OPER. OGRID NO. 17891

PROPERTY NO. 13271

POOL CODE 39366

EFF. DATE

API NO. 30-025-37000

District I

Form 3160-3
(April 2004)

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

Lease Serial No.
NM-32411

6. If Indian, Allotee or Tribe Name

1a. Type of work: [X] DRILL [ ] REENTER

7 If Unit or CA Agreement, Name and No.

1b. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [XX] Single Zone [ ] Multiple Zone

8. Lease Name and Well No.
Livingston Ridge 18 Fed #5

2. Name of Operator
Pogo Producing Company

9. API Well No.
30-025-~~36270~~ 37000

3a. Address
P.O. Box 10340, Midland,TX

3b. Phone No. *(include area code)*
432-685-8100

10. Field and Pool, or Exploratory
Livingston Ridge Delaware East

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 660' FSL & 1650' FWL
At proposed prod. zone same Unit N

11. Sec., T. R. M. or Blk. and Survey or Area
Sec 18, T22S, R32E

14. Distance in miles and direction from nearest town or post office*
Approximately 20 miles East of Carlsbad New Mexico

12. County or Parish
Lea County

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
330'	360	40
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
3200'	8700'	29771
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
3628' GR	When Approved	

24. Attachments

Carlsbad Controlled Water Basin

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

RECEIVED
DEC 2004
OCD

25. Signature	Name *(Printed/Typed)*	Date
Cathy Wright	Cathy Wright	11/03/04

Title
Sr. Eng. Tech

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Russ Johnson	Russ Johnson	6 DEC 2004

Title
ACTING FIELD MANAGER

Office
CARLSBAD FIELD OFFICE

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, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

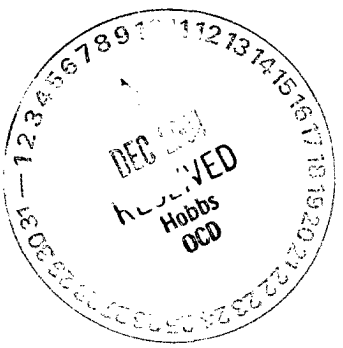
(Instructions on page 2)

DECLARED WATER BASIN
CEMENT BEHIND THE 13 3/8"
CASING MUST BE CIRCULATED

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

LIVINGSTON RIDGE "18" FEDERAL #5
Drilling Plan

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cmt to surface w/ Redi-mix.
2. Drill 17-1/2" hole to 800'. Run & set 800' of 13-3/8" 48# H-40 ST&C csg. Cmt w/ 600 sks Cl "C" cmt + add followed by 200 sks Cl "C" + 2% CaCl2 + add. Circ cmt to surface.
3. Drill 11" hole to 4400'. Run & set 4400' 8-5/8" 32# J-55 ST&C casing. Cmt w/ 1300 sks 65:35:6 Cl "C" cmt + add followed by 200 sks Cl "C" cmt + add. Circ cmt to surface.
4. Drill 7-7/8" hole to 8,700'. Run & set 8,700' of 5-1/2" csg as follows: 2700' 17# J-55 LT&C, 5000' 15.5# J-55 LT&C, 1000' 17# J-55 LT&C. Cmt in 3 stages w/ DV tools at 5800' & 3700' ±. Cmt 1st stage w/ 650 sks Cl "H" cmt, 2nd stage w/ 600 sks Cl "C" cmt + add, 3rd stage w/ 400 sks 65:35:6 Cl "C" followed by 100 sks Cl "C" + 1% CaCl2. Circ cmt to surface.



DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-37000	39360	LIVINGSTON RIDGE-DELAWARE East

Property Code	Property Name	Well Number
13271	LIVINGSTON RIDGE "18" FEDERAL	5

OGRID No.	Operator Name	Elevation
17891	POGO PRODUCING COMPANY	3628'

Surface Location

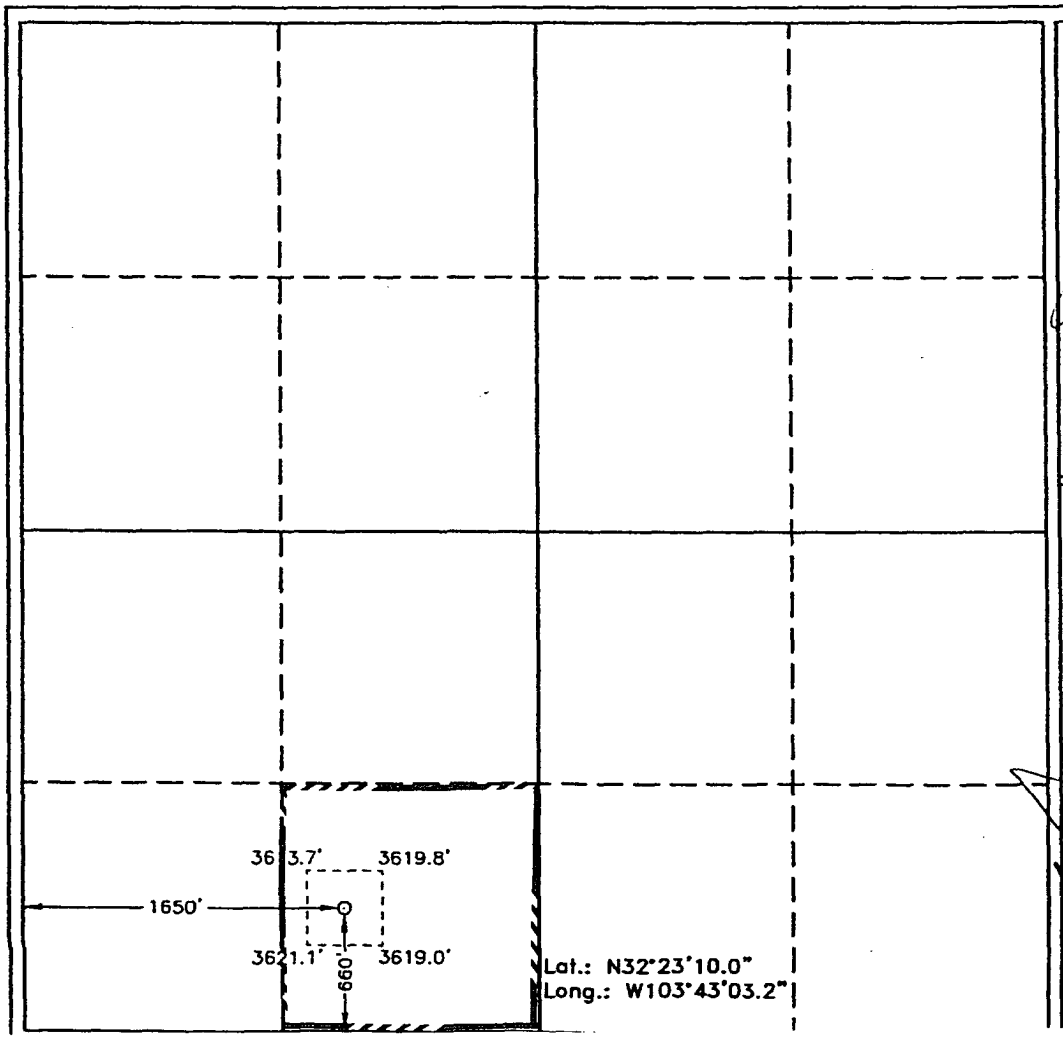
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	18	22 S	32 E		660	SOUTH	1650	WEST	LEA

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.
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

03/27/03
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.

