

F-64-24 0587

SUBMIT IN TRIPLICATE
UNITED STATES M. O. Cons. Div. Dist. 2FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
1301 W. Grand Avenue
Artesia, NM 88210

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☐DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒OTHER ☐SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

POGO PRODUCING COMPANY (MR. RICHARD WRIGHT 432-685-8140)

3. ADDRESS AND TELEPHONE NO.

P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (432-685-8100)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

1250' FSL & 1650' FWL SECTION 17 T20S-R25E EDDY CO. NM

At proposed prod. zone SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

Approximately 25 miles Northwest of Carlsbad New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

1250'

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

NA

19. PROPOSED DEPTH

9700'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3518' 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"	20" Conductor	NA	40'	Cement to surface with Redi-mix
17½"	H-40 13 3/8"	48	400'	550 Sx. cement to surface
11"	J-55 8 5/8"	32	2600'	600 Sx. cement to surface
7 7/8"	L-80 5½"	17	9700'	1000 Sx. 2 stage TOC 2000' ES

1. Drill 25" hole to 40'. Set 40' of 20" conductor and cement to surface with Redi-mix.
2. Drill 17½" hole to 400'. Run and set 400' of 13 3/8" 48# H 40 ST&C casing. Cement with 550 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. circulate cement to surface.
3. Drill 11" hole to 2600'. Run and set 2600' of 8 5/8" J-55 32# ST&C casing. Cement with 600 Sx. of class "C" cement + 25CaCl, + ¼# Flocele/Sx. Circulate cement to surface.
4. Drill 7 7/8" hole to 9700'. Run and set 9700' of 5½" 17# L-80 LT&C casing. Cement in 2 stages with DV Tool at 4500'±. Cement 1st stage with 650 Sx. of Class "H" cement + additives, cement 2nd stage with 350 Sx. of Class "H" cement + additives, estimate top of cement 2000' from surface.

Carlsbad Controlled Water Basin

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

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 depths. Give blowout preventer program, if any.

24.

SIGNED

TITLE Agent

DATE

03/16/04

(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/ Joe G. Lara

TITLE

ACTING FIELD MANAGER

DATE

MAY 20 2004

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
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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: Seven Rivers 17 Fed #111 U/L or Qtr/Qr SE/SM Sec 17 T 20 R 25
County: Eddy Latitude 32 34 11.5N Longitude 104 30 36.7W NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit	Below-grade tank						
Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12 mil</u> Clay <input type="checkbox"/> Volume <u>16,000 bbl</u>	Volume: <u> </u> bbl Type of fluid: <u> </u> Construction material: <u> </u> Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: <u> </u>						
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	<table border="1"> <tr> <td>Less than 50 feet</td> <td>(20 points)</td> </tr> <tr> <td>50 feet or more, but less than 100 feet</td> <td>(10 points)</td> </tr> <tr> <td>100 feet or more <u>X</u></td> <td>(0 points) <u>0</u></td> </tr> </table>	Less than 50 feet	(20 points)	50 feet or more, but less than 100 feet	(10 points)	100 feet or more <u>X</u>	(0 points) <u>0</u>
Less than 50 feet	(20 points)						
50 feet or more, but less than 100 feet	(10 points)						
100 feet or more <u>X</u>	(0 points) <u>0</u>						
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	<table border="1"> <tr> <td>Yes</td> <td>(20 points)</td> </tr> <tr> <td>No <u>X</u></td> <td>(0 points) <u>0</u></td> </tr> </table>	Yes	(20 points)	No <u>X</u>	(0 points) <u>0</u>		
Yes	(20 points)						
No <u>X</u>	(0 points) <u>0</u>						
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	<table border="1"> <tr> <td>Less than 200 feet</td> <td>(20 points)</td> </tr> <tr> <td>200 feet or more, but less than 1000 feet</td> <td>(10 points)</td> </tr> <tr> <td>1000 feet or more <u>X</u></td> <td>(0 points) <u>0</u></td> </tr> </table>	Less than 200 feet	(20 points)	200 feet or more, but less than 1000 feet	(10 points)	1000 feet or more <u>X</u>	(0 points) <u>0</u>
Less than 200 feet	(20 points)						
200 feet or more, but less than 1000 feet	(10 points)						
1000 feet or more <u>X</u>	(0 points) <u>0</u>						
Ranking Score (Total Points) <u>0</u>							

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: 05/21/04

Printed Name/Title Cathy Wright, Sr Oper 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:

Printed Name/Title

Signature

Please see attached stipulations and/or requirements:



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor

Joanna Prukop
Cabinet Secretary
Acting Director
Oil Conservation Division

21 May 2004

Pogo Producing
P.O. Box 10340
Midland, Texas 79702-7340

RE:

Permit Stipulations - Seven Rivers 17 Fed # 1

Unit N SEC-17 T-20S R-25E

The Oil Conservation Division of Artesia is in receipt of your application to construct a pit for the purpose of drilling. The request is hereby accepted and approved with the following provisions:

1. Construction and closing of pit(s) must meet the criteria of Rule 19.15.2.50 and the Pit Guidelines.
2. The pit is not located in any watercourse, lakebed, sinkhole, playa lake, or wetland.
3. Notice is to be given to the OCD prior to construction of the pit(s).
4. Liner must be a minimum of 12 mil. woven.
5. Due to liner choice, the pit's contents and the liner shall be removed and disposed of in a manner approved by the Division.
6. The integrity of the bottom liner may not be breached at any time for any reason.
7. The pit will not be used for any additional storage of fluids.
8. The Division may attach additional conditions to any permit upon a finding that such conditions are necessary to prevent the contamination of fresh water, or to protect public health or the environment. (19.15.2.50.C.3.G.1.)
9. Re-seeding mixture will must be approved or authorized by surface owner.

If I can be of any further assistance, please feel free to call (505) 748-1283 ext. 109.

Sincerely,

A handwritten signature in dark ink, appearing to be "Van Barton", written over a light background.

