ATS-07-124

Form 3160-3
(April 2004)

OCD-HOBBS

DEC 2006
RECEIVED
OCD - ARTESIA

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NM-90812

6. If Indian, Allotee or Tribe Name

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

7 If Unit or CA Agreement, Name and No.

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

8. Lease Name and Well No. (35733)
MESA VERDE "8" FEDERAL # 1

2. Name of Operator (17891)
POGO PRODUCING COMPANY (RICHARD WRIGHT 432-685-8140)

9. API Well No.
30-025-38226

3a. Address P.O. BOX 10340
MIDLAND, TEXAS 79702-7340

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

10. Field and Pool, or Exploratory (96229)
MESA VERDE-BONE SPRING

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* Unit I
At surface 1980' FSL & 330' FEL SEC. 8 T24S-R32E LEA CO. NM
At proposed prod. zone 1980' FSL & 1650' FWL SEC. 8 T24S-R32E HORIZIONAL

11. Sec., T. R. M. or Blk. and Survey or Area
SECTION 8 T24S-R32E

Carlsbad Controlled Water Basin

14. Distance in miles and direction from nearest town or post office*
Approximately 70 miles Southwest of Hobbs New Mexico

12. County or Parish
LEA

13. State
New Mexico

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'	320	120

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
1320'	TVD-9800'± MD-12,900'±	NATION WIDE WYB-000238

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3610' GL.	WHEN APPROVED	50 days

24. Attachments

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.

25. Signature	Name *(Printed/Typed)*	Date
Joe T. Janica	Joe T. Janica	11/20/06

Title
Agent

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ James A. Amos	/s/ James A. Amos	DEC 18 2006

Title	Office
ACTING FIELD MANAGER	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)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.

2. Drill 17½" holw to 850'. Run and set 850' of 13 3/8" 48# H-40 ST&C casing. Cement with 1000 Sx. of Class "C" Light weight cementMixed at 12.8#/Gal. + 6% Gel, + 5% salt, yield 1.89 CU FT?/SX., tail in with 200 Sx. of Class "C" + 2% CaCl, mixed at 14.8#/Gal with a yield of 1.32 CU FT/Sx. Circulate cement to surfqce.

2. Drill 12¼" hole to 4600'. Run and set 4600' of 9 5/8" 36# J-55 ST&C casing. Cement with 1900 Sx. of Light Weight cement + 6% Gel, + 5% Salt, mixed at 12.4#/Gal.,yield 2.09 CU FT/SX., tail in with 200 Sx. of Class "C" cement + 1% CaCl, mixed at 14.8#/ Sx. with a yield of 1.32 CU FT/SX. Circulate cement to surface.

4. Drill 8 ½" hole to 9950'. Run Gyro, pull out of hole and run open hole logs. Plug back to 9150' for kick off point. Drill curve and lateral with a 8½" bit then reduce hole to 7 7/8" and drill to a a measured depth of 12,900'±. Run and set 5½" casing as follows: 3900' of 5½" 17# P-110 BT&C , 9000' of 5½" 17# P-110 LT&C casing. Cement with 1400 Sx. of Class "H" cement + additives, mixed at 15.6#/Gal and a yield of 1.18 CU FT/Sx. Estimate top of cement 4000' from surface.

OBLIQUE CIRCULAR ARC INTERPOLATION

0	MD OF INTERPOLATION DEPTH,(feet)
#N/A	TVD COORDINATE OF THE DEPTH (feet)
#N/A	N/S COORDINATE OF DEPTH (feet)
#N/A	E/W COORDINATE OF DEPTH (feet)

DISTANCE TABLE

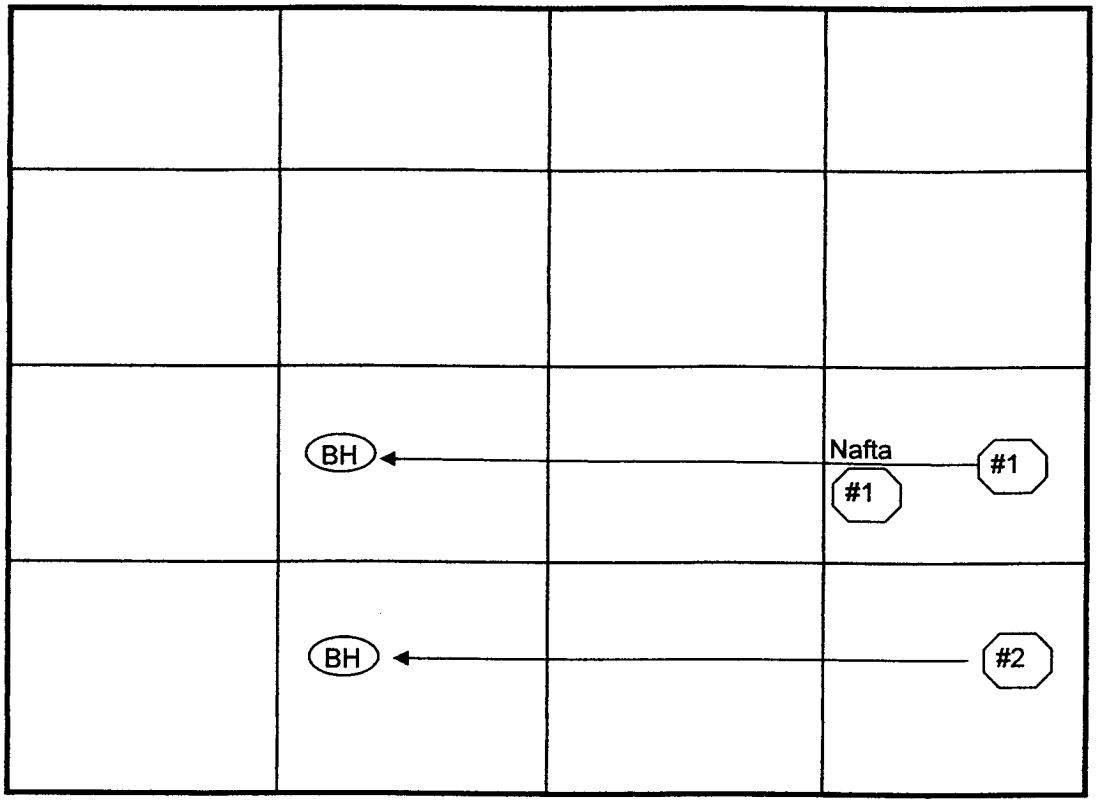
STATION A	STATION B
3 D DISTANCE BETWEEN STATION A AND STATION B	0.00 ft
Calculator =	

TABLE OF SURVEY STATIONS

STA #	ΔMD ft	INCL deg	AZIM deg	MD ft	TVD ft	N+/S- ft	E+/W- ft	DLS deg/100FT
1	TIE POINT =>	0	0	9321.00	9321.00	0.00	0.00	-
2	100	12	270	9421.00	9420.27	0.00	-10.43	12.00
3	100	24	270	9521.00	9515.20	0.00	-41.28	12.00
4	100	36	270	9621.00	9601.65	0.00	-91.19	12.00
5	100	48	270	9721.00	9675.83	0.00	-157.98	12.00
6	100	60	270	9821.00	9734.50	0.00	-238.73	12.00
7	100	72	270	9921.00	9775.10	0.00	-329.92	12.00
8	100	84	270	10021.00	9795.85	0.00	-427.56	12.00
9	50	90	270	10071.00	9798.46	0.00	-477.46	12.00
10	100	92	270	10171.00	9796.72	0.00	-577.44	2.00
11	100	92	270	10271.00	9793.23	0.00	-677.38	0.00
12	100	92	270	10371.00	9789.74	0.00	-777.32	0.00
13	100	92	270	10471.00	9786.25	0.00	-877.26	0.00
14	100	92	270	10571.00	9782.76	0.00	-977.20	0.00
15	100	92	270	10671.00	9779.27	0.00	-1077.14	0.00
16	100	92	270	10771.00	9775.78	0.00	-1177.08	0.00
17	100	92	270	10871.00	9772.29	0.00	-1277.02	0.00
18	100	92	270	10971.00	9768.80	0.00	-1376.96	0.00
19	100	92	270	11071.00	9765.31	0.00	-1476.90	0.00
20	100	92	270	11171.00	9761.82	0.00	-1576.84	0.00
21	100	92	270	11271.00	9758.33	0.00	-1676.77	0.00
22	100	92	270	11371.00	9754.84	0.00	-1776.71	0.00
23	100	92	270	11471.00	9751.35	0.00	-1876.65	0.00
24	100	92	270	11571.00	9747.86	0.00	-1976.59	0.00
25	100	92	270	11671.00	9744.37	0.00	-2076.53	0.00
26	100	92	270	11771.00	9740.88	0.00	-2176.47	0.00
27	100	92	270	11871.00	9737.39	0.00	-2276.41	0.00
28	100	92	270	11971.00	9733.90	0.00	-2376.35	0.00
29	100	92	270	12071.00	9730.41	0.00	-2476.29	0.00
30	100	92	270	12171.00	9726.92	0.00	-2576.23	0.00
31	100	92	270	12271.00	9723.43	0.00	-2676.17	0.00
32	100	92	270	12371.00	9719.94	0.00	-2776.10	0.00
33	100	92	270	12471.00	9716.45	0.00	-2876.04	0.00
34	100	92	270	12571.00	9712.96	0.00	-2975.98	0.00
35	100	92	270	12671.00	9709.47	0.00	-3075.92	0.00
36	100	92	270	12771.00	9705.98	0.00	-3175.86	0.00
37	100	92	270	12871.00	9702.49	0.00	-3275.80	0.00
38	24	92	270	12895.00	9701.65	0.00	-3299.79	0.00