MARCH 4, 2003
Date Surveyed

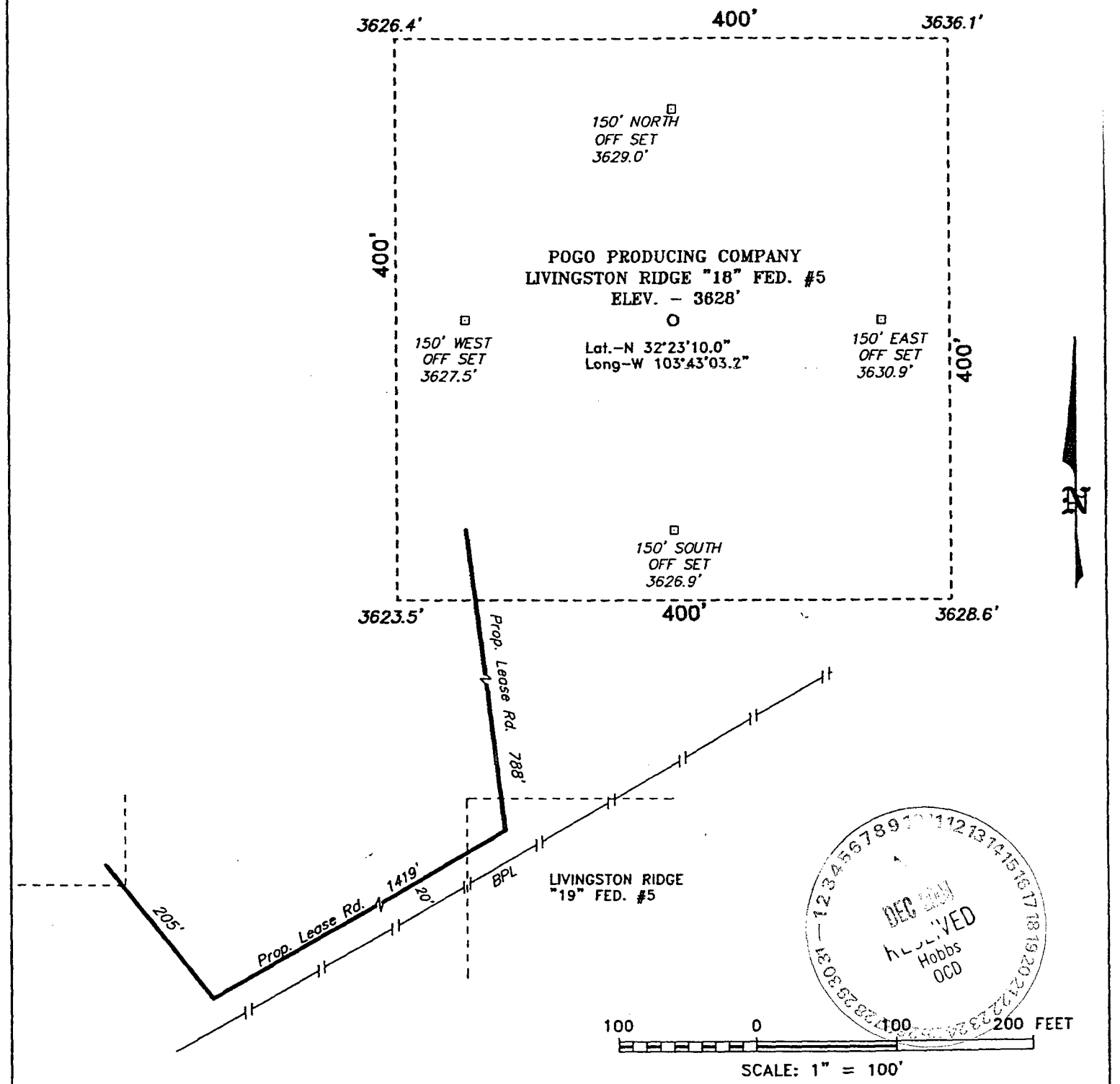
Signature & Seal of Professional Surveyor

W.O. No. 3072

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

SECTION 18, TOWNSHIP 22 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



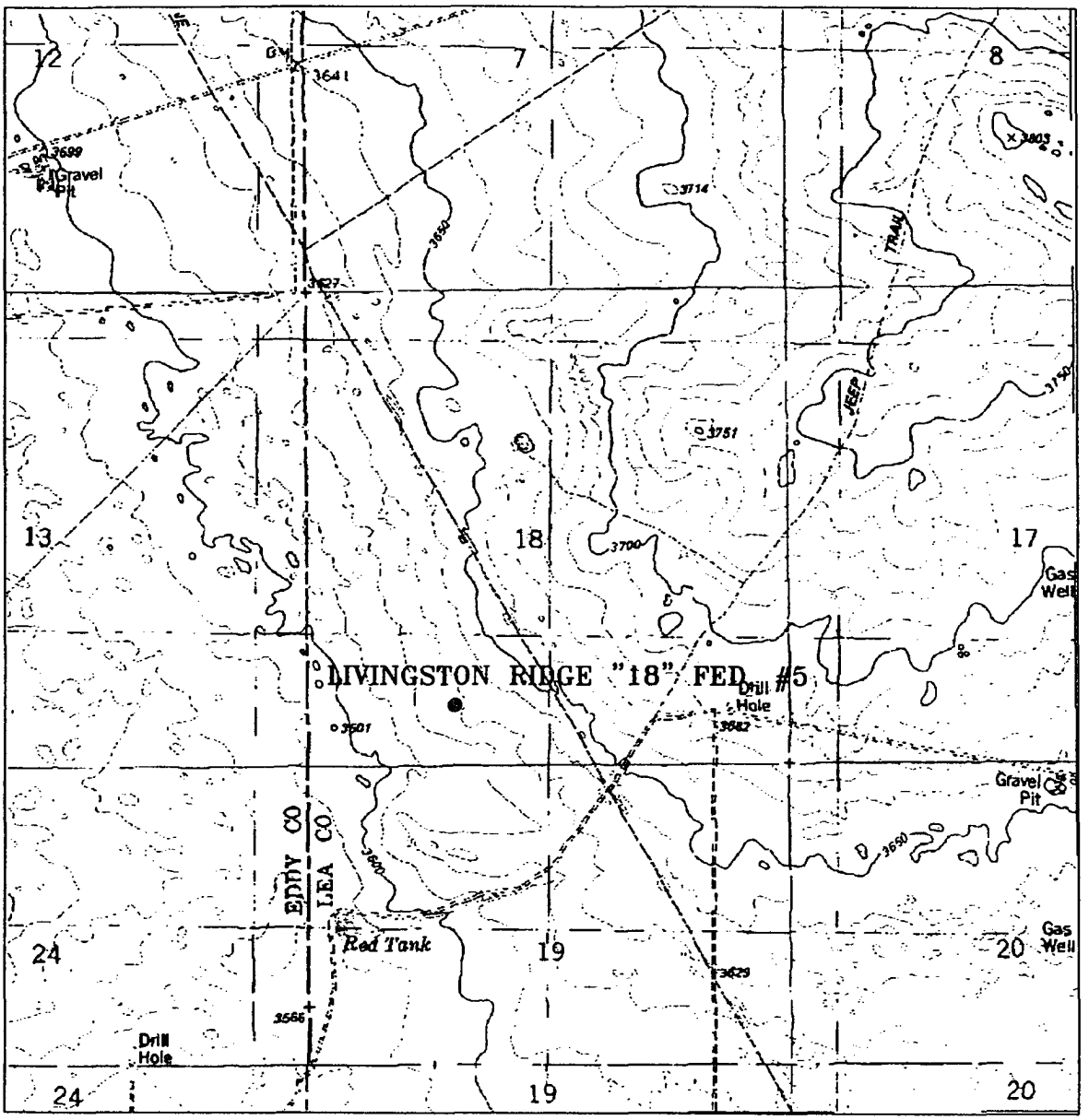
POGO PRODUCING CO.

