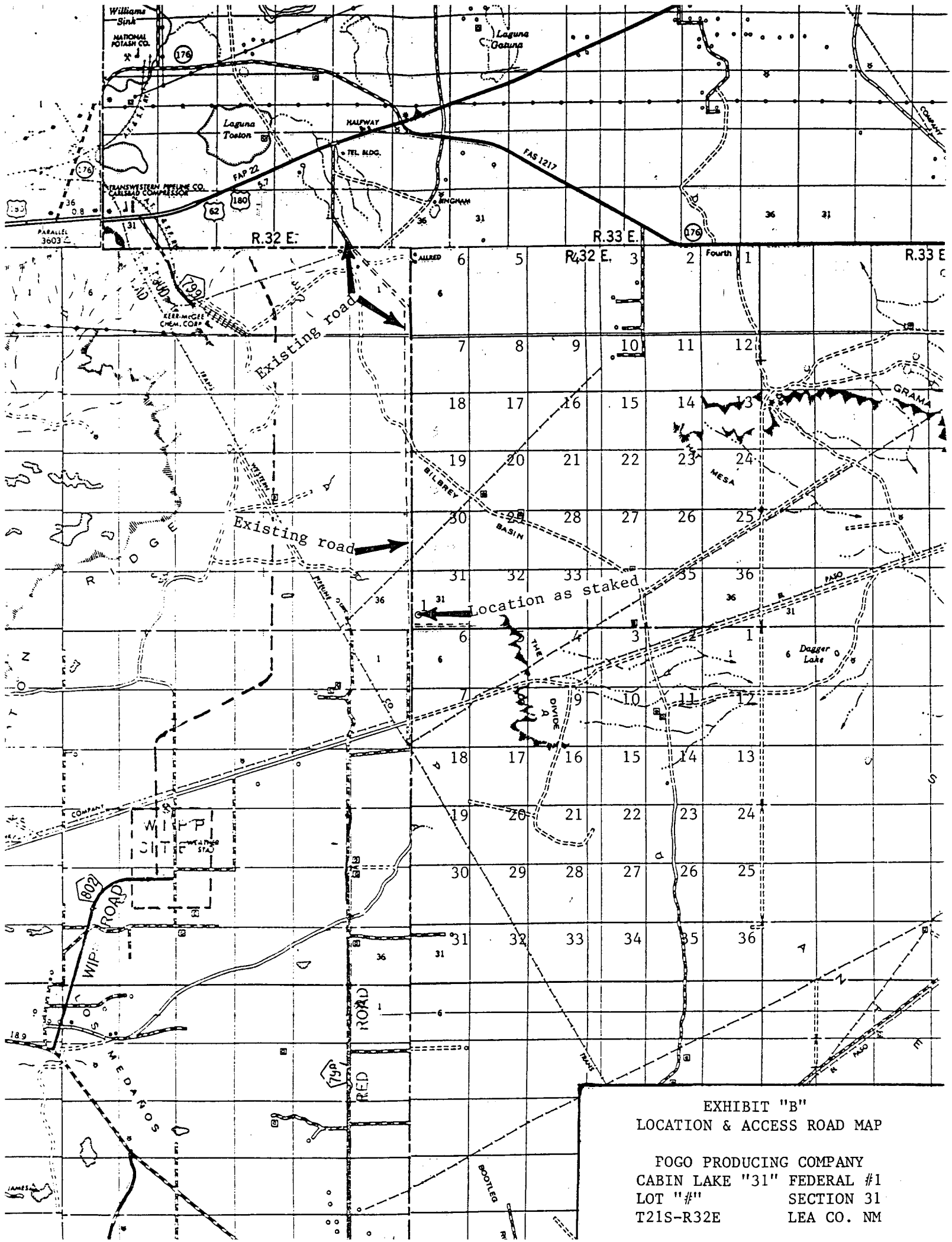


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