Mesa Verde / Nafta Section

Sec 8, T-24-S, R-32-E, LEA County, New Mexico



WELL NAME	Surface location legals	Plan Depth TVD	Producing Interval
NAFTA 8 FED # 1	1650 FSL & 990 FEL	TD = 10,000	1st Bone Production
Mesa Verde 8 Fed #1	1980 FSL & 330 FEL	TVD = Proposed 9900'	Anticipated 1st Bone Production
Mesa Verde 8 Fed #2	660 FSL & 330 FEL	TVD = Proposed 9900'	1st Bone Production

DISTRICT I
1625 N. FRENCH DR., HOBBS, 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	Pool Name
30-025-38226	96229	MESA VERDE-BONE SPRING

Property Code	Property Name	Well Number
35733	MESA VERDE 8 FEDERAL	1H

OGRID No.	Operator Name	Elevation
017891	POGO PRODUCING COMPANY	3610'

Surface Location

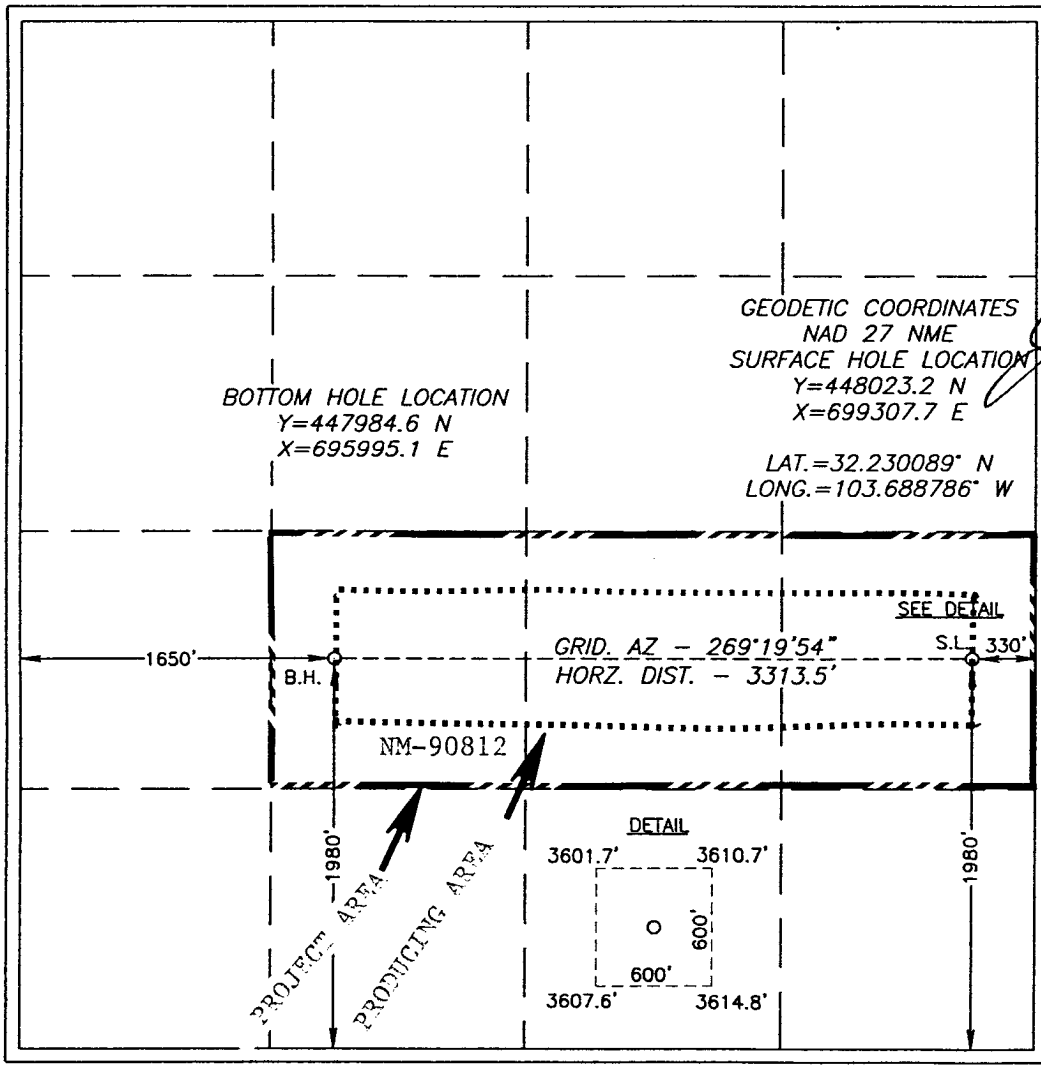
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	8	24-S	32-E		1980	SOUTH	330	EAST	LEA

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
K	8	24-S	32-E		1980	SOUTH	1650	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
120			

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 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.

Signature: Joe T. Janica — Date: 11/20/06

Printed Name: Agent

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 supervision, and that the same is true and correct to the best of my belief.