REF: LIVINGSTON RIDGE "18" FEDERAL #5 / Well Pad Topo

THE LIVINGSTON RIDGE "18" FED. No. 5 LOCATED 660' FROM THE SOUTH LINE AND 1650' FROM THE WEST LINE OF SECTION 18, TOWNSHIP 22 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 3072	Drawn By: K. GOAD
Date: 03-07-2003	Disk: KJG CDW4 3072A.DWG



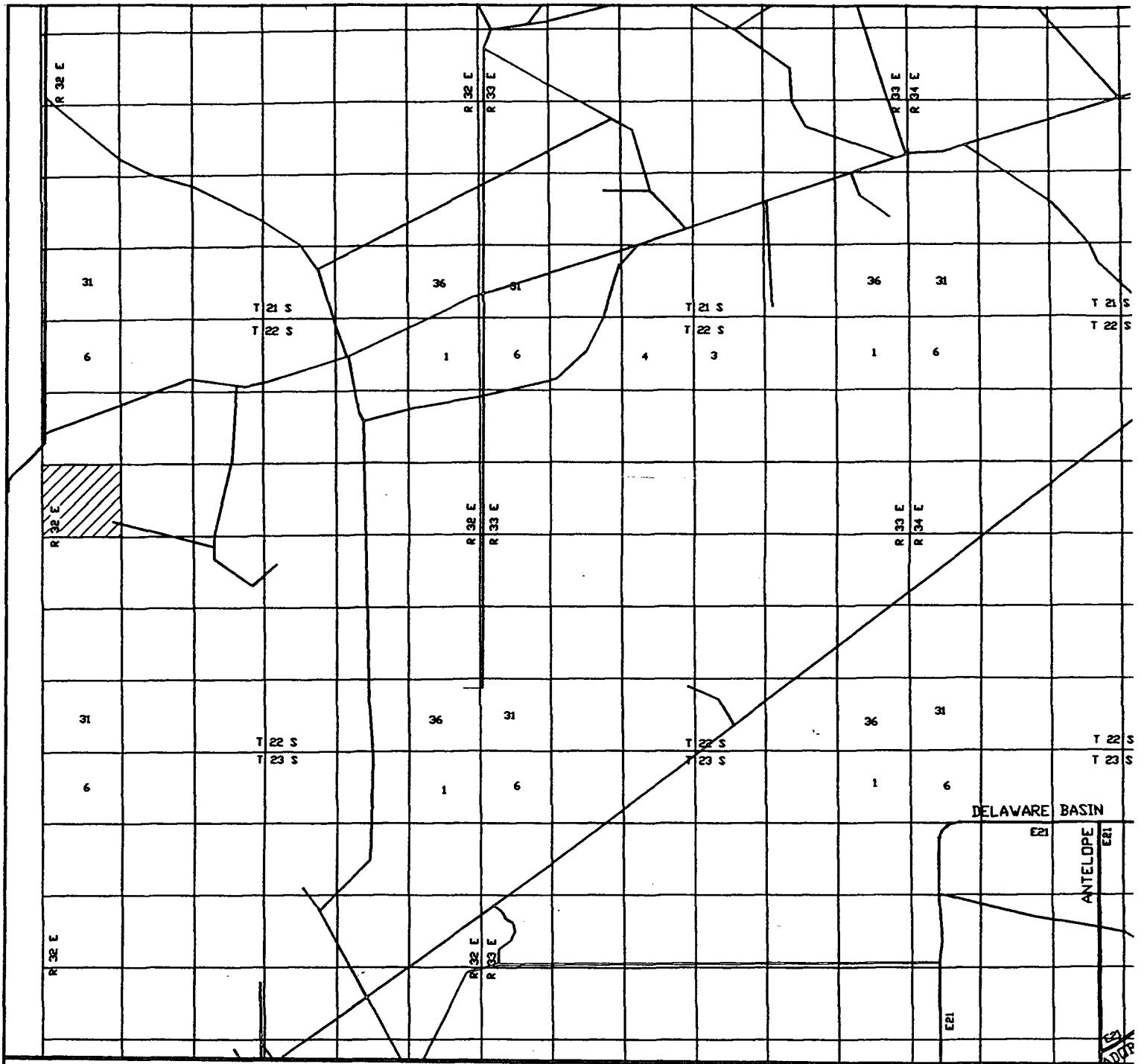
LIVINGSTON RIDGE "18" FEDERAL #5
Located at 660' FSL and 1650' FWL
Section 18, Township 22 South, Range 32 East,
N.M.P.M., Lea County, New Mexico.

basin surveys
focused on excellence in the oilfield

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:	3072AA - KJG CD#5
Survey Date:	03-04-2003
Scale:	1" = 2000'
Date:	03-07-2003

POGO PRODUCING COMPANY



LIVINGSTON RIDGE "18" FEDERAL #5
Located at 660' FSL and 1650' FWL
Section 18, Township 22 South, Range 32 East,
N.M.P.M., Lea County, New Mexico.

basin surveys
focused on excellence in the oilfield

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:	3072AA - KJG CD#5
Survey Date:	03-04-2003
Scale:	1" = 2 miles
Date:	03-07-2003

POGO PRODUCING COMPANY

APPLICATION TO DRILL

POGO PRODUCING COMPANY
LIVINGSTON RIDGE "18" FEDERAL # 5
UNIT "N" SECTION 18
T22S-R32E LEA CO. NM

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

1. Location of well: 330' FSL & 1650' FWL SECTION 18 T22S-R32E LEA CO. NM

2. Ground Elevation above Sea Level: 3628' GR.

3. Geological age of surface formation: Quaternary

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:

Rustler Anhydrite	750'	Cherry Canyon	5400'
Basal Anhydrite	4238'	Brushy Canyon	6630'
Delaware Lime	4512'	Bone Spring	8380'
Bell Canyon	4570'		

7. Possible mineral bearing formations:

Brushy Canyon	Oil
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~~ 925'	13 3/8"	48#	8-R	ST&C	H-40
11"	0-4400'	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
LIVINGSTON RIDGE "18" FEDERAL # 5
UNIT "N" SECTION 18
T22S-R32E LEA CO. NM

9. CASING CEMENTING & SETTING DEPTHS:

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 600 Sx. of 65/35/6 Class "C" POZ-Gel, tail in with 200 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. Circulate cement.
8 5/8"	Intermediate	Set 4400' of 8 5/8" 32# J-55 ST&C casing, Cement with 1300 Sx. of 65/35/6 Class "C" POZ-Gel, + 5% NaCl, tail in with 200 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. 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# LT&C, 1000' of 5½" 17# J-55 LT&C. Cement in 3 stages, place DV Tools at 5800' & 3700'±. Cement 1st stage with 650 Sx. of Class "H" cement + additives, cement 2nd stage with 600 Sx. of Class "C" cement + 8# of Gilsonite/Sx., 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 900 Series 3000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams and bottom pipe rams. The B.O.P. will be nipped up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 2" 3000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-~~800~~ 925'	8.4-8.7	29-32	NC	Fresh water Spud Mud add paper to control seepage.
800-4400'	10.0-10.2	29-38	NC	Brine water add paper to control seepage and use high viscosity sweeps to clean hole.
4400-8700'	8.4-8.7	29-40	NC*	Fresh water mud system use high viscosity sweeps to clean hole.

* If water loss control is required in order to take DST's, run logs, or run casing add Dris-Pac to system to control water loss.

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/or water loss may have to be adjusted to meet these needs.

12. LOGGING, CORING, AND TESTING PROGRAM:

A. Open hole logs: Run Dual Induction, SNP, LDT, Gamma Ray, Caliper logs from TD back to 8 5/8" casing shoe.

B. Run Gamma Ray, Neutron logs from 8 5/8" casing shoe back to surface.

C. Mud logger may be placed on hole at 4400'±.

D. No cores or DST's are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H^2S in this area. If H^2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 4300 PSI, and Estimated BHT 165°.

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 28 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Delaware(BS) formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified 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"

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 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
LIVINGSTON RIDGE "18" FEDERAL # 5
UNIT "N" SECTION 18
T22S-R32E LEA CO. NM

1. EXISTING ROADS: Area roads, Exhibit "B" is a reproduction of a County General Hiway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing exixting roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.

   A. Exhibit "A" shows the proposed well site location as staked.

   B. From Hobbs, New Mexico take U.S. Hi-way 62-180 toward Carlsbad New Mexico go 38± miles to CR-29, turn Left (SOUTH) go 12.5± miles, turn Left (EAST) go .7 miles, turn North go .25 miles, turn East go .25 miles to well # 1, from the Southeast corner of location follow new least road .3 miles to well # 5 bear Left and follow new lease road 800' to location.

   C. Exhibit "F" shows probable routes of powerlines and flowlines to be constructed to produce this lease.

2. PLANNED ACCESS ROADS: Approximately 800' of new road will be constructed.

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

   B. Gradient on all roads will be less than 5%.

   C. Turnouts will be constructed as required or as directed by the BLM.

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

   E. Center line for the new access road has been staked and flagged. Earthwork will be done as required by field and topographic conditions.