FOGO PRODUCING COMPANY
CABIN LAKE "31" FEDERAL #1
LOT "#" SECTION 31
T21S-R32E LEA CO. NM

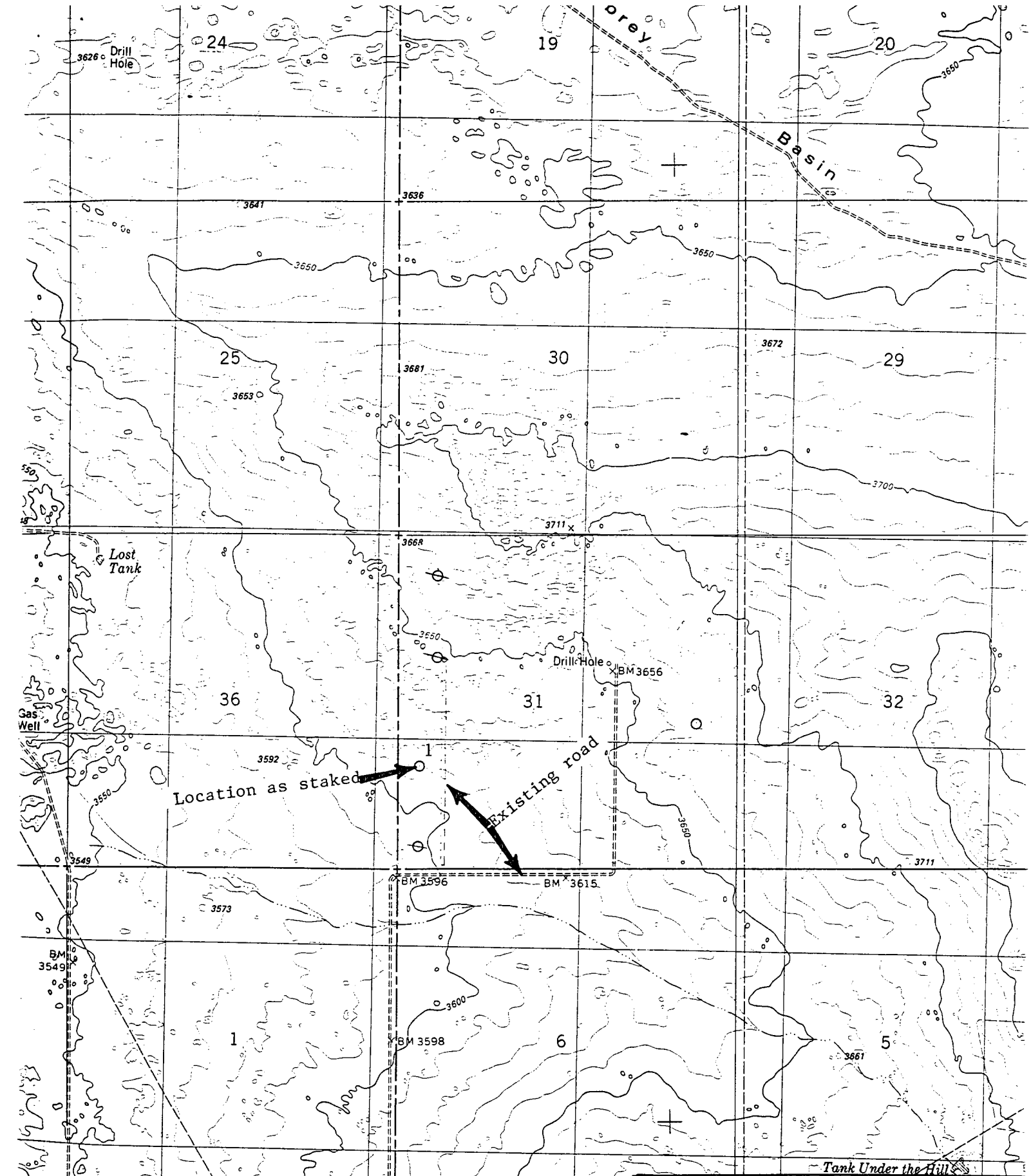
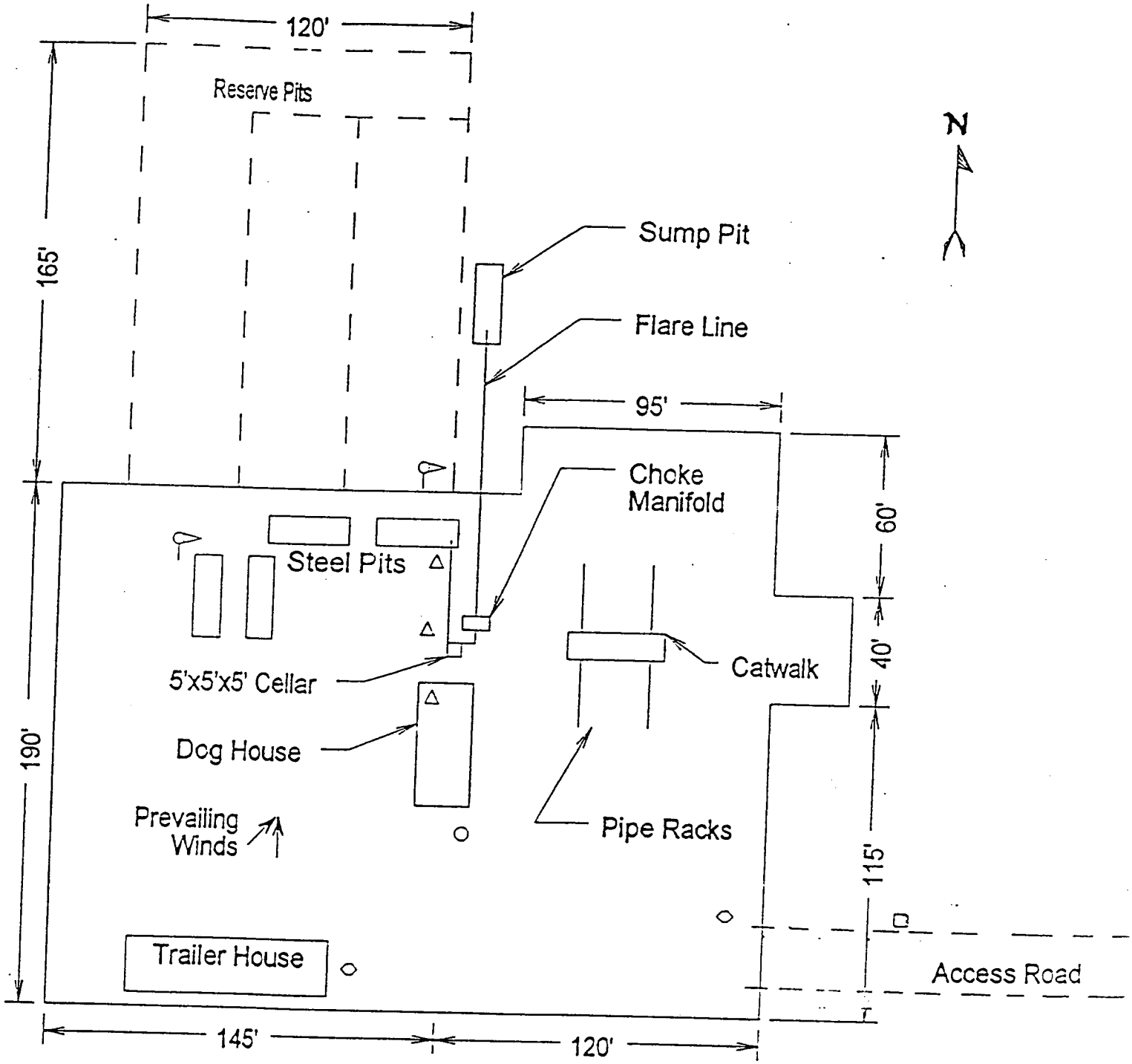