Van Barton

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State of New Mexico
Energy Minerals and Natural Resources

Form C-144
March 12, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

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For downstream facilities, submit to Santa Fe office

RECEIVED

MAY 24 2004

OCD-ARTESIA

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: Seven Rivers 17 Fed #1 U/L or Qtr/Qtr SE/SW Sec 17 T 20 R 25
County: Eddy Latitude 32 34 11.5N Longitude 104 30 36.7W NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit	Below-grade tank	
Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness 12 mil Clay <input type="checkbox"/> Volume 16,000 bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> 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 <input checked="" type="checkbox"/>	(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 <input checked="" type="checkbox"/>	(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 <input checked="" type="checkbox"/>	(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.

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Date: 05/21/04

Printed Name/Title Cathy Wright, Sr Oper 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: 6-1-04

Printed Name/Title

Signature

[Signature]

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State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

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

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 74640	Pool Name CEMETARY-MORROW GAS
Property Code	Property Name SEVEN RIVERS "17" FEDERAL	Well Number 1
OGRID No. 17891	Operator Name POGO PRODUCING COMPANY	Elevation 3518'

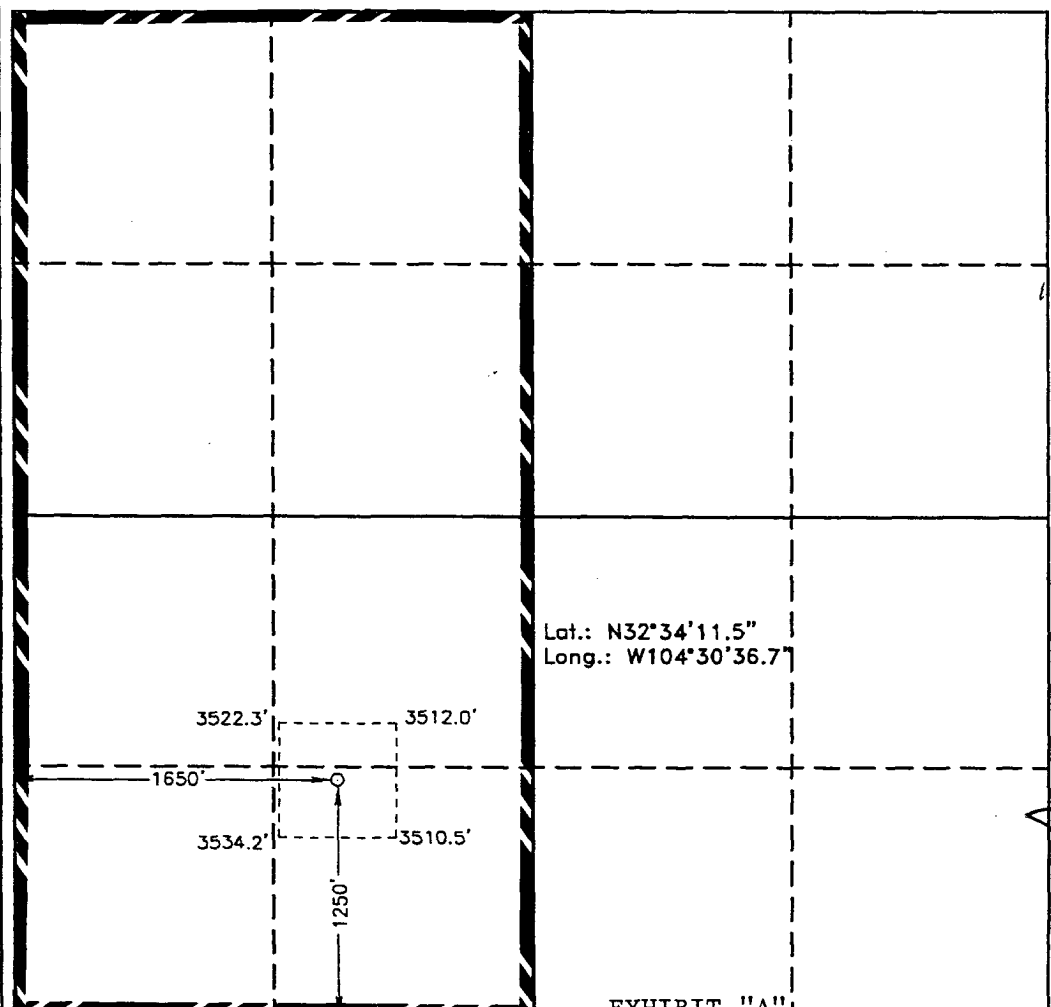
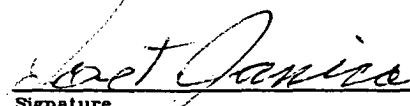
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	17	20 S	25 E		1250	SOUTH	1650	WEST	EDDY