   F. Culverts in the access road will be used where necessary. The road will be constructed to utilize low water crossings for drainage as dictated by the topography.

3. LOCATION OF EXISTING WELLS WITHIN A ONE-MILE RADIUS SHOWN ON EXHIBIT "A-1".

A. Water wells	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"
F. Injection wells	None known

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 "F".

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.

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
LIVINGSTON RIDGE "18" FEDERAL # 5
UNIT "N" SECTION 18
T22S-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. There are no dwellings near this 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. 915-685-8100
Mr. RICHARD WRIGHT 915-685-8140

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 : 03/23/03
TITLE : Agent

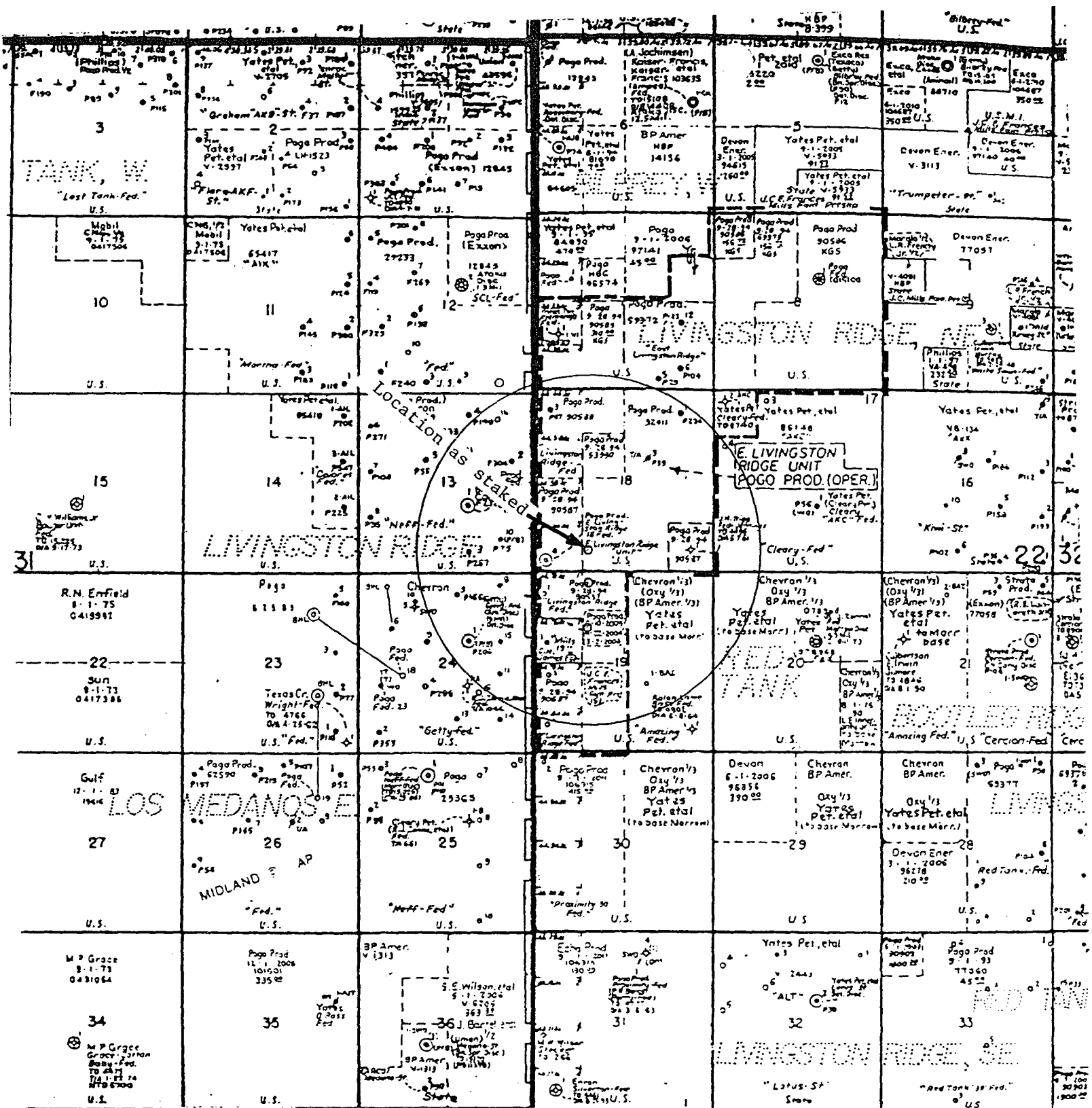


EXHIBIT "A-1"
ONE MILE RADIUS MAP

POGO PRODUCING COMPANY
LIVINGSTON RIDGE "18" FEDERAL # 5
UNIT "N" SECTION 18
T22S-R32E LEA CO. NM

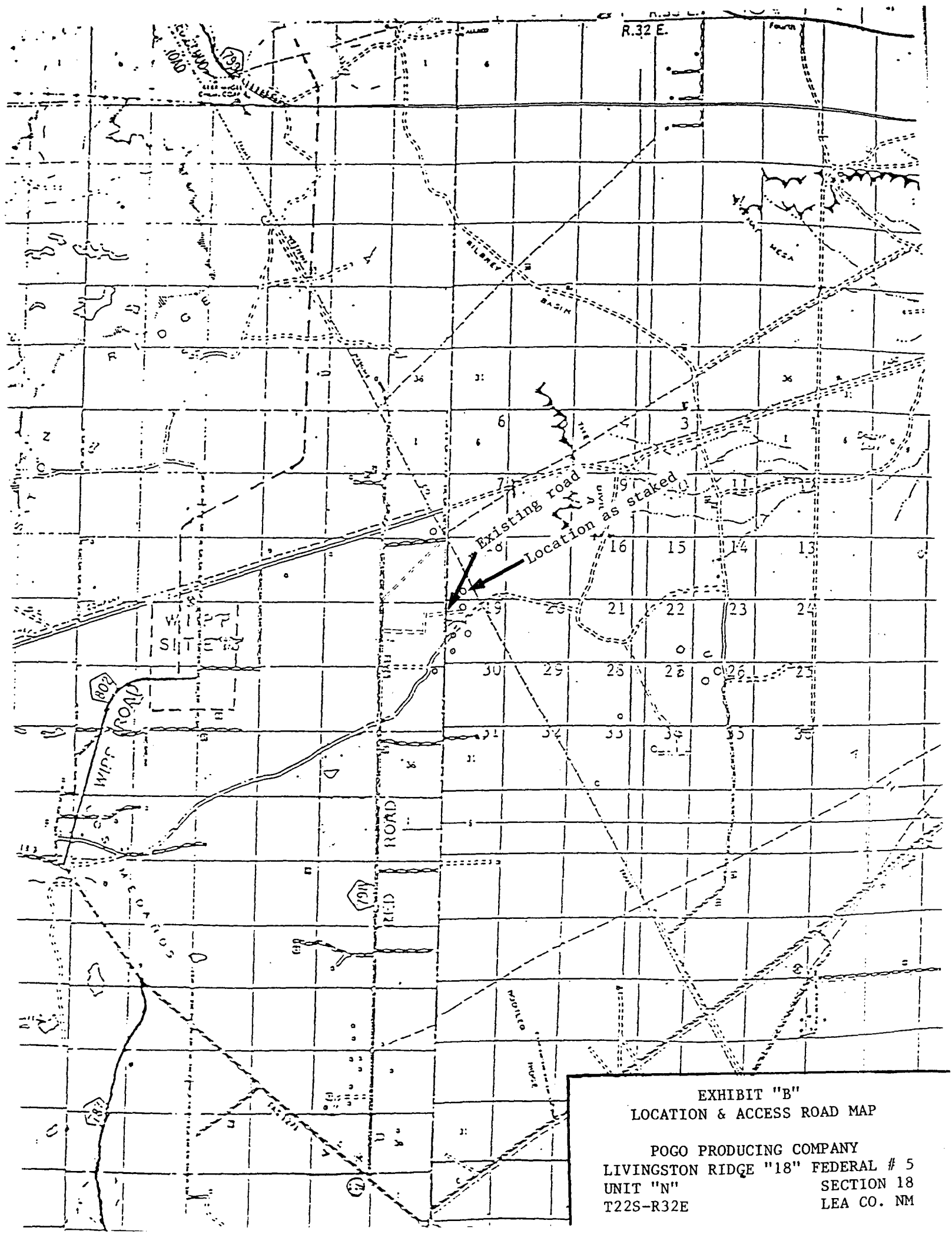


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

POGO PRODUCING COMPANY
LIVINGSTON RIDGE "18" FEDERAL # 5
UNIT "N" SECTION 18
T22S-R32E LEA CO. NM

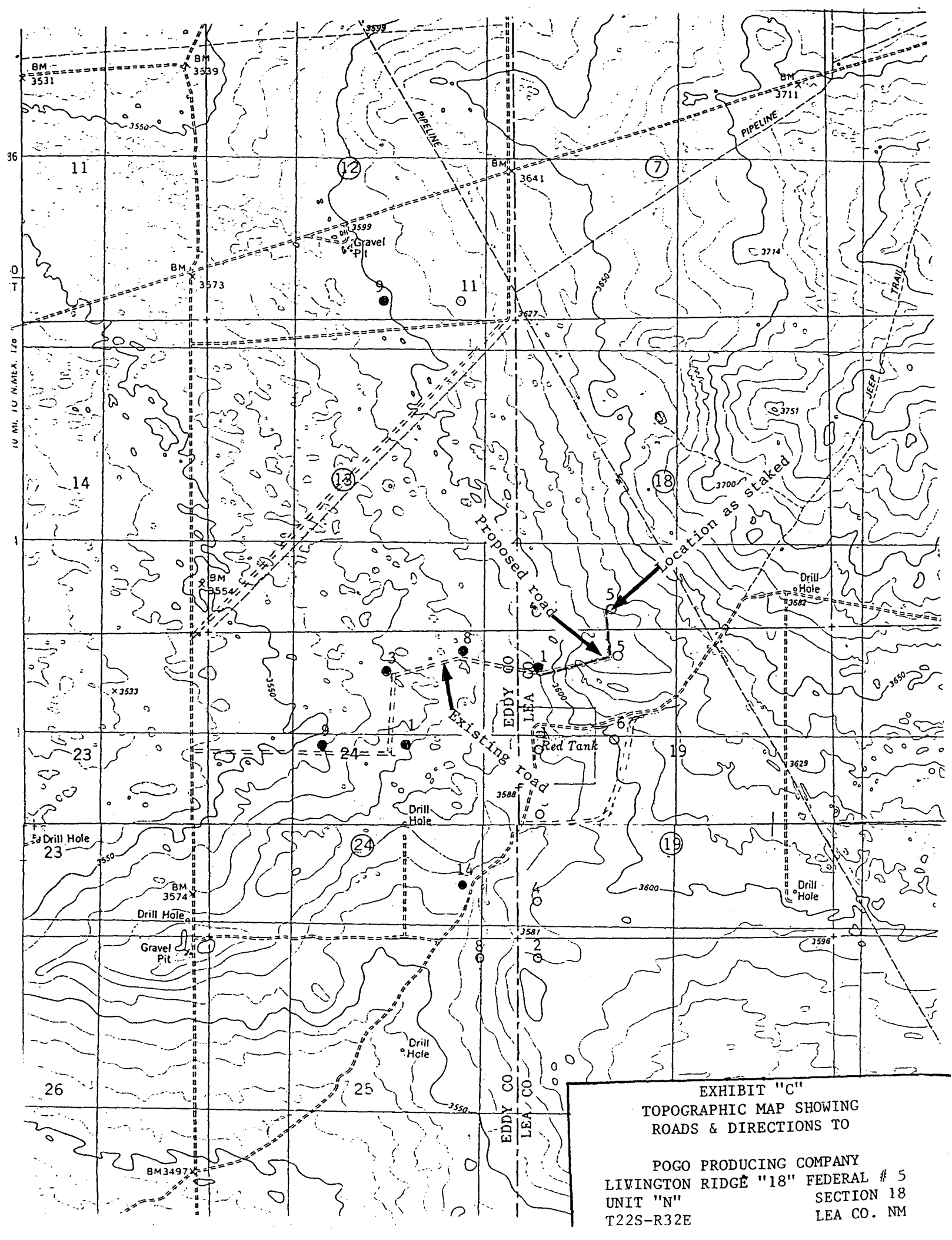


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

POGO PRODUCING COMPANY