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

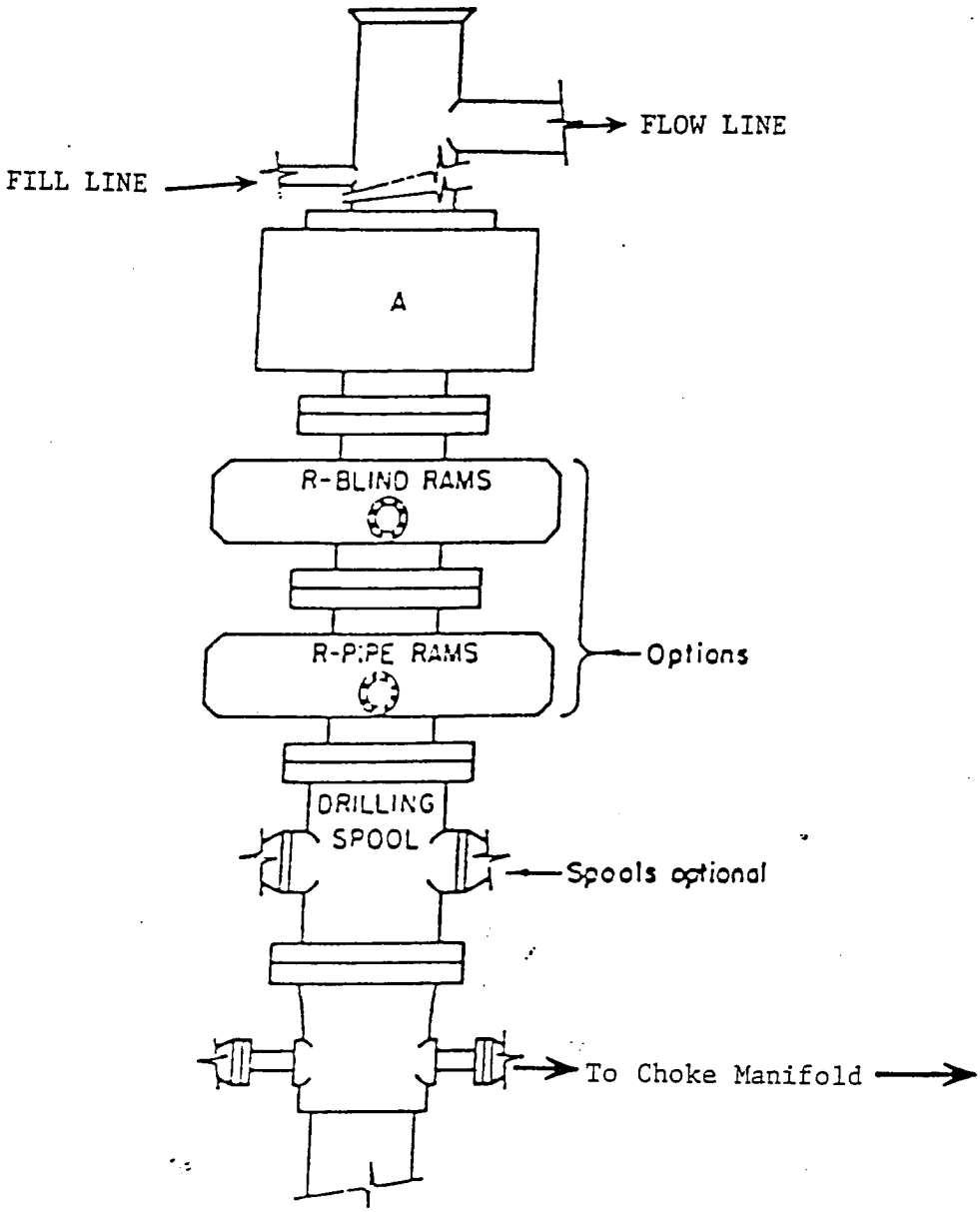
POGO PRODUCING COMPANY
CABIN LAKE "31" FEDERAL #1
LOT "1" SECTION 31
T21S-R32E LEA CO. NM