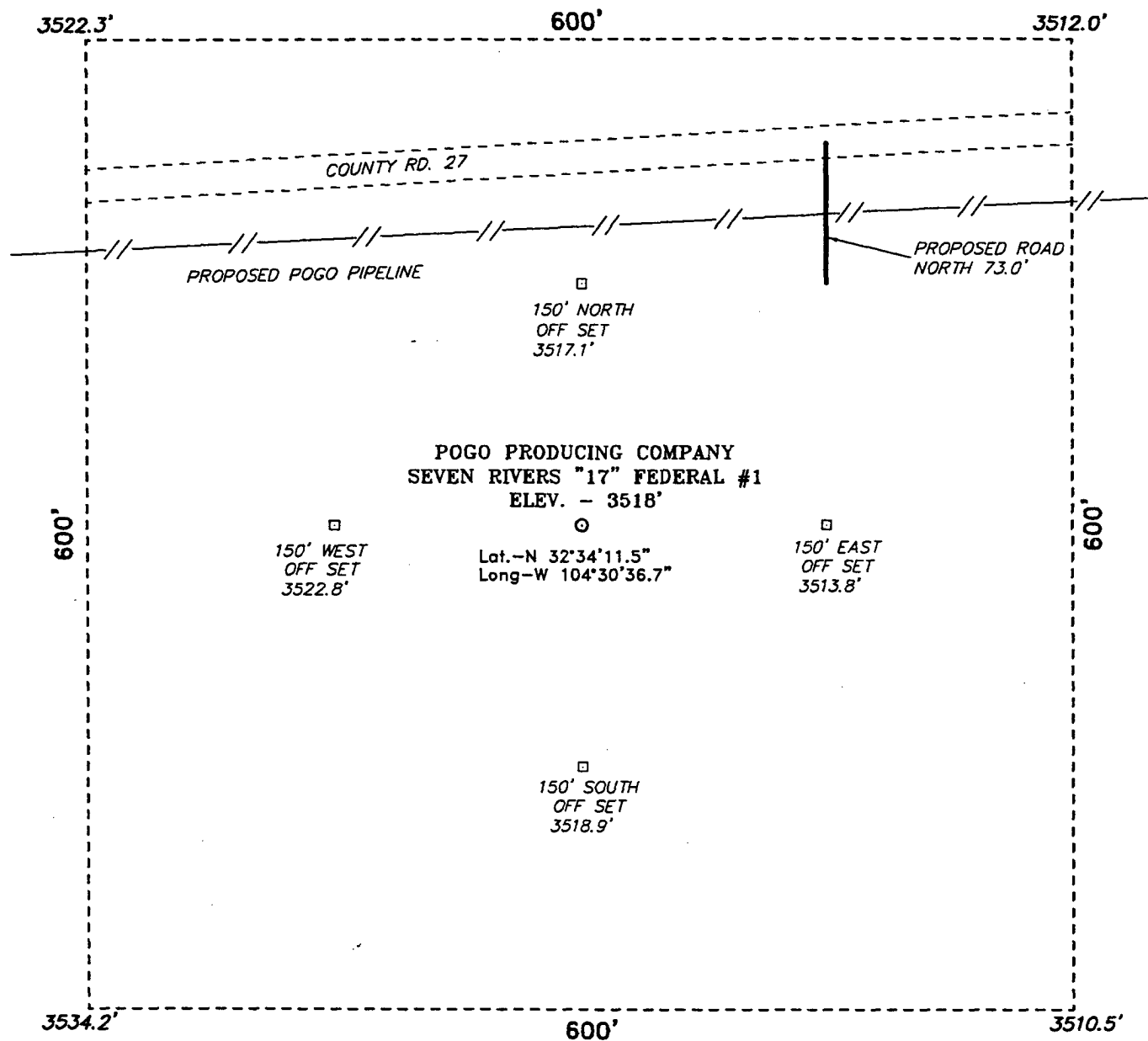
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.						

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

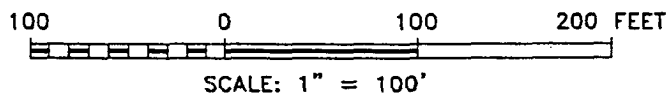
 <p>Lat.: N32°34'11.5" Long.: W104°30'36.7"</p> <p>3522.3' 3512.0' 1650' 3534.2' 3510.5' 1250'</p> <p>EXHIBIT "A"</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p> Signature Joe T. Janica Printed Name Agent Title 03/16/04 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>MARCH 8, 2004 Date Surveyed Signature & Seal of Professional Surveyor GARY L. JONES W.O. No. 4064 Certificate No. Gary L. Jones 7977 JLP BASIN SURVEYS</p>
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**SECTION 17, TOWNSHIP 20 SOUTH, RANGE 25 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.**



Directions to Location:

FROM THE JUNCTION OF CO. RD. 28 AND CO. RD. 27 GO NORTH 0.5 MILES THEN LEFT ON FORK 1.4 MILES WEST TO LOCATION.



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

W.O. Number: 4064

Drawn By: J. PRESLEY

Date: 03-07-2003

Disk: JLP CD#4 - 4064A.DWG

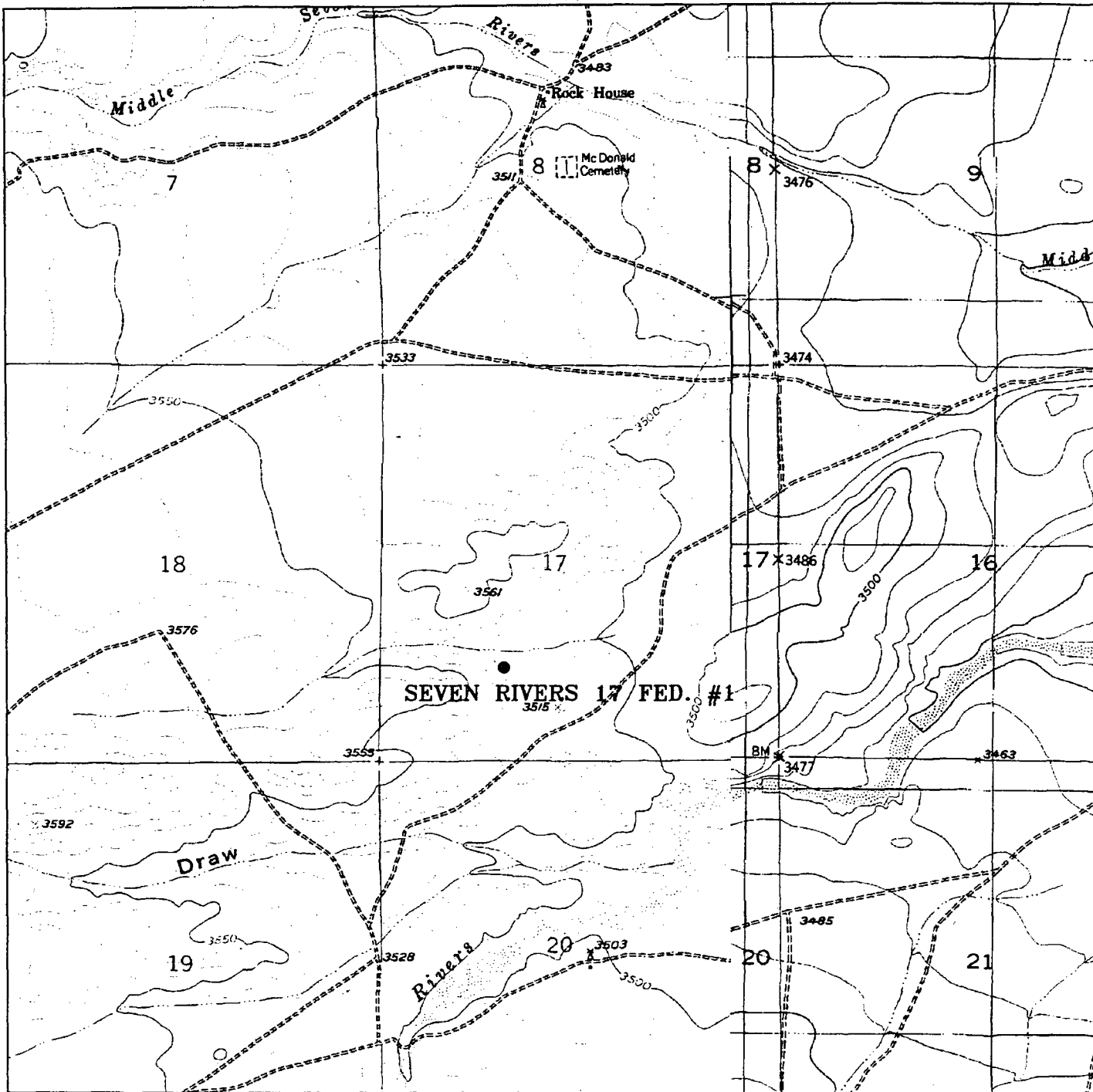
POGO PRODUCING CO.