NOVEMBER 1, 2006

Date Surveyed: LA

Signature & Seal of Professional Surveyor: Gary L. Eidson 11/9/06

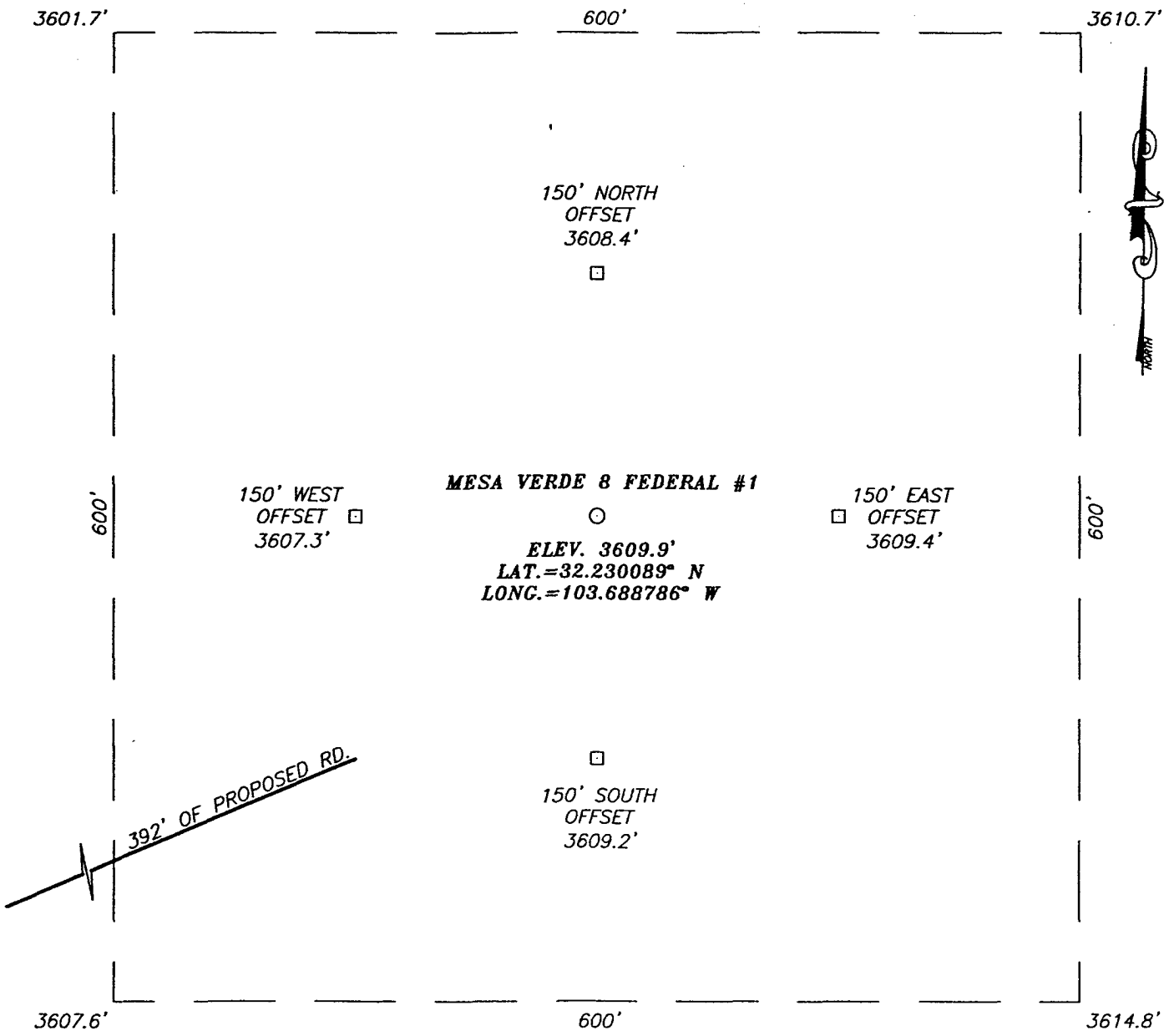
06.11.1735

Certificate No. GARY EIDSON 12641

EXHIBIT "A"

SECTION 8, TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #128 (JAL HWY.) AND CO. RD. #786 (BUCK JACKSON RD.) GO SOUTHEAST ON ST. HWY. #128 FOR APPROX. 0.5 MILES. TURN LEFT AND GO NORTHEAST APPROX. 1.3 MILES. THIS LOCATION IS APPROX. 500 FEET NORTHEAST.

100 0 100 200 Feet

Scale:1"=100'

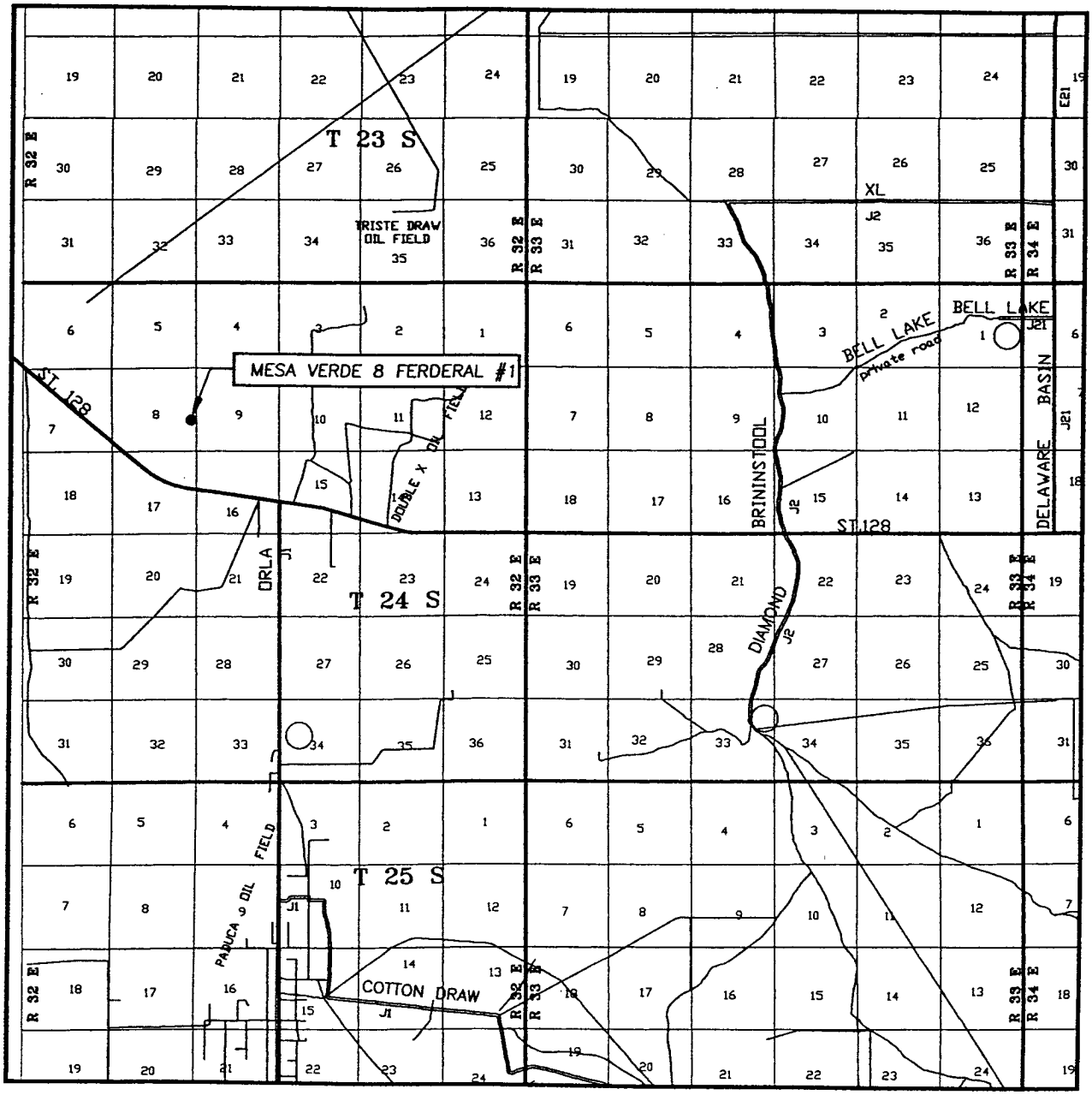
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

POGO PRODUCING COMPANY

MESA VERDE 8 FEDERAL #1 WELL
LOCATED 1980 FEET FROM THE SOUTH LINE
AND 330 FEET FROM THE EAST LINE OF SECTION 8,
TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

Survey Date: 11/1/06	Sheet 1 of 1 Sheets		
W.O. Number: 06.11.1735	Dr By: LA		Rev 1:N/A
Date: 11/7/06	Disk: CD#5	06111735	Scale:1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 8 TWP. 24-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 1980' FSL & 330' FEL

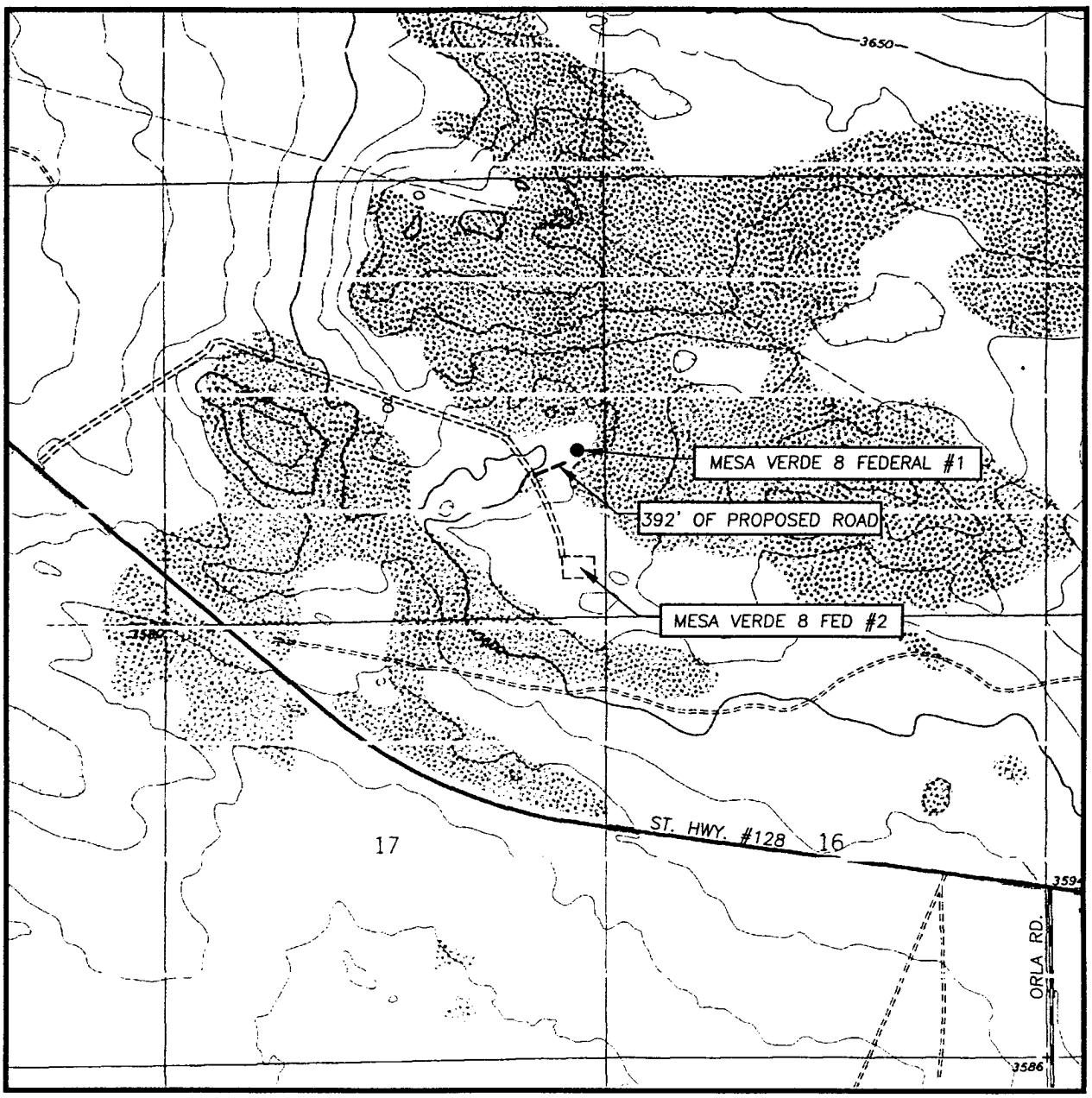
ELEVATION 3610'