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

EXHIBIT "D"
RIG LAY OUT PLAT

POGO PRODUCING COMPANY
CABIN LAKE "31" FEDERAL #1
LOT "#" SECTION 31
T21S-R32E LEA CO. NM

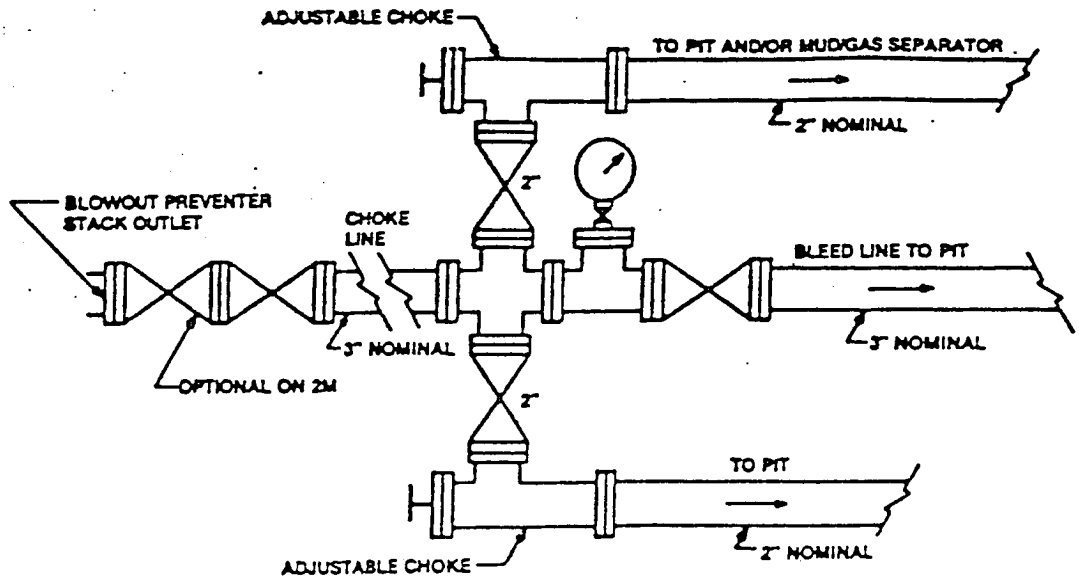


ARRANGEMENT SRRA

900 Series
3000 PSI WP

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

POGO PRODUCING COMPANY
CABIN LAKE "31" FEDERAL #1
LOT "3" SECTION 31
T21S-R32E LEA CO. NM



Typical choke manifold assembly for 3M WP system

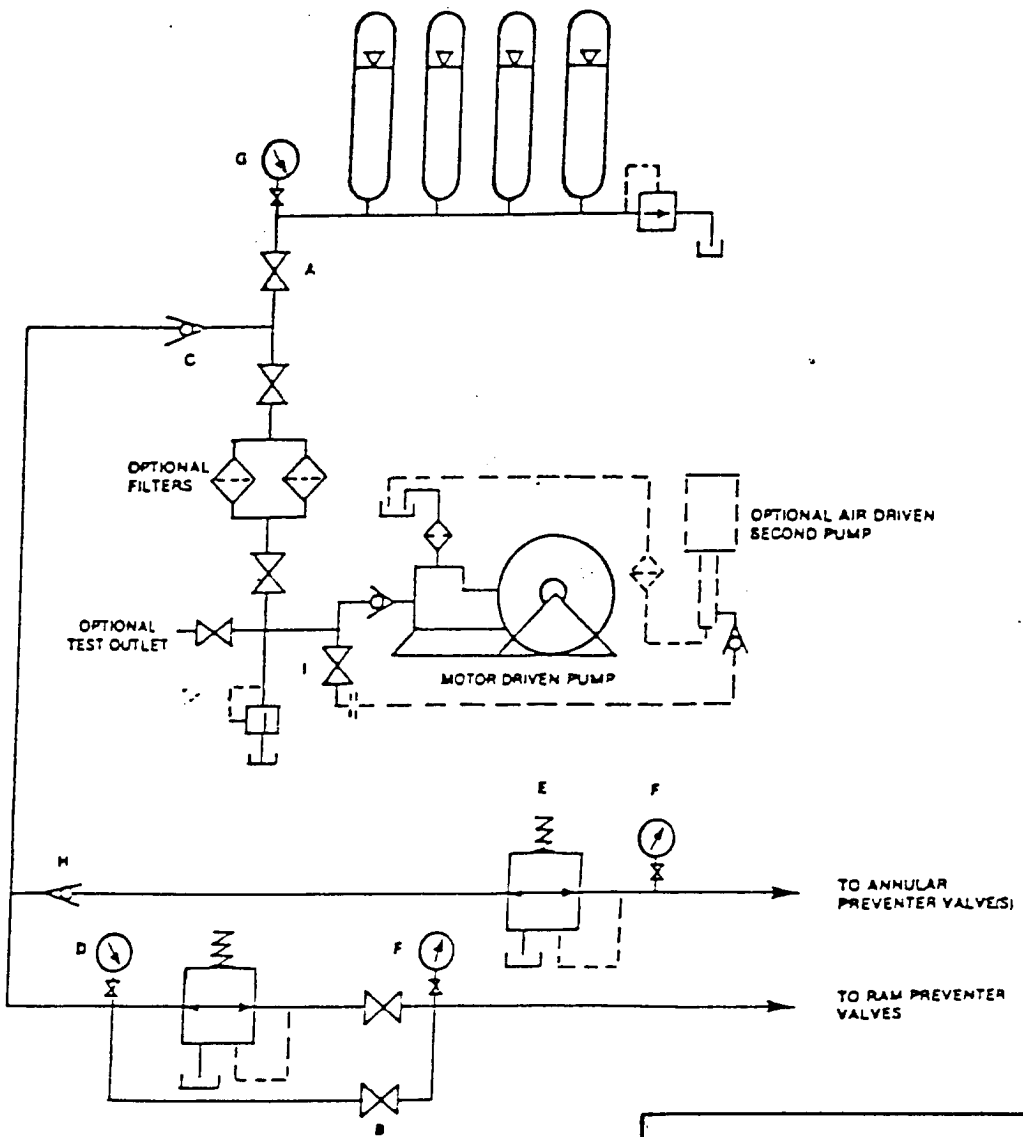


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
CABIN LAKE "31" FEDERAL #1
LOT "3" SECTION 31
T21S-R32E LEA CO. NM

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio 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

Form C-144
March 12, 2004

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

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒
Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Pogo Producing Company Telephone: 432-685-8100 e-mail address: wrightc@pogoproducing.com
Address: P. O. Box 10340, Midland, TX 79702-7340
Facility or well name: Cabin Lake 31 Fed #1 API #: 30-025-36830 U/L or Qtr/Qtr L Sec 31 T 21 R 32
County: Lea Latitude 32:25:55.92N Longitude 103:43:16.92W NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit	**Below-grade tank**	
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume 16000 bbl	Volume: ____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more X	(20 points) (10 points) (0 points) 0
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No X	(20 points) (0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more X	(20 points) (10 points) (0 points) 0
	Ranking Score (Total Points)	0

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: onsite ☐ offsite ☐ If offsite, name of facility_____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface_____ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**
Date: 8/27/04
Printed Name/Title Cathy Wright, Sr Eng Tech Signature Cathy Wright

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Date: 8/31/04
Printed Name/Title PETROLEUM ENGINEER Signature