REF: SEVEN RIVERS "17" FEDERAL #1

SEVEN RIVERS "17" FEDERAL #1 LOCATED 1250' FROM THE SOUTH LINE AND 1650' FROM THE WEST LINE OF SECTION 17, TOWNSHIP 20 SOUTH, RANGE 25 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 03-04-2003

Sheet 1 of 1 Sheets



SEVEN RIVERS "17" FEDERAL #1

Located at 1250' FSL and 1650' FWL
 Section 17, Township 20 South, Range 25 East,
 N.M.P.M., Eddy 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

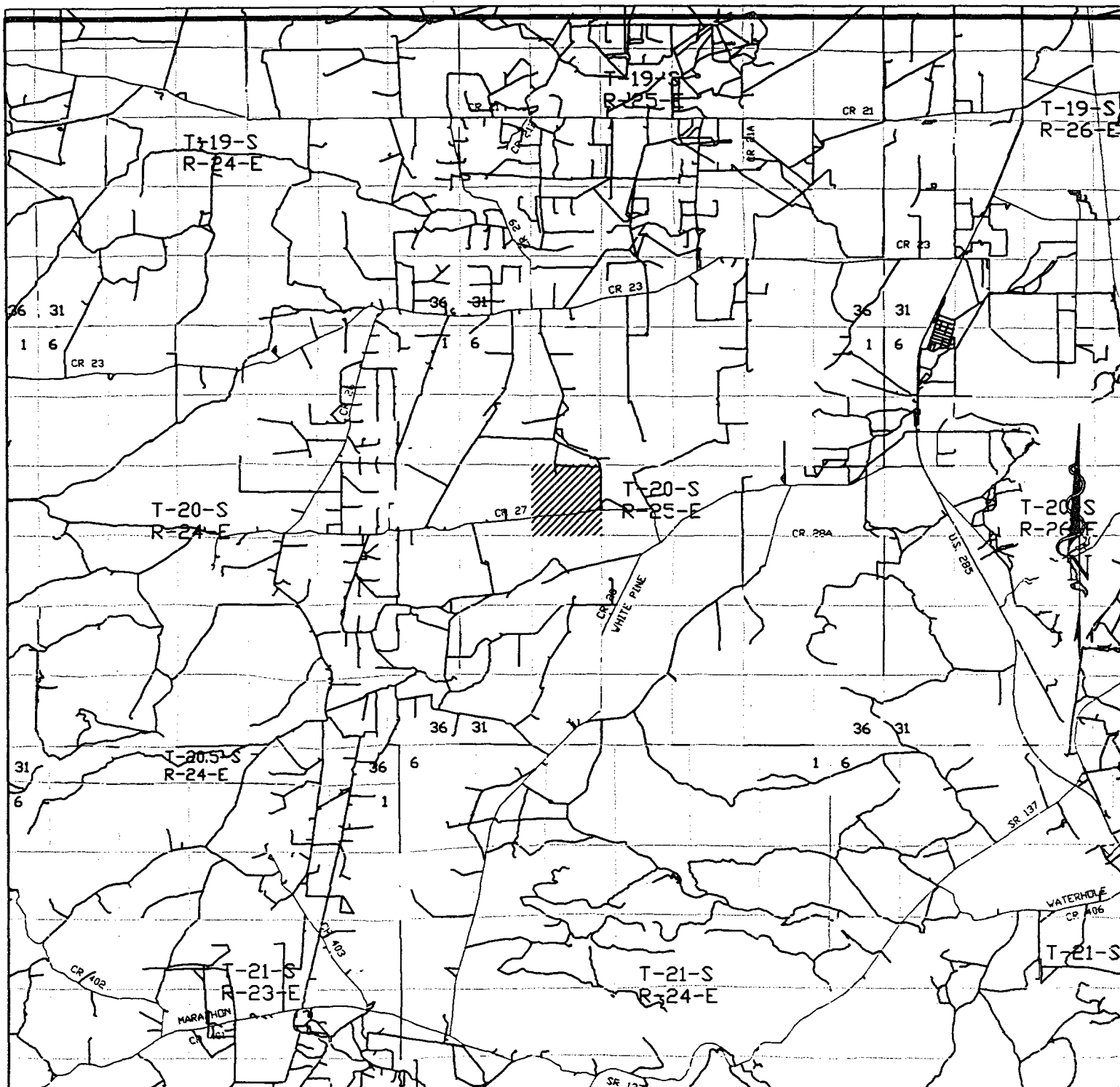
W.O. Number: 4064AA - JLP CD#1

Survey Date: 03/08/04

Scale: 1" = 2000'

Date: 03/09/04

POGO
PRODUCING
COMPANY



SEVEN RIVERS "17" FEDERAL #1

Located at 1250' FSL and 1650' FWL
 Section 17, Township 20 South, Range 25 East,
 N.M.P.M., Eddy County, New Mexico.

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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: 4064AA - JLP CD#1

Survey Date: 03/08/04

Scale: 1" = 2000'

Date: 03/09/04

POGO
PRODUCING
COMPANY

APPLICATION TO DRILL

POGO PRODUCING COMPANY
SEVEN RIVERS "17" FEDERAL #1
UNIT "N" SECTION 17
T20S-R25E EDDY 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 consideration.