LIVINGTON RIDGE "18" FEDERAL # 5
UNIT "N" SECTION 18
T22S-R32E LEA CO. NM

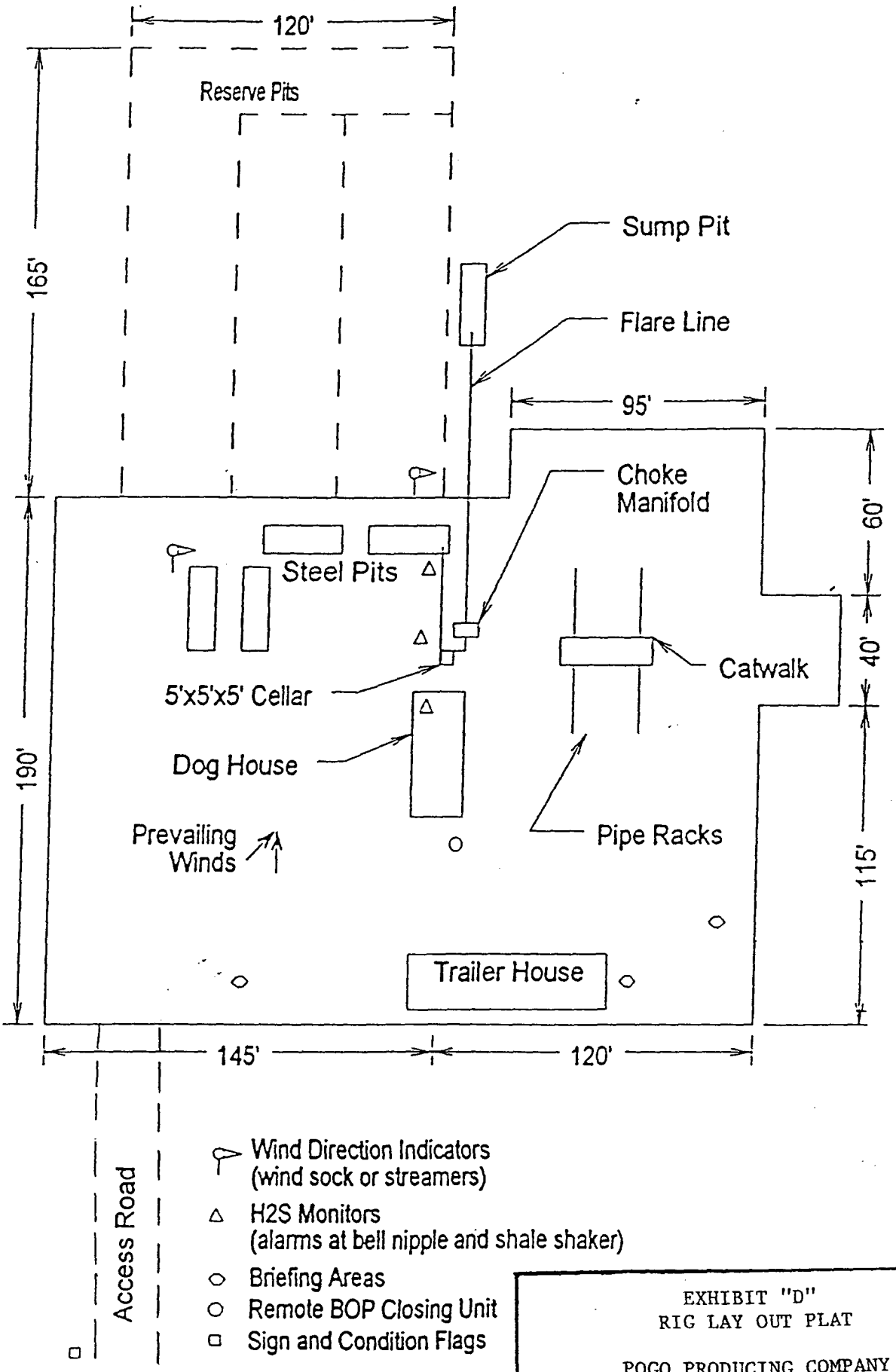
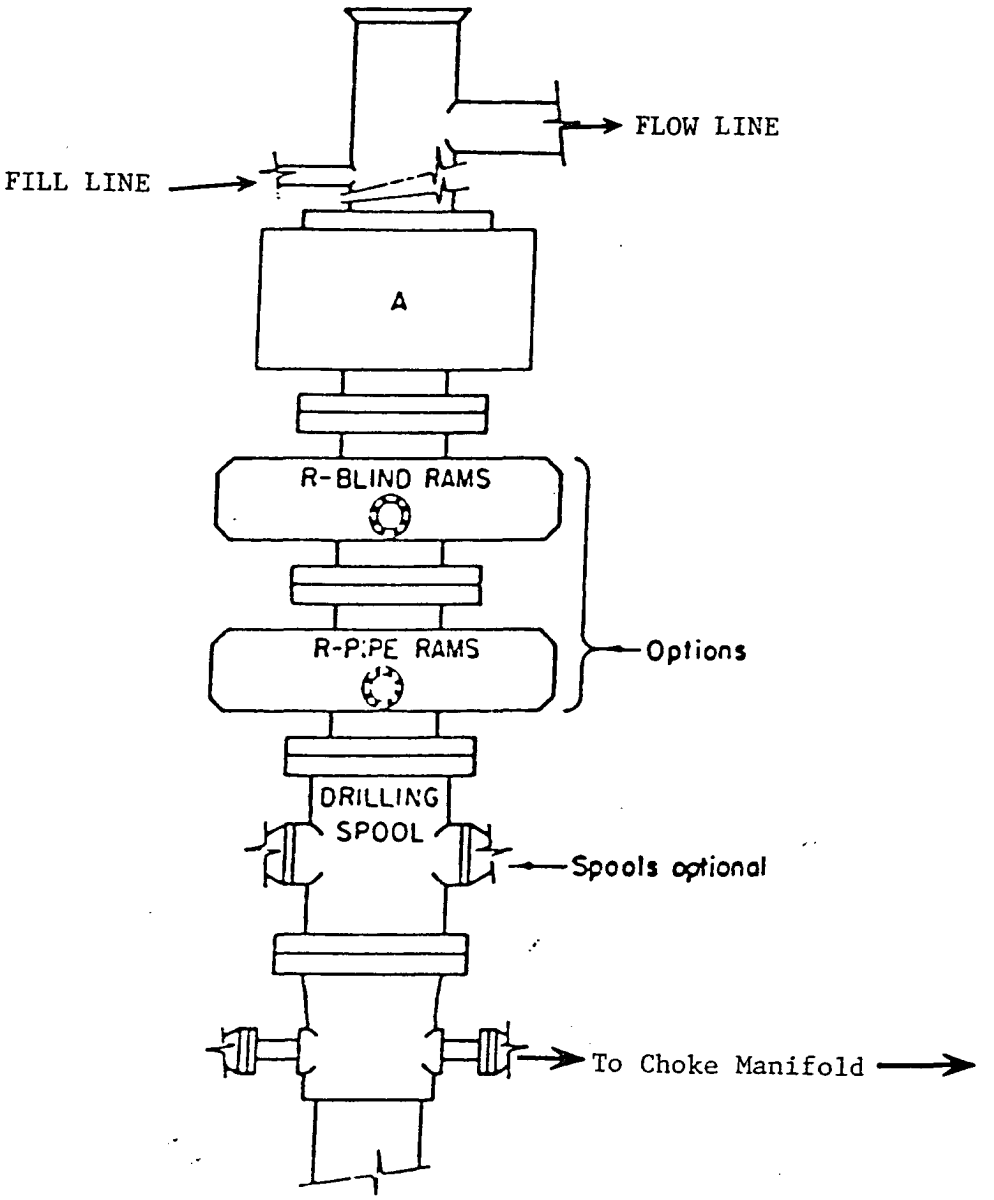


EXHIBIT "D"
RIG LAY OUT PLAT

POGO PRODUCING COMPANY
LIVINGSTON RIDGE "18" FEDERAL # 5
UNIT "N" SECTION 18
T22S-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
LIVINGSTON RIDGE "18" FEDERAL # 5
UNIT "N" SECTION 18
T22S-R32E LEA CO. NM

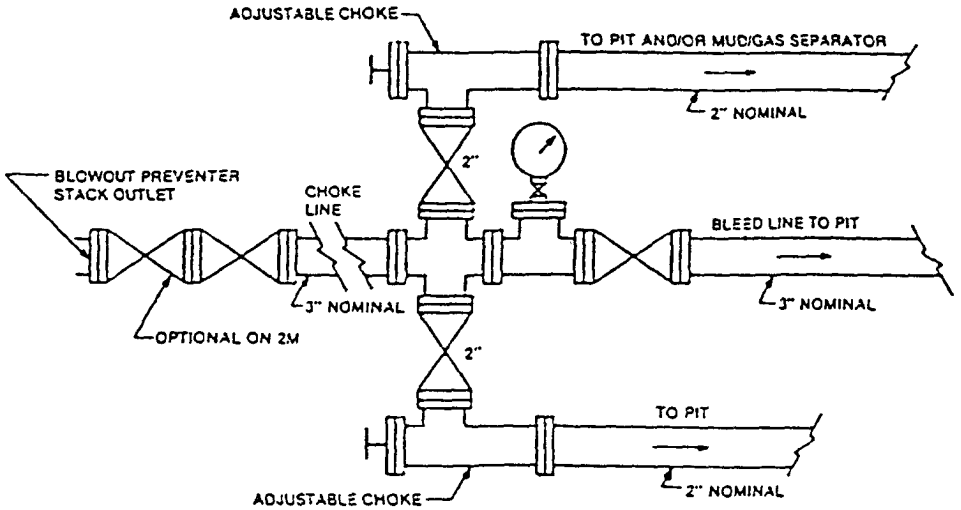


FIGURE K-1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

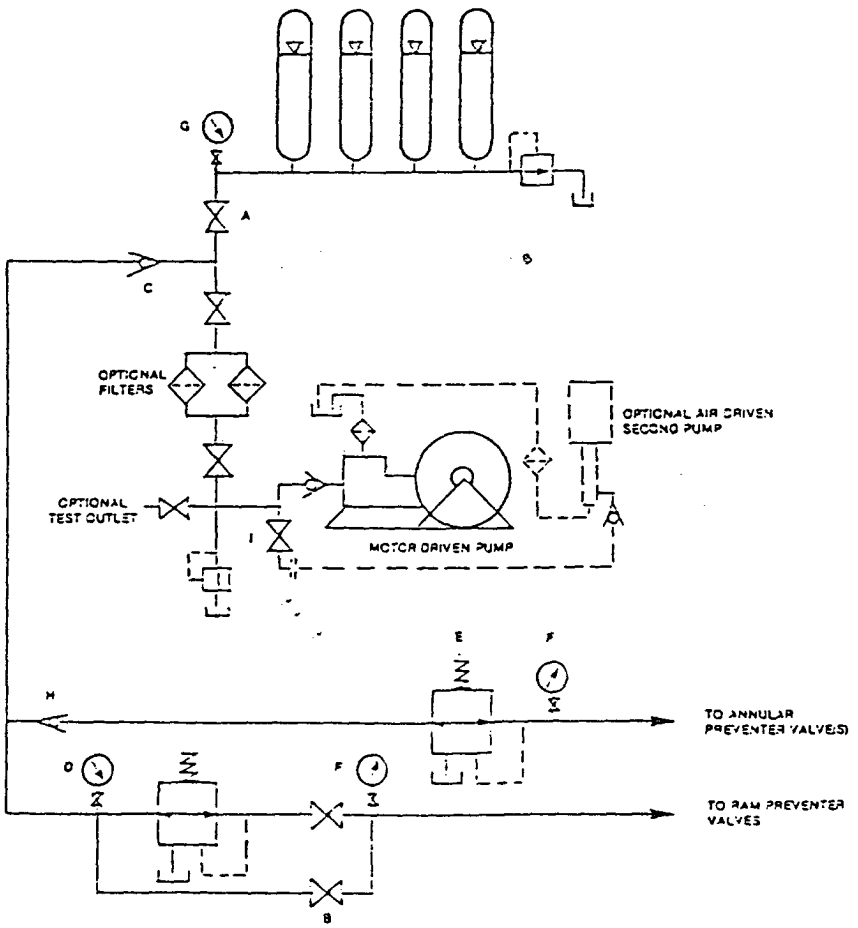


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
LIVINGSTON RIDGE "18" FEDERAL # 5
UNIT "N" SECTION 18
T22S-R32E LEA CO. NM