RECEIVED
AUG 2004
Hobbs
OCD

Water Resources

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

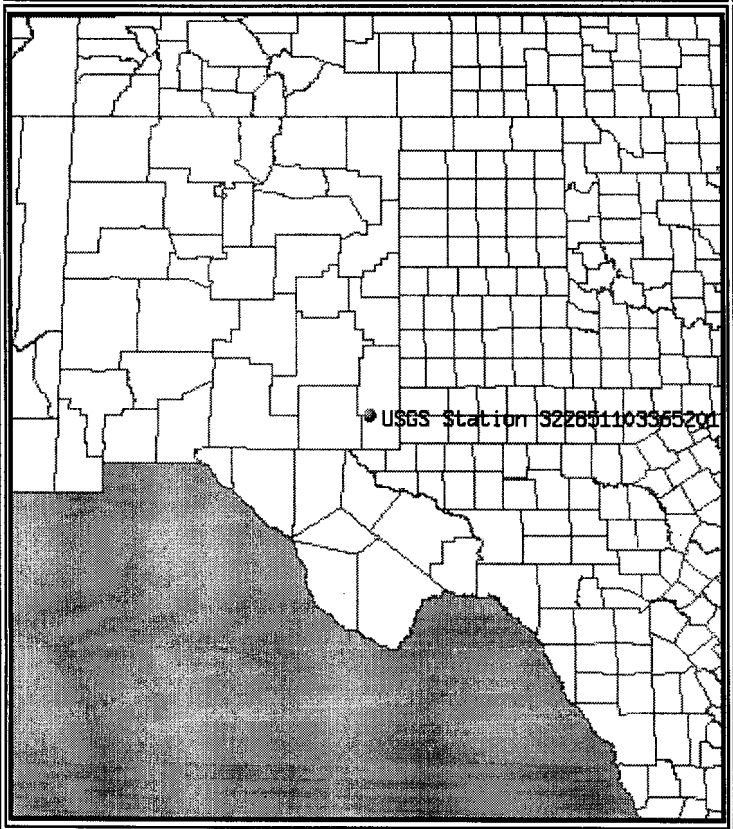
Site Map for New Mexico

USGS 322851103365201 21S.33E.18.12314

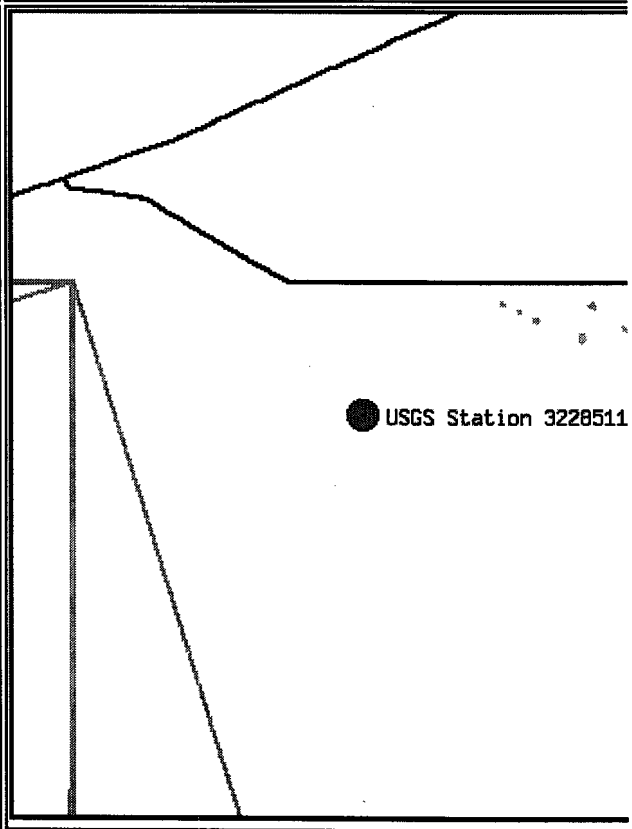
Available data for this site Station site map GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°28'51", Longitude 103°36'52" NAD27
Gage datum 3,855.00 feet above sea level NGVD29

Location of the site in New Mexico.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data New Mexico NWISWeb Data Inquiries
Feedback on this website New Mexico NWISWeb Maintainer

Top
Explanation of terms

NWIS Site Inventory for New Mexico: Site Map
http://waterdata.usgs.gov/nm/nwis/nwismap?