1. Location of well: 1250' FSL & 1650' FWL SECTION 17 T20S-R25E EDDY CO. NM
2. Ground Elevation above Sea Level: 3518' 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: 9700'

6. Estimated tops of geological markers:

San Andres	750'	Cisco	7630'
Glorieta	2310'	Atoka	8780'
3rd Bone Spring	6150'	Morrow Lime	8980'
Wolfcamp Lime	6490'	Morrow Clastics	9240'

7. Possible mineral bearing formations:

Bone Spring	Oil	Atoka	Gas
Wolfcamp	Gas	Morrow	Gas
Cisco	Gas		

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40	20"	NA	NA	NA	Conductor
17½"	0-400'	13 3/8"	48	8-R	ST&C	H-40
11"	0-2600'	8 5/8"	32	8-R	ST&C	J-55
7 7/8"	0-9700'	5½"	17	8-R	LT&C	L-80

APPLICATION TO DRILL

POGO PRODUCING COMPANY
SEVEN RIVERS "17" FEDERAL #1
UNIT "N" SECTION 17
T20S-R25E EDDY 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 400' of 13 3/8" 48# H-40 ST&C casing. Cement with 550 Sx. of Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. circulate cement to surface.
8 5/8"	Intermediate	Set 2600' of 8 5/8" 32# J-55 ST&C casing. Cement with 600 Sx. of Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. Circulate cement to surface.
5 1/2"	Production	Set 9700' of 5 1/2" 17# L-80 LT&C casing cement in 2 stages. Set DV Tool at 4500'±. Cement 1st stage with 650 Sx. of Class "H" Premium Plus cement + additives, Cement 2nd stage with 350 Sx. of Class "H" cement + additives. Estimate top of cement 2000' from surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 1500 series 5000 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 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
40-400'	8.4-8.7	29-32	NC	Fresh water Spud Mud add paper to control seepage.
400-2600'	10.0-10.2	29-38	NC	FRESH Brine water use paper to control seepage and use high viscosity sweeps to clean hole.
2600-8700'	8.4-8.6	29-40	NC	Fresh water mud system use FW Gel and Drispac system for high viscosity sweeps to Clean hole.
8700-9700	8.4-8.6	32-40	10 cc	Same as above use Drispac 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, and casing, viscosity, and water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
SEVEN RIVERS "17" FEDERAL #1
UNIT "N" SECTION 17
T20S-R25E EDDY CO. NM

12. LOGGING, COREING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Induction, MSFL, CNL, LDT, Gamma Ray, Caliper from TD to 8 5/8" casing shoe. Run Cased hole Gamma Ray, Neutron from 8 5/8" casing shoe to surface.
- B. Mud logger will be rigged up on hole at 2600'±.
- C. Cores and/or DST's may be taken at the advice of the Geologist.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H²S in this area. If H²S 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 4800 PSI, and Estimated BHT 145°.

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 32 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 MORROW formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialized as a gas well.

1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
3. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock at entrance to location.
4. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H₂S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well control equipment
 - A. See exhibit "E" & "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 separator will be brought into service along with H_2S scavengers if necessary.

SURFACE USE PLAN

POGO PRODUCING COMPANY
SEVEN RIVERS "17" FEDERAL #1
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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 the junction of State Hi-way 200 (Relief By-pass) and U.S. Hi-way 285 North of Carlsbad New Mexico, go North 12 miles to CR-28 (White Pine Road) turn Left go 4 miles to CR-27 (Pickett Road) turn Right go .5 miles . turn West go 1.5 miles to location on the South side of road.
 - C. Exhibit "F" shows route of proposed gas pipeline that when completed if this well is a producer it will be connected to this pipeline.
2. PLANNED ACCESS ROADS: No additional road will be necessary.
 - 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 minimum 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 utilize 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 - One approximately 1 mile East of location.
 - B. Disposal wells - None known
 - C. Drilling wells - None known
 - D. Producing wells - As shown on Exhibit "A_1"
 - E. Abandoned wells - As shown on Exhibit "A-1"

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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 quarters 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 furthred 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.

SURFACE USE PLAN

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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

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11. OTHER INFORMATION:

- A. Topography consists of low lying Limestone hills with drainage toward to the Southeast into the South Seven Rivers drainage system. Vegetation consists of creosote, yucca, sumac, and mesquite.
- 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 in the near vicinity of this location.

12. OPERATORS REPRESENTIVES:

Before construction:

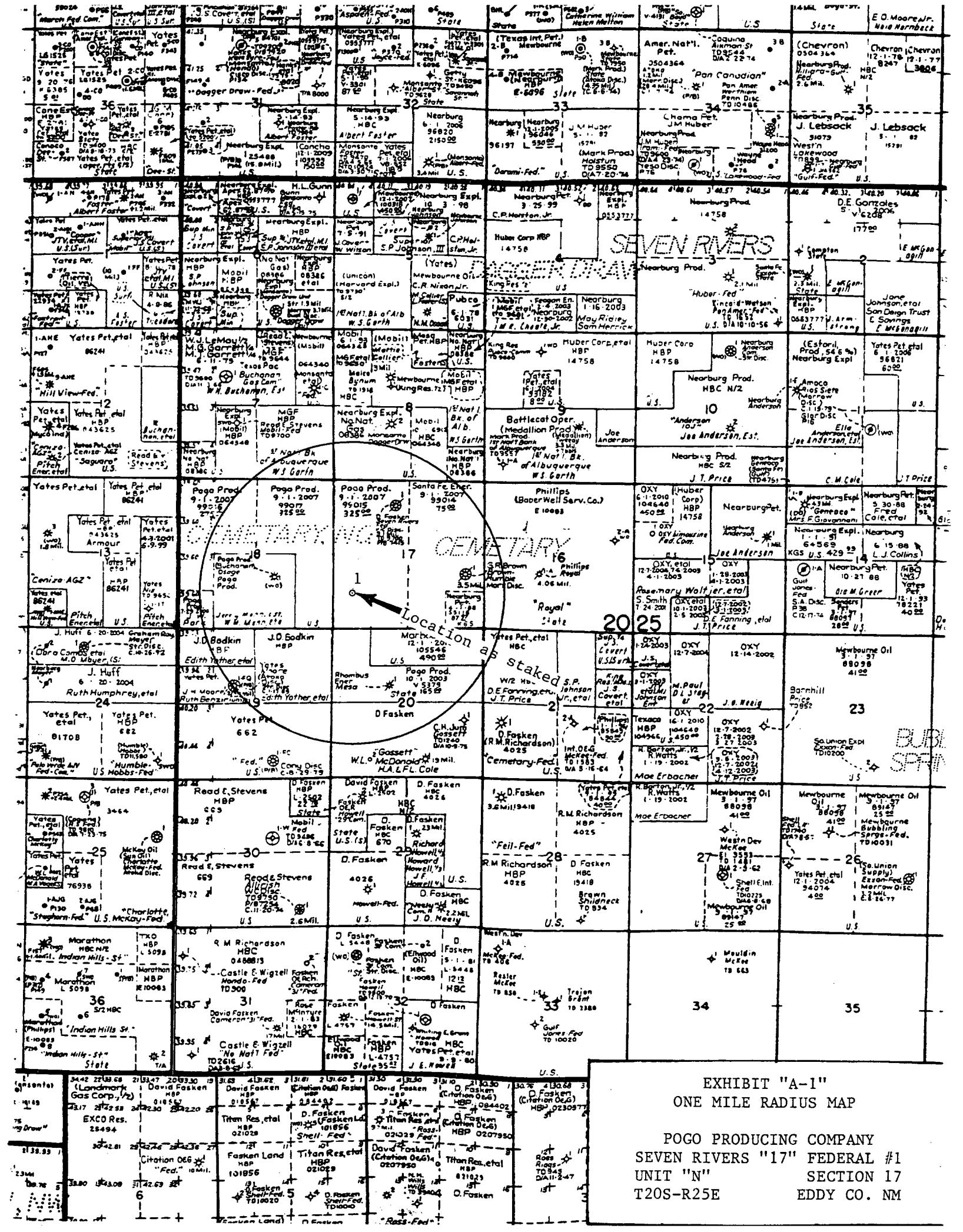
TIERRA EXPLORATION, INC
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
OFFICE Ph. 505-391-8503
JOE T. JANICA

During and after construction:

POGO PRODUCING COMPANY
P.O. BOX 10340
MIDLAND, TEXAS 79702-7340
OFFICE Ph. 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 familiar with the conditions which currently exist, that the statements made in this plan are to the best of my knowledge true and correct, and that the work associated² with the operations proposed herein will be performed by POGO PRODUCING COMPANY it's contractors/subcontractors is in compfornity 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 : 03/16/04
TITLE : Agent