OPERATOR POGO PRODUCING COMPANY

LEASE MESA VERDE 8 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:
PADUCA BREAKS NW, N.M. – 10'

SEC. 8 TWP. 24-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 1980' FSL & 330' FEL

ELEVATION 3610'

OPERATOR POGO PRODUCING COMPANY

LEASE MESA VERDE 8 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
PADUCA BREAKS NW, 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
MESA VERDE "8" FEDERAL # 1H
UNIT "I" SECTION 8
T24S-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: 1980' FSL & 330' FEL SECTION 8 T24S-R32E LEA CO. NM

2. Ground Elevation above Sea Level: 3610' GL

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: MD-12,900'± TVD-9800'±

6. Estimated tops of geological markers:

Basal Anhydrite	4482'	Brushy Canyon	6906'
Delaware Lime	4712'	Bone Spring	8576'
Bell Canyon	4734'	1st Bone Spring Sd.	9550'
Cherry Canyon	5590'	TVD	9950'

7. Possible mineral bearing formations:

Bone Spring	Oil

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
26"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-850'	13 3/8"	48#	8-R	ST&C	H-40
12¼"	0-4600'	9 5/8"	36#	8-R	ST&C	J-55
8½" & 7 7/8"	0-12,900'	5½"	17#	8-R BUTT	LT&C	P-110

APPLICATION TO DRILL

POGO PRODUCING COMPANY
MESA VERDE "8" FEDERAL # 1 Hdl
UNIT "I" SECTION 8
T24S-R32E LEA CO. NM

9. CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Run and set 850' of 13 3/8" 48# H-40 ST&C casing. Cement with 1000 Sx. of Class "C" cement + 6% Gel, + 5% Salt, tail in with 200 Sx. of Class "C" + 2% CaCl, circulate cement.
9 5/8"	Intermediate	Set 4600' of 9 5/8" 36# J-55 ST&C casing. Cement with 1900 Sx. of Class "C" Lite cement + 6% Gel, + 5% Salt, tail in with 200 Sx. of Class "C" cement + 2% CaCl. Circulate cement to surface.
5½"	Production	Set 12,900' of 5½" casing as follows: 3900' of 5½" 17# P-110 BT&C, 9000' of 5½" 17# J-55 LT&C casing. Cement with 1400 Sx. of Class "H" cement + additives, mixed at 15.5#/Gal estimate top of cement 4000' from 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 9 5/8" 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 the drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will 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 in this well.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE SYSTEM
40-850'	8.4-8.7	29-36	NC	Fresh water Spud Mud add paper to control seepage.
850'-4600'	10.0-10.2	29-38	NC	Brine water use paper to control seepage and use high viscosity sweeps to clean hole.
4600-12,900'	8.4-8.7	29-40	NC.	Fresh water use high viscosity sweeps to clean hole, If WL is required use a Dris-Pac System to control WL.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY
MESA VERDE "8" FEDERAL # 1
UNIT "I" SECTION 8
T24S-R32E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

A. Open hole logs: Run Gyro, then run Dual Laterolog, SNP, LDT, CDL, Gamma Ray, Caliper from 9950' back to 9 5/8" casing shoe. Run Gamma Ray, Neutron from 9 5/8" casing shoe back to surface.

B. Rig up mud logger on hole at 4600' and keep on hole to TD.

C. No DST's or Cores are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of 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 5000 PSI, and Estimated BHT 190°.

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 50 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 Bone Spring 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.

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
MESA VERDE "8" FEDERAL # 1H
UNIT "I" SECTION 8
T24S-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. 62-180 West toward Carlsbad New Mexico, go 38 miles to CR-29, turn Left (South) go 21.6 miles to State Road 128, turn Left (East) go 2.4 miles to a lease road on the Left side of road. Turn Left North follow lease road past well# 2 , bear Right and follow lease road .8 miles, turn Left and go 400' to location.

   C. Exhibit "C" is a topographic map showing existing roads and proposed roads. and flowlines.

2. PLANNED ACCESS ROADS: 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. Exhibit "C" shows proposed routes of roads, flowlines and powerlines.

5. LOCATION AND TYPE OF WATER SUPPLY:

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

6. SOURCE OF CONSTRUCTION MATERIAL:

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

7. METHODS OF HANDLING WASTE MATERIAL:

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

B. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill.

C. Salts remaining after completion of well will be picked up by the supplier, including broken sacks.

D. Waste water from living quaters will be drained into holes with a minium of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-John will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.

E. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for furthed drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approve disposal site. Later pips will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

8. ANCILLARY FACILITIES:

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

9. WELL SITE LAYOUT:

A. Exhibit "D" shows the proposed well site layout.

B. This Exhibit shows the location of reserve pit, sump pits, and living facilities.

C. Mud pits in the active circulating system will be steel pits and the reserve pits will be unlined unless subsurface conditions encontered during pit construction indicate that a plastic liner is required to contain lateral migration.

D. If needed the reserve pits will be lined with polyethelene. The pit liner will be no less than 6 mils thick and the liner will be extended at least 3 feet over the top of the dikes and secured in place to keep edge of liner in place.

E. The reserve pit will be fenced on three sides and fenced with four strands of barbed wire during drilling and completionphases. The 4th side will be fenced after drilling operations are complete and the drilling rig has moved out.If the well is a producer the mud pits will remain fenced in until the mud has dried up enough to break out the pits and reclaimed according to BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE:

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

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

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

SURFACE USE PLAN

POGO PRODUCING COMPANY
MESA VERDE "8" FEDERAL # 1 (+2)
UNIT "I" SECTION 8
T24S-R32E LEA CO. NM

11. OTHER INFORMATION:

A. Topography is relatively flat with a slight dip to the East, with shallow drainage patterns. Vegetation consists of creosote bush, little leaf sumac, broom-snakeweed, and native grasses.

B. Surface is owned by the U.S. Department of Interior and is administered by the Bureau of Land Management. The surface is leased to ranchers for grazing of live stock.

C. An archaeological survey will be conducted and the results will be filed with The Bureau of Land Management Carlsbad Field office in Carlsbad NM.