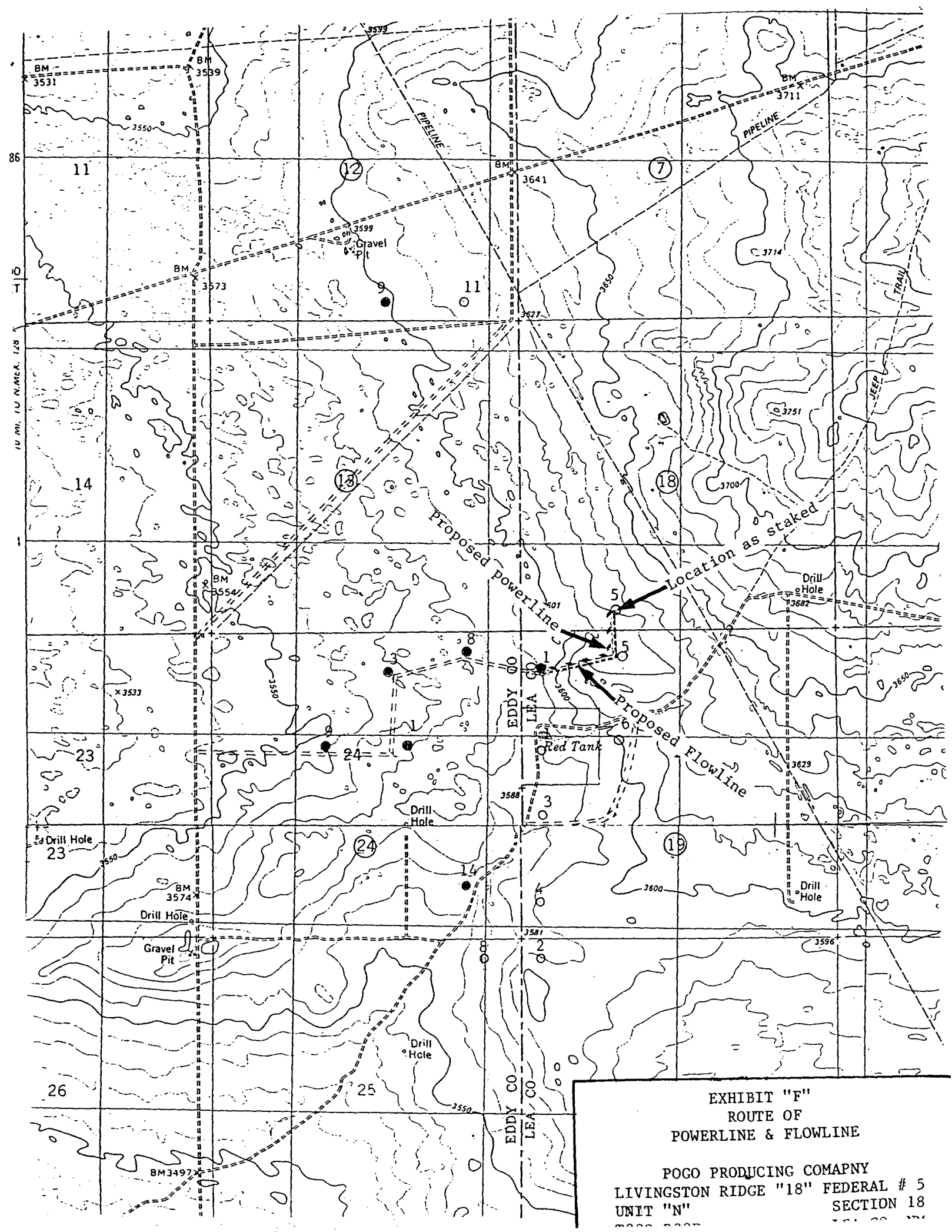


EXHIBIT "F"
ROUTE OF
POWERLINE & FLOWLINE

POGO PRODUCING COMAPNY
LIVINGSTON RIDGE "18" FEDERAL # 5
UNIT "N" SECTION 18

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 37000
Facility or well name: Liv Ridge 19 Fed #5 API #: 30-025-~~36294~~ U/L or Qtr/Qtr C Sec 19 T 22 R 32
County: Lea Latitude 32:22:59.2N Longitude 103:43:2.1W 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		(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

RECEIVED DEC 2004 Hobbs OCD

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 h been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**
Date: 12/10/04
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: DEC 16 2004
Printed Name/Title PETROLEUM ENGINEER Signature

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 322314103384301

Save file of selected sites to local disk for future upload

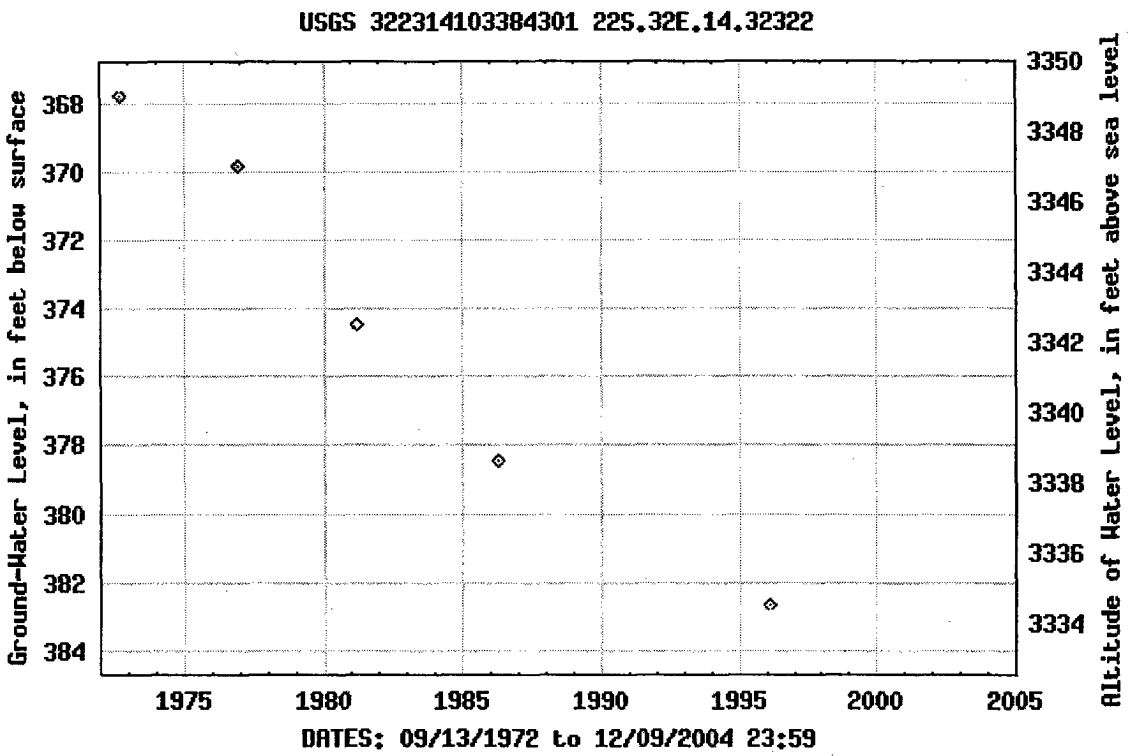
USGS 322314103384301 22S.32E.14.32322

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code
Latitude 32°23'14", Longitude 103°38'43" NAD27
Gage datum 3,717.00 feet above sea level NGVD29
The depth of the well is 435 feet below land surface.
This well is completed in SANTA ROSA SANDSTONE (231SNRS)

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.
Download a presentation-quality graph

USGS

Water Resources

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

This server(nwis.waterdata.usgs.gov) is currently experiencing network and database connectivity problems which prevent Real-Time data from being updated. We are actively working on resolving this issue.
All real-time data continues to be available at http://waterdata.usgs.gov/nwis/rt.