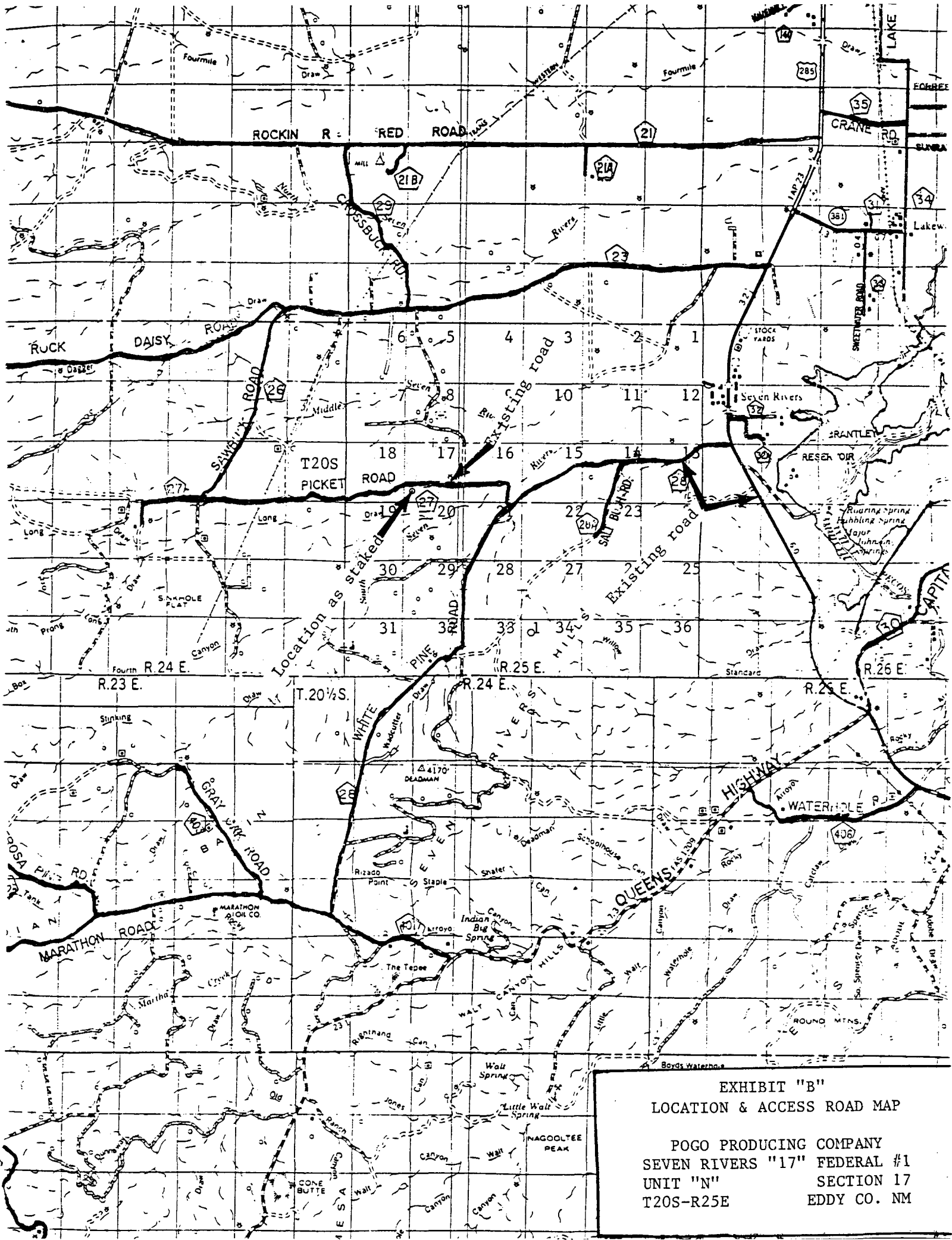
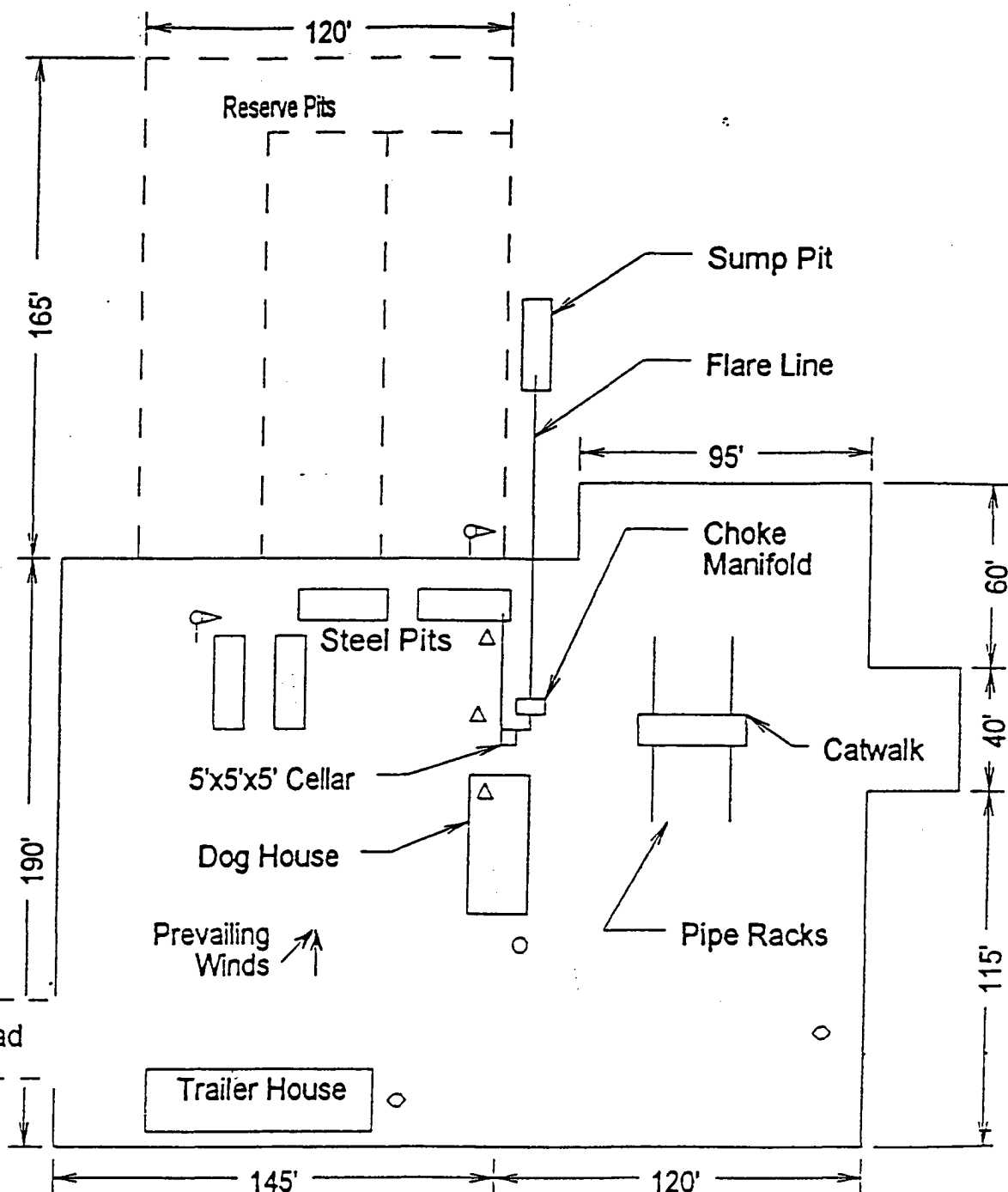


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

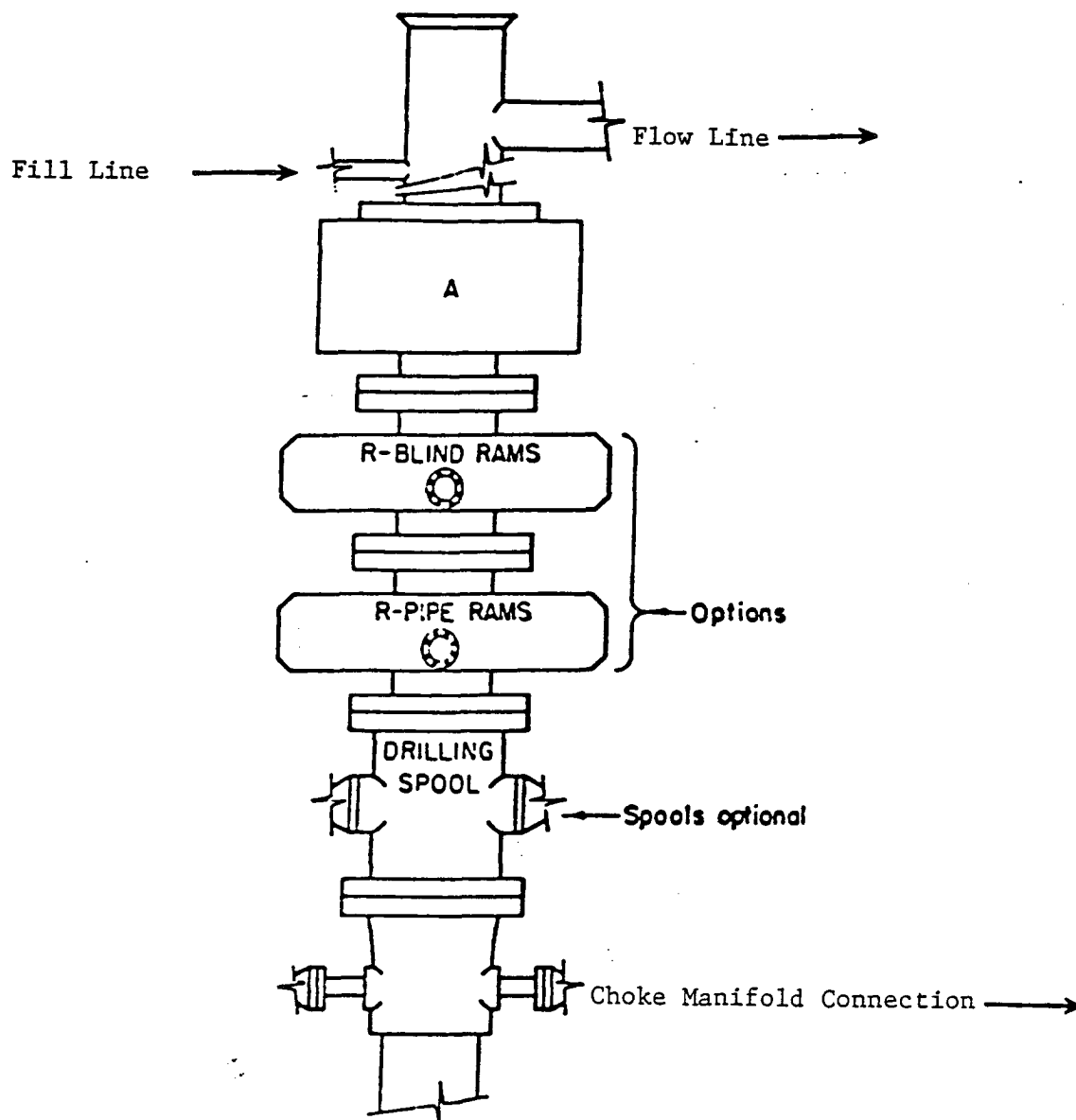
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- ⊙ Wind Direction Indicators
(wind sock or streamers)
- △ H2S Monitors
(alarms at bell nipple and shale shaker)
- Briefing Areas
- Remote BOP Closing Unit
- Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