D. There are no domestic dwellings located within one mile of the location.

12. OPERATORS REPRESENTIVE:

Before construction:

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

During and after construction:

POGO PRODUCING COMPANY
P.O. BOX 10340
MIDLAND, TEXAS 79702-7340
RICHARD WRIGHT
OFFICE PHONE 915-685-8140

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

NAME : Joe T Janica
DATE : 11/20/06
TITLE : Agent

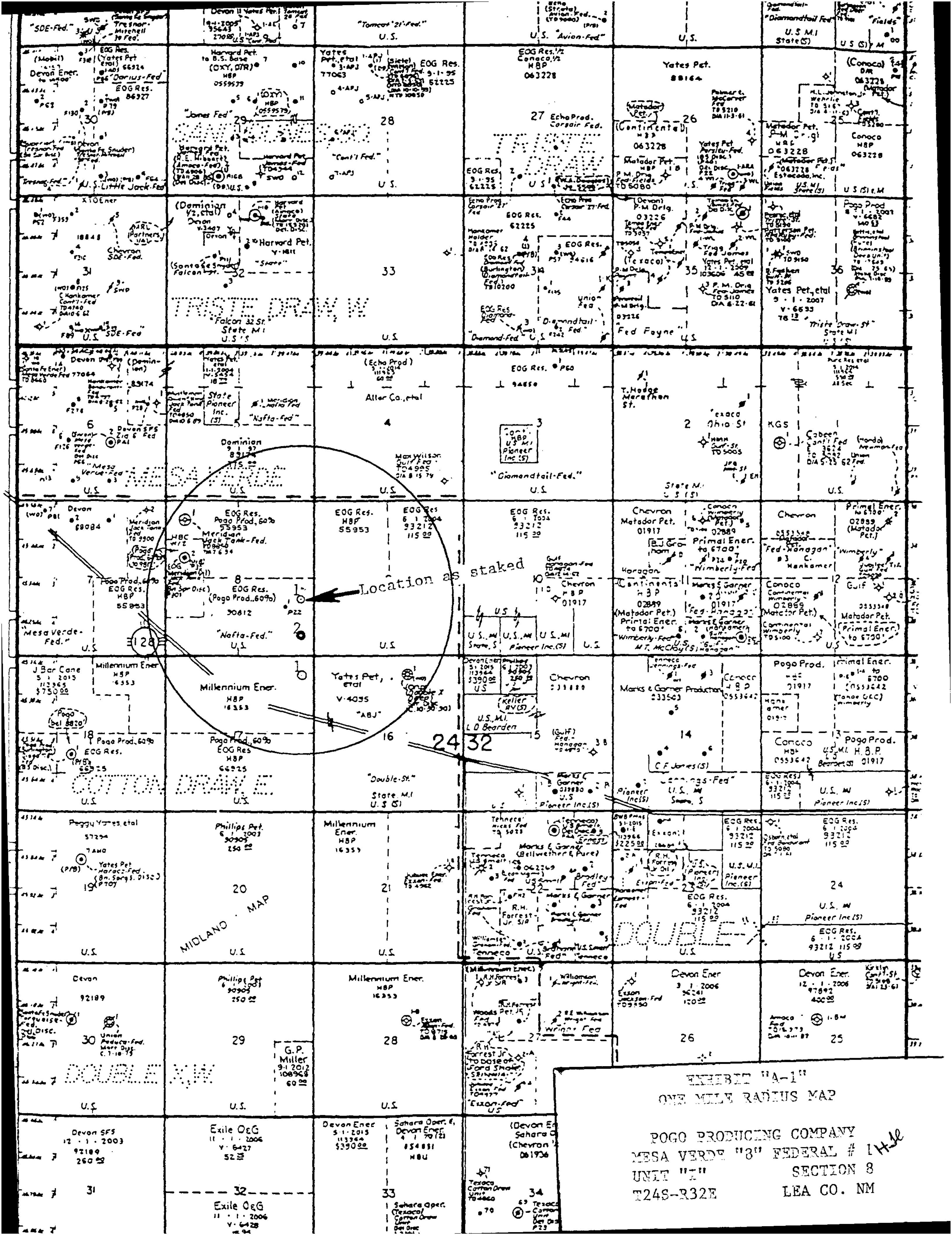


EXHIBIT "A-1"
ONE MILE RADIUS MAP

POGO PRODUCING COMPANY