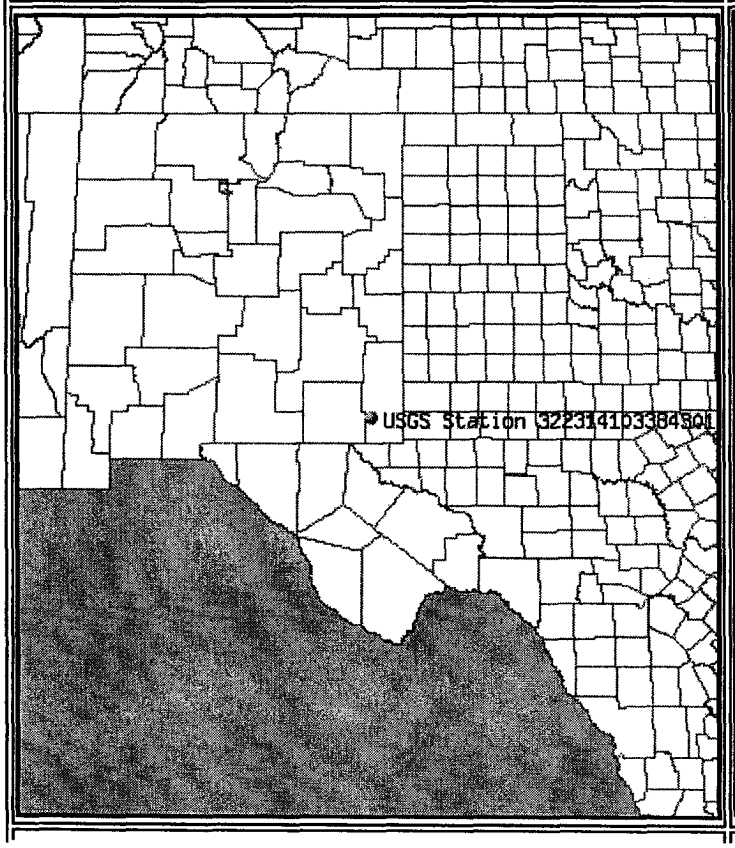
Site Map for New Mexico

USGS 322314103384301 22S.32E.14.32322

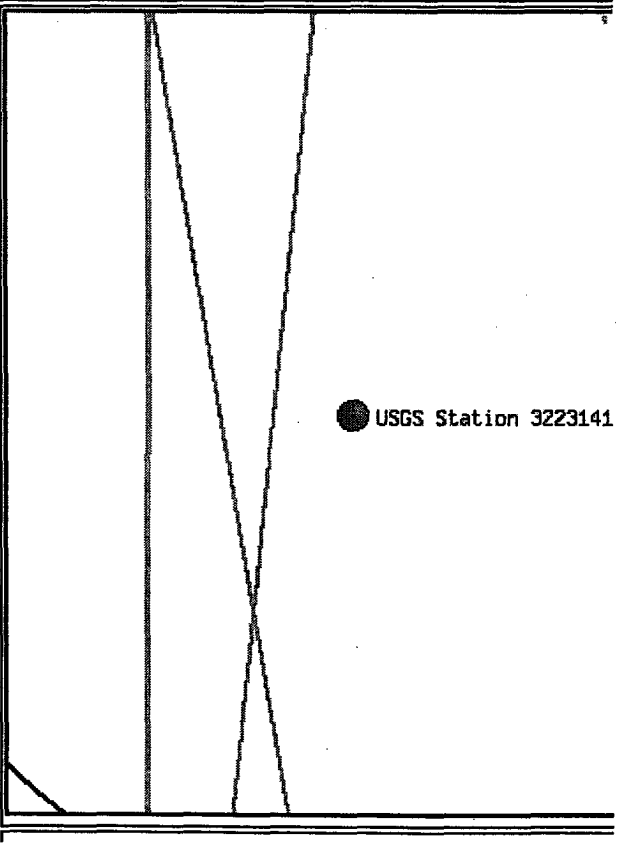
Available data for this site: site map | GO

Lea County, New Mexico
Hydrologic Unit Code
Latitude 32°23'14", Longitude 103°38'43" NAD27
Gage datum 3,717.00 feet above sea level NGVD29

Location of the site in New Mexico.

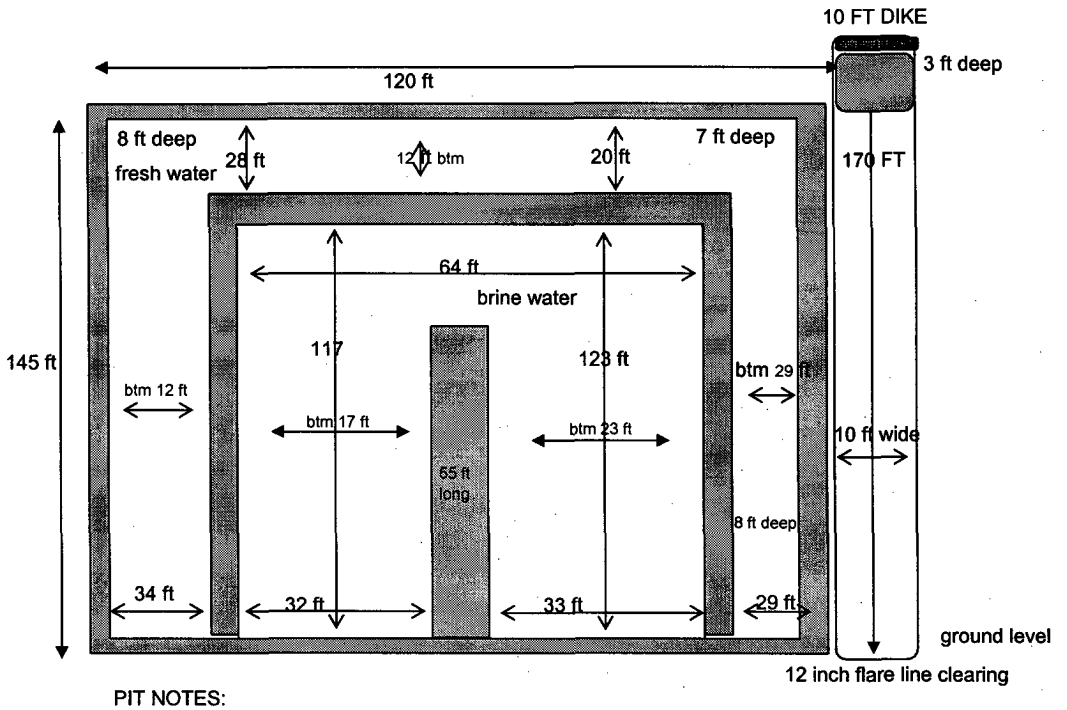


Site map.



POGO Producing Company
Livingston Ridge 19 Federal #5
Approximate Pit Dimensions

C/19/22S/32E, Lea County, New Mexico
API # 30 025 36294



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° 23' 14" N & 103° 38' 43" W "Published data"
This well produces from a depth greater than 100 ft.

Pit equals approx 16000 bbls

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	
32:23.14	N	103:38:43	W
Lat2		**Lon2**	
32:22:59.2	N	103:43:2.1	W

Output

Course 1-2	Course 2-1	Distance
267.611581	87.5730334	3.64994184

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

Compute Reset

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

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

Note that the starting point cannot be a pole.

Input data

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