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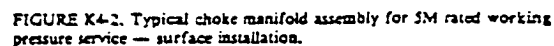
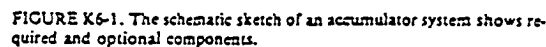


ARRANGEMENT SRRA

1500 Series
5000 PSI WP

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

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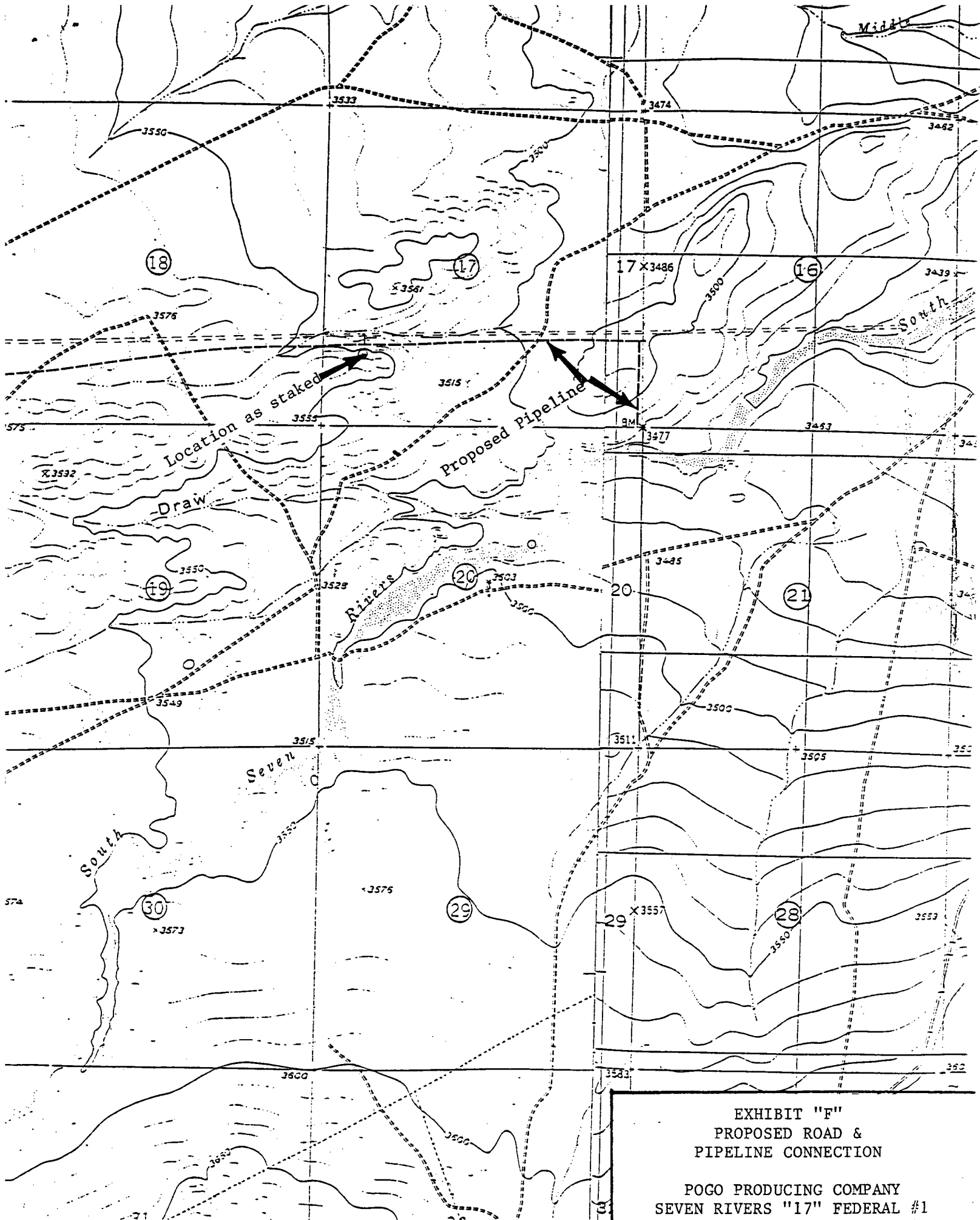


EXHIBIT "F"
PROPOSED ROAD &
PIPELINE CONNECTION

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