USGS

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 322851103365201

Save file of selected sites to local disk for future upload

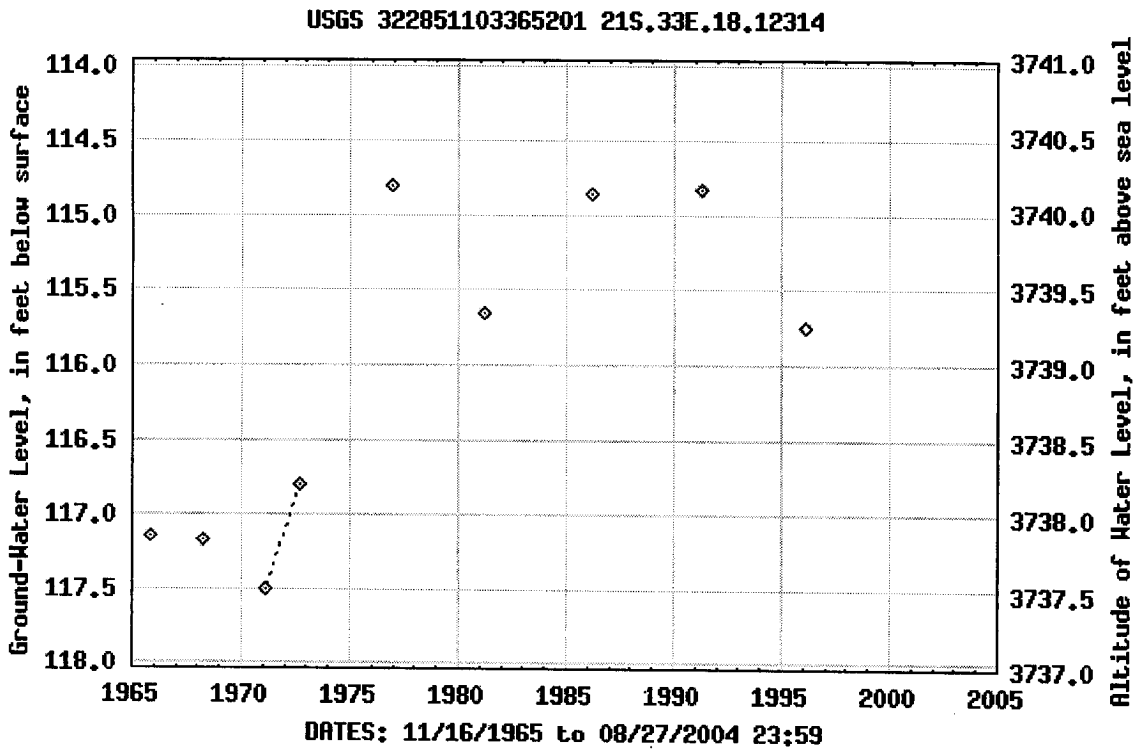
USGS 322851103365201 21S.33E.18.12314

Available data for this site: Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°28'51", Longitude 103°36'52" NAD27
Gage datum 3,855.00 feet above sea level NGVD29
The depth of the well is 123 feet below land surface.
This well is completed in ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB)

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

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.

Input Data

Lat1		Lon1	
32:25:55.92	N	103:43:16.92	W
Lat2		**Lon2**	
32:28:51	N	103:36:52	W

Output

Course 1-2	Course 2-1	Distance
61.7602211	241.817602	6.16006417

Distance Units: nm Earth model: Clarke (1866)/NAD27

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.

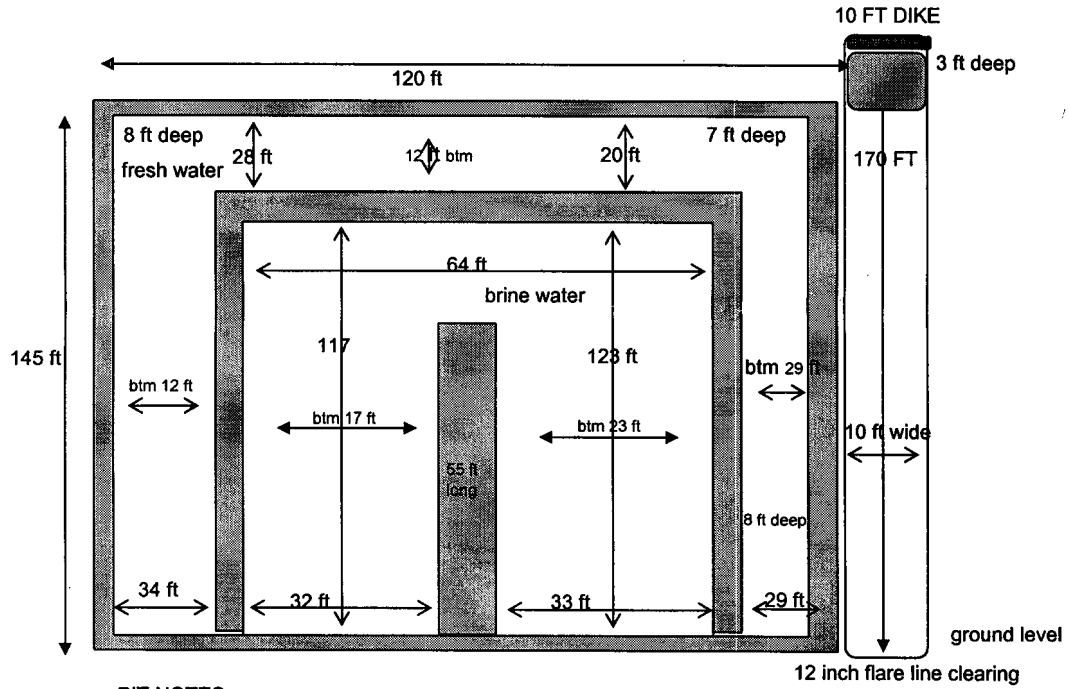
Note that the starting point cannot be a pole.

Input data

Lat1		Lon1	
0:00.00	N	0:00.00	W
Course 1-2		Distance 1-2	

POGO Producing Company
Cabin Lake 31 Federal #1
Approximate Pit Dimensions

1650' FSL & 330' FWL, Sec 31, T21S, R32E, Lea County, New Mexico
API #



PIT NOTES:

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° 28' 51" N & 103° 36' 52" W "Published data"
This well produces from a depth greater than 100 ft.

Pit equals approx 16000 bbls