MESA VERDE "8" FEDERAL # 1
UNIT "I"　　SECTION 8
T24S-R32E　　LEA CO. NM

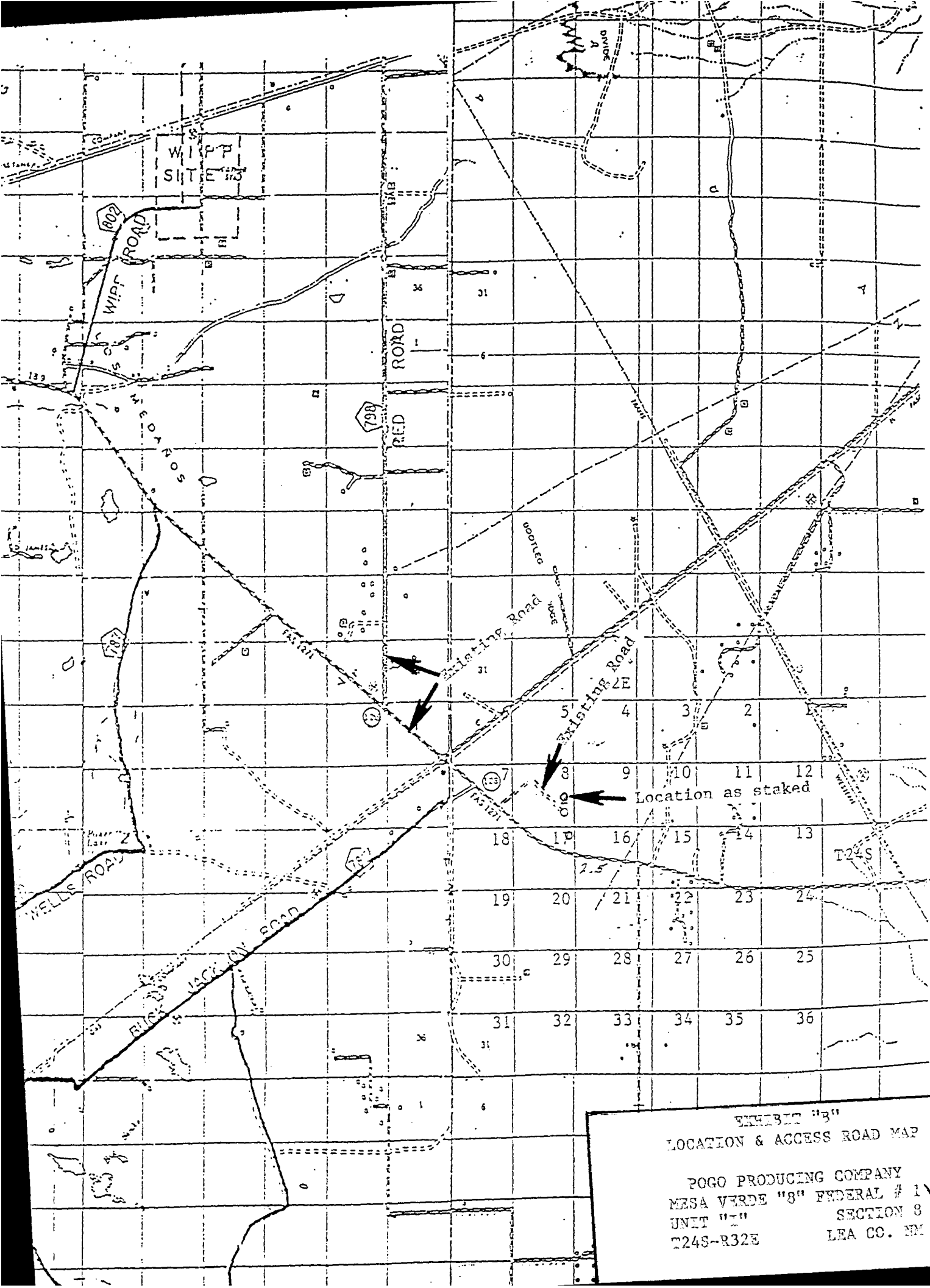


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

POGO PRODUCING COMPANY
MESA VERDE "8" FEDERAL # 1
UNIT "H"
T24S-R32E

SECTION 8
LEA CO. NM

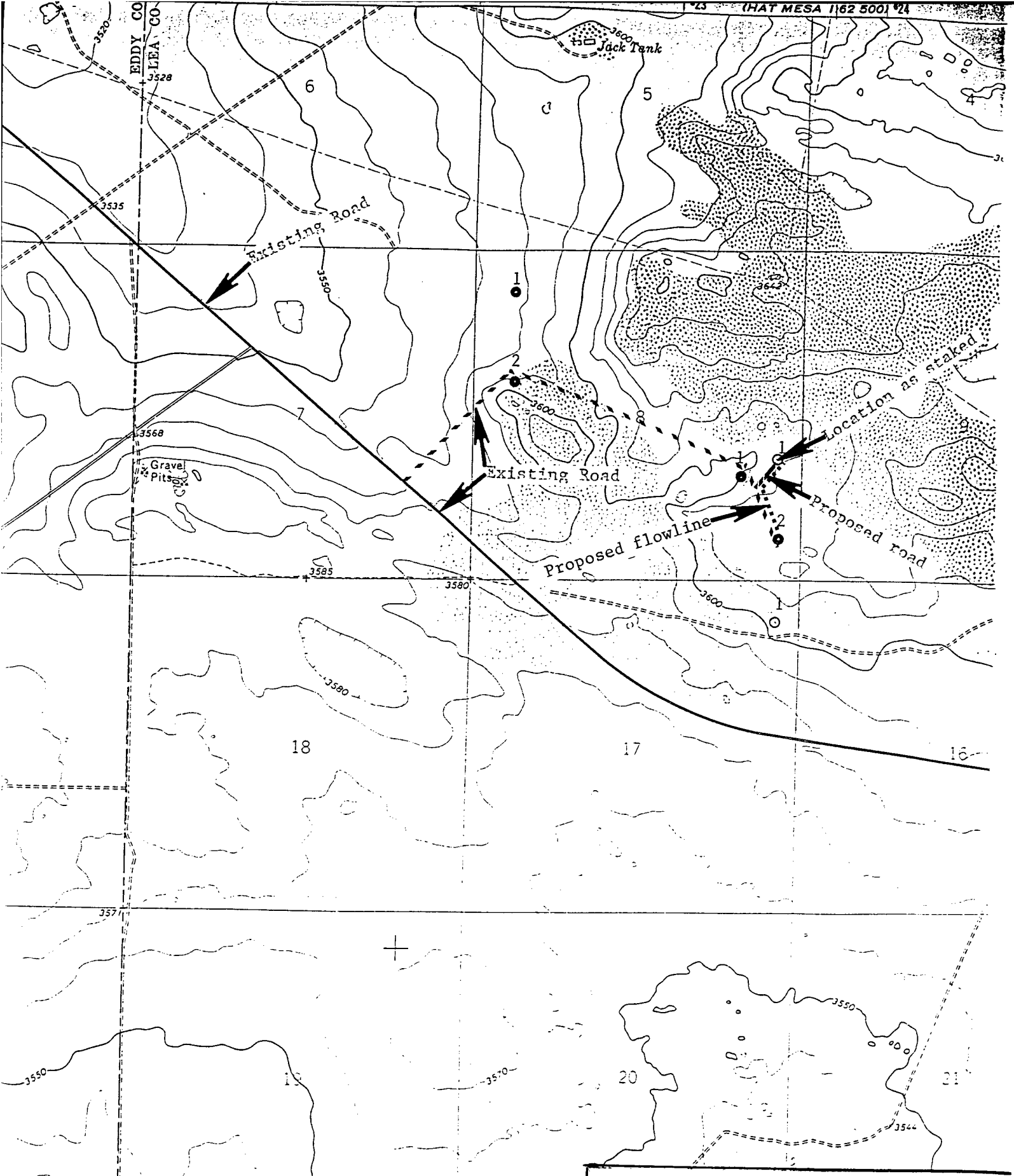
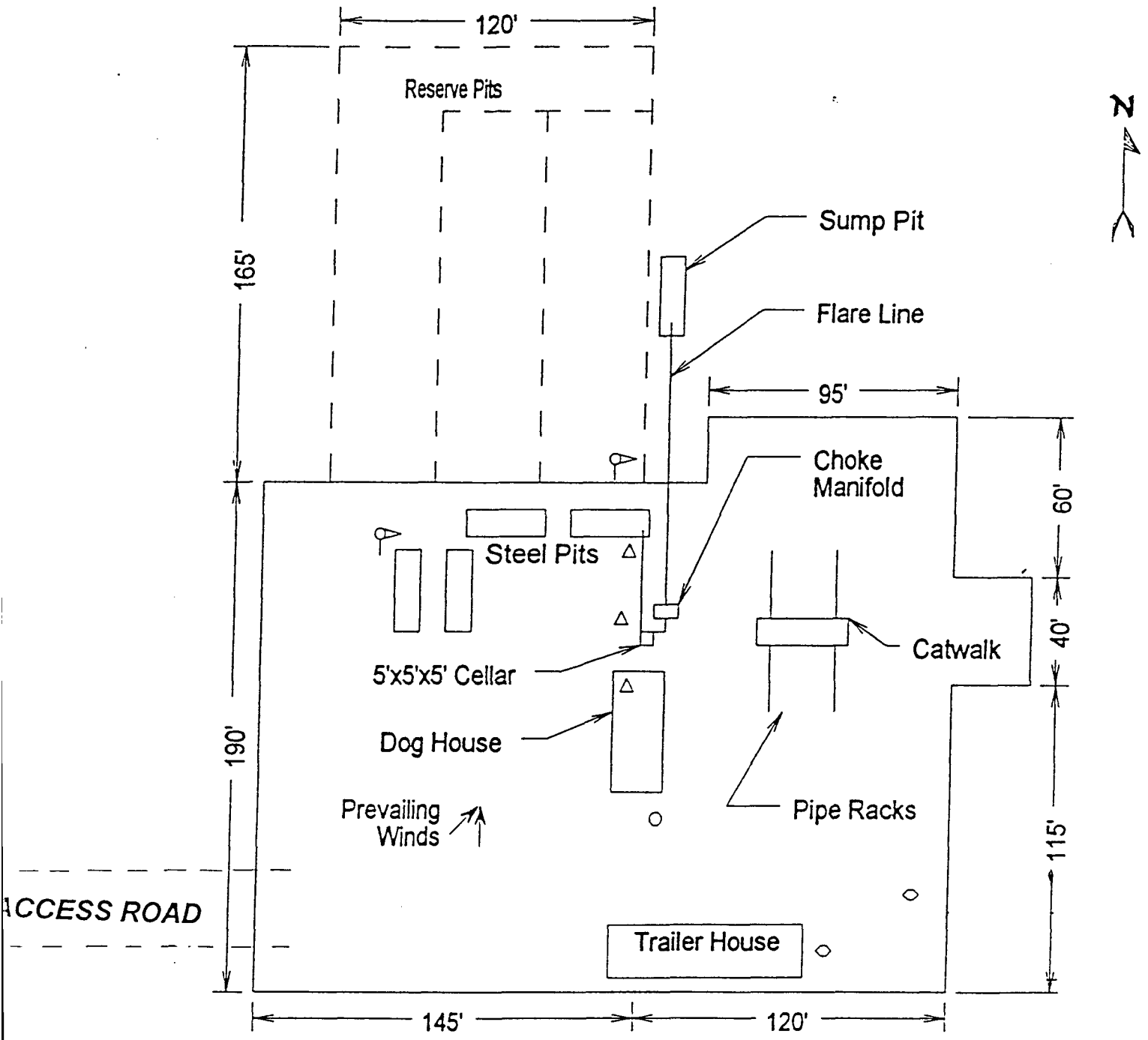


EXHIBIT "C"
TOPOGROAHIC MAP SHOWING
ROADS & DIRECTIONS TO

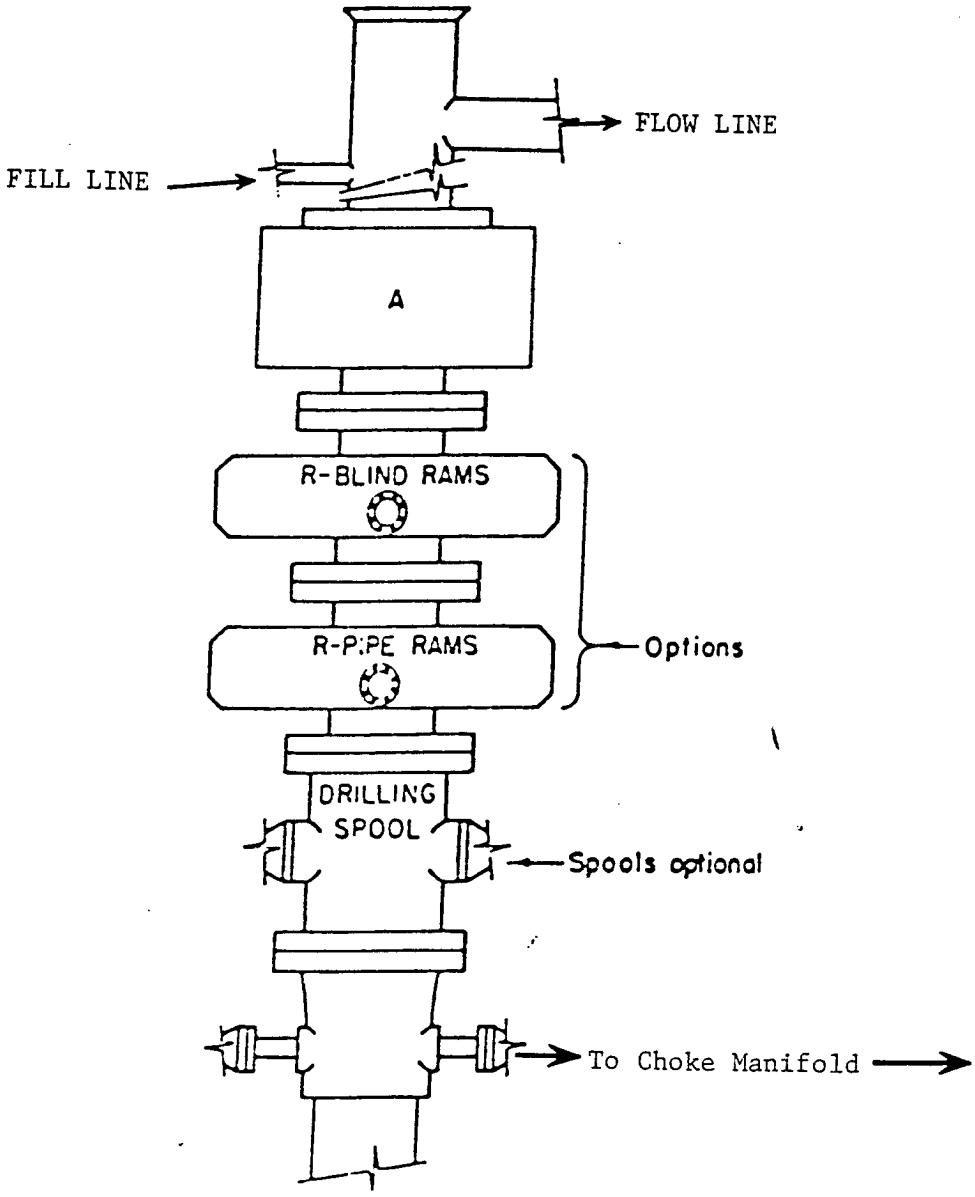
POGO PRODUCING COMPANY
MESA VERDE "8" FEDERAL # 1H
UNIT "I" SECTION 8
T24S-R32E LEA CO. NM



- 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
MESA VERDE "8" FEDERAL # 1 H
UNIT "I" SECTION 8
T24S-R32E LEA CO. NM

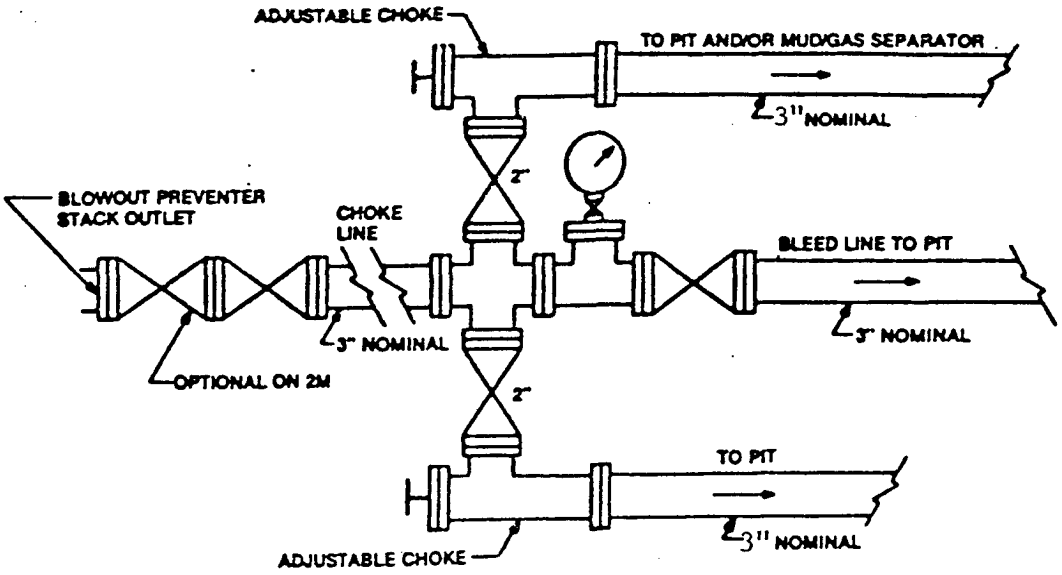


ARRANGEMENT SRRA

900 Series
3000 PSI WP

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

POGO PRODUCING COMPANY
MESA VERDE "8" FEDERAL # 1H
UNIT "I" SECTION 8
T24S-R32E LEA CO. NM



Typical choke manifold assembly for 3M WP system

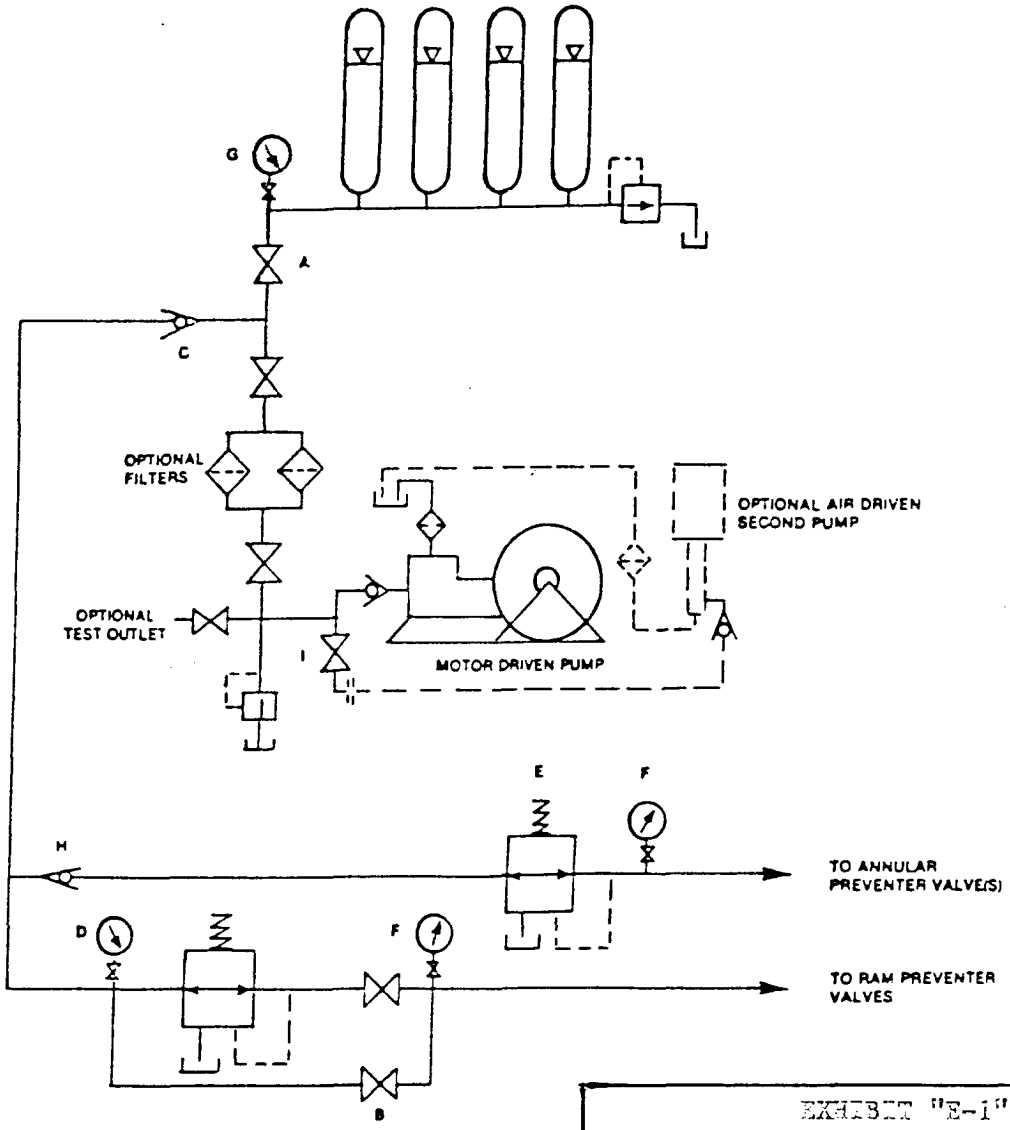


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
MESA VERDE "8" FEDERAL # 1
UNIT "I" SECTION 8
T24S-R32E LEA CO. NM

CONDITIONS OF APPROVAL - DRILLING

Well Name & No. 1-Mesa Verde "8" Federal
Operator's Name: POGO Producing Company
Location SHL: 1980FSL, 0330FEL, Section 8, T-24-S, R-32-E
Location BHL: 1980FSL, 1650FWL, Section 8, T-24-S, R-32-E
Lease: NM-90812

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 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 20 inch 13-3/8 inch 9-5/8 inch 5-1/2 inch

C. BOP tests

2. **Hydrogen Sulfide has been reported in Sec. 18, T-23-S, R-32-E with measurements of 2000 ppm in STVs from an Undesignated Delaware formation. Hydrogen Sulfide monitoring equipment should be available prior to drilling into the Delaware formation.**

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 at **a minimum of 25 feet into the Rustler Anhydrite approximately 850 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. **Fresh water must be used to the top of the Rustler.**

2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is **circulate cement to the surface.**

Possible lost circulation in the Delaware and Bone Spring formations. Possible water flows in the Salado, Castile, Delaware, and Bone Spring.

3. The minimum required fill of cement behind the 5-1/2 inch production casing is **cement shall extend upward a minimum of 200 feet into the intermediate casing. Operator estimates TOC 4000'.**

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 **2M** psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the **9-5/8** 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.

Engineer on call phone: 505-706-2779

WWI 121806

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: Mesa Verde 8 Federal #1 API #: 30-025-38226 U/L or Qtr/Qtr I Sec 8 T 24S R 32E
County: Lea Latitude 32.230089N Longitude 103.688786W 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 X 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)	20
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)		20

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: 12/1/06
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: 12/29/06
Printed Name/Title Chris Williams, District Supervisor Signature Chris Williams

Received
Hobbs OCD
2006

Water Resources

National Water Information System: Web Interface

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 = • 321312103395601

Save file of selected sites to local disk for future upload

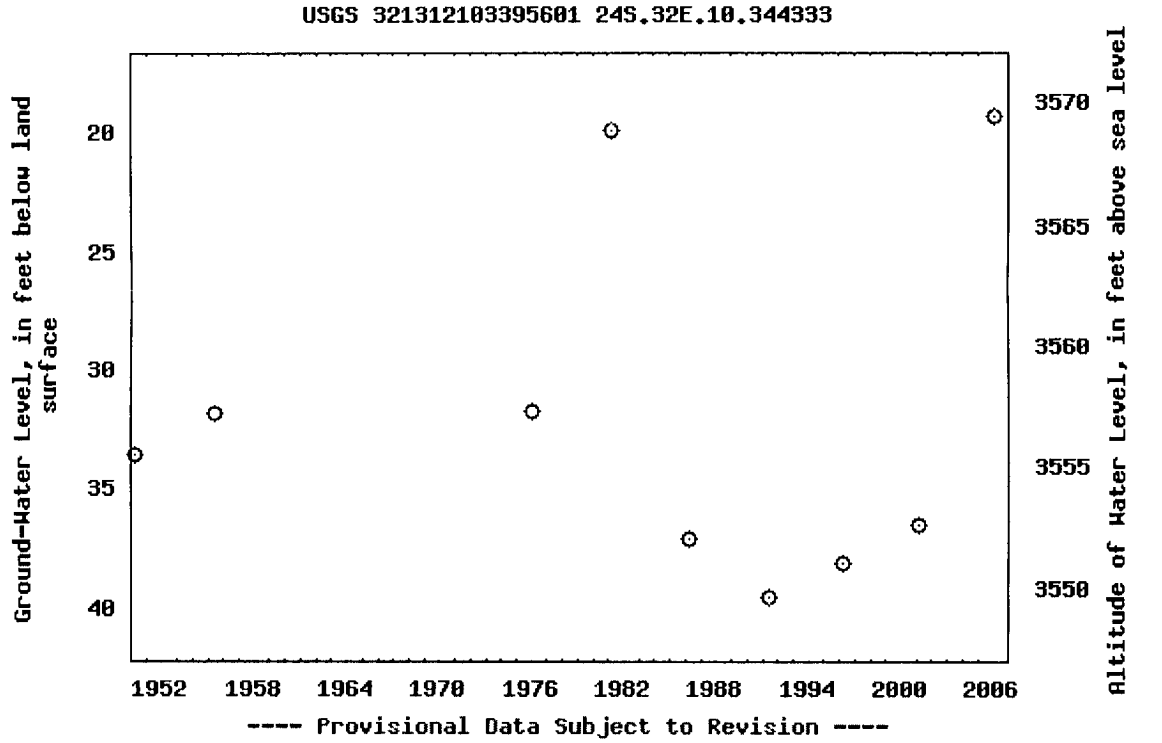
USGS 321312103395601 24S.32E.10.344333

Available data for this site Ground-water: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°13'12", Longitude 103°39'56" NAD27
Land-surface elevation 3,589.00 feet above sea level NGVD29
The depth of the well is 60 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

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

Questions about data?

Top

Water Resources

National Water Information System: Web Interface

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

Site Map for New Mexico

USGS 321312103395601 24S.32E.10.344333

Available data for this site Site map GO

Lea County, New Mexico
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The depth of the well is 60 feet below land surface.
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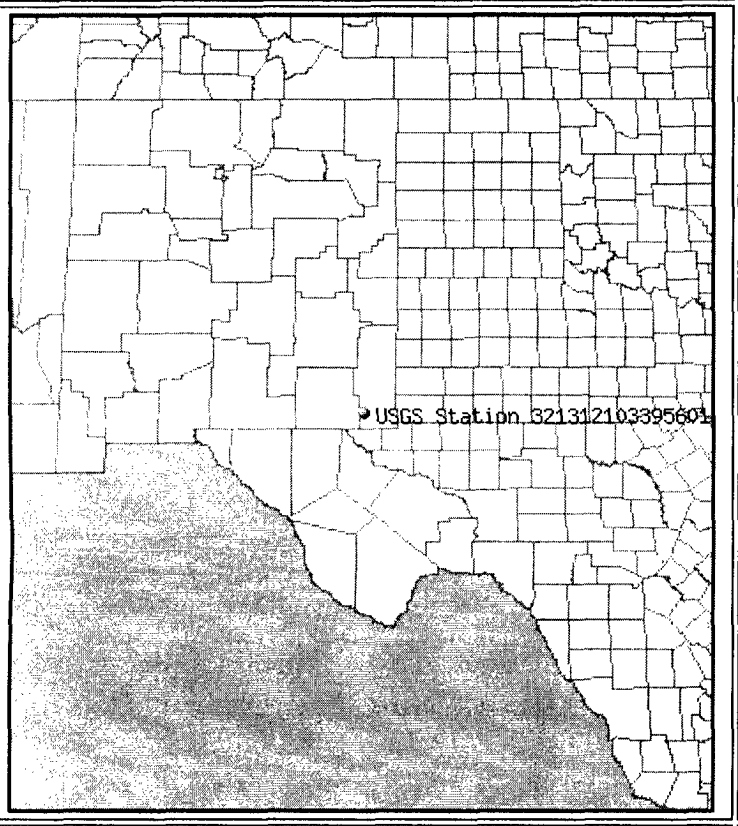
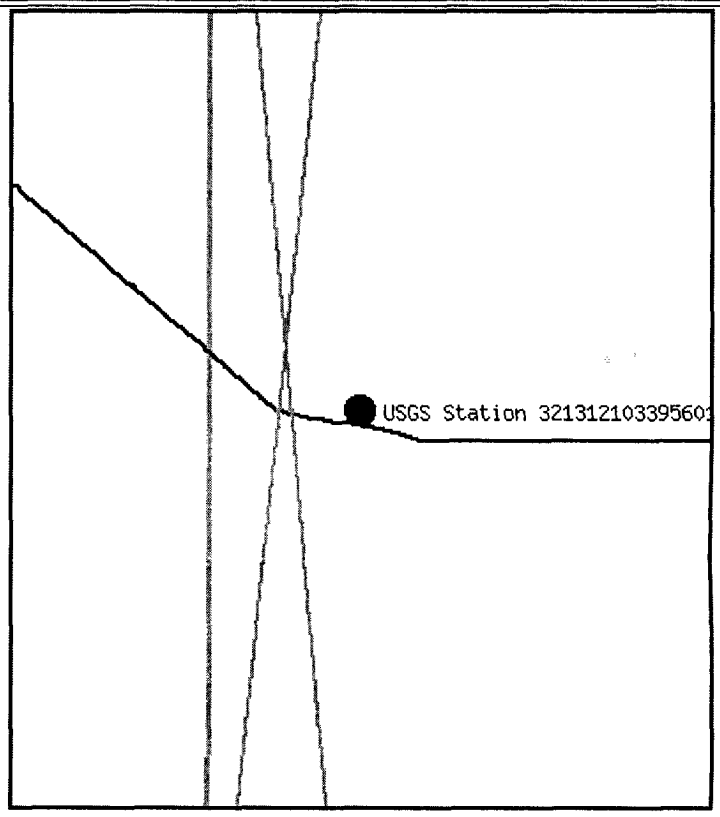
Location of the site in New Mexico.



Site map.



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

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data?
Feedback on this web site
NWIS Site Inventory for New Mexico: Site Map
http://waterdata.usgs.gov/nm/nwis/nwismap?

Top
Explanation of terms

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	
32.230089	N	103.688786	W
Lat2		**Lon2**	
32:13:12	N	103:39:56	W

Output

Course 1-2	Course 2-1	Distance
117.16895€	297.181344	1.32543004

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	
360		0.0	