

State of New Mexico

Energy, Minerals and Natural Resources Department

DISTRICT I

1625 N. FRENCH DR., HOBBBS, 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

OIL CONSERVATION DIVISION

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

Form C-102

Revised JUNE 10, 2003

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 97573	Pool Name Lost Tank -WOLFCAMP
Property Code	Property Name LOST TANK "3" FEDERAL (DEEP)	Well Number 23
OGRID No. 17891	Operator Name POGO PRODUCING COMPANY	Elevation 3477'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	3	22-S	31-E		1405	NORTH	630	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	Joint or Infill	Consolidation Code	Order No.
40			

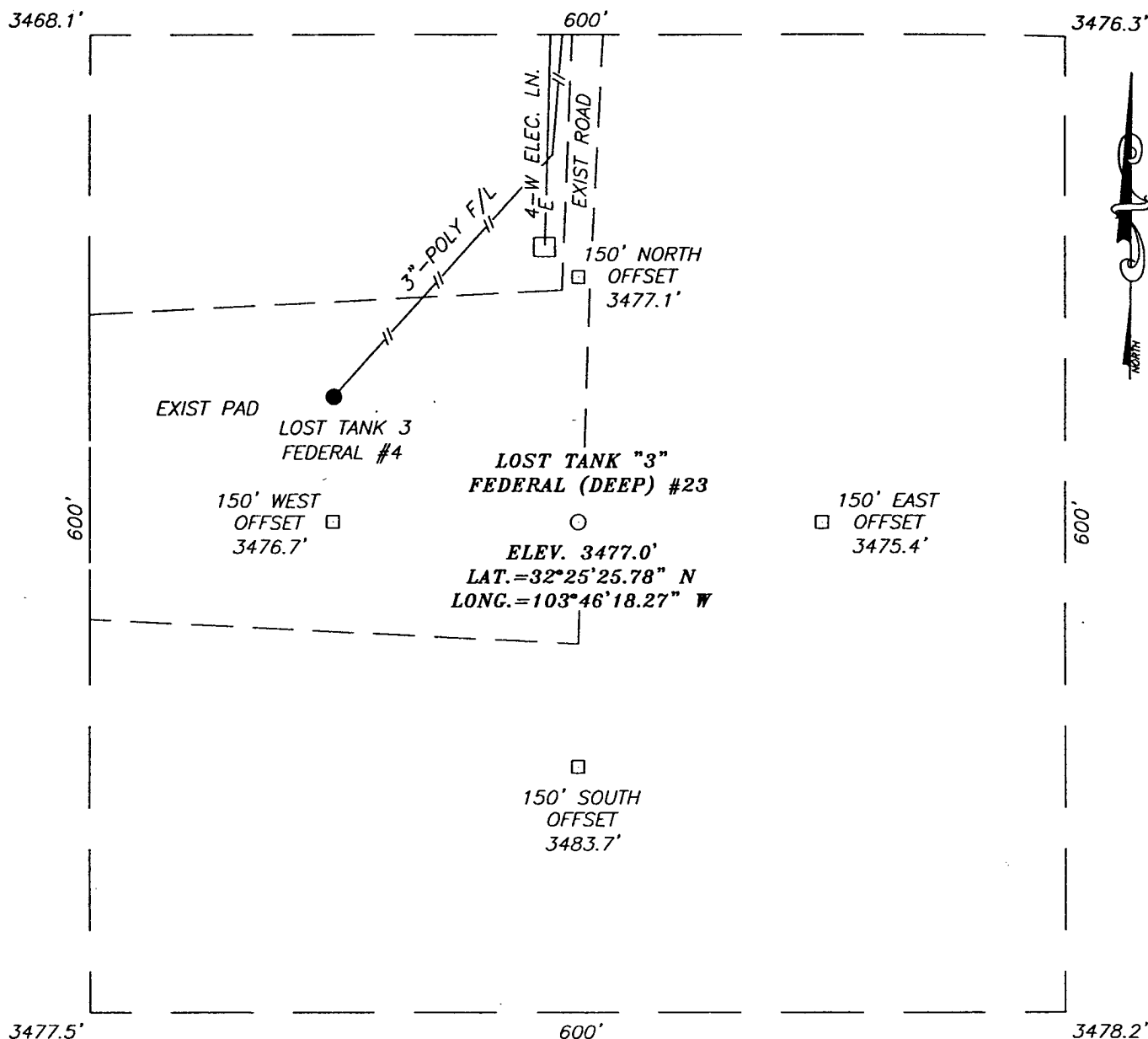
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>LOT 4 39.65 AC</p> <p>LOT 3 39.78 AC</p> <p>LOT 2 39.92 AC</p> <p>LOT 1 40.05 AC</p> <p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=518357.9 N X=673286.4 E</p> <p>LAT.=32°25'25.78" N LONG.=103°46'18.27" W</p>	<h3>OPERATOR CERTIFICATION</h3> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Joe T. Janica</i> Signature</p> <p>Joe T. Janica Printed Name</p> <p>Agent</p> <p>Title</p> <p>05/24/05 Date</p> <h3>SURVEYOR CERTIFICATION</h3> <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>MAY 20, 2005</p> <p>Date Surveyed</p> <p>Signature & Seal Professional Surveyor</p> <p><i>GARY EIDSON</i> GARY EIDSON 5/24/05 05.11.0684</p> <p>Certificate No. GARY EIDSON 12841</p>
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EXHIBIT "A"

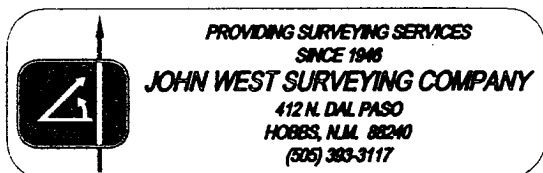
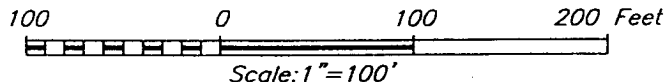
1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 950'. Run and set 950' of 13 3/8" 48# H-40 ST&C casing. Cement with 850 Sx. of Class "C" cement + 2% CaC-, + ¼# Flocele/Sx. circulate cement to surface.
3. Drill 12½" hole to 4000'. Run and set 4000' of 9 5/8" 40# N-80 ST&C casing. Cement with 1200 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. circulate cement to surface.
4. Drill 8½" hole to 11,600'. Run and set 11,600' of 7" 29# P-110 LT&C casing. Cement in 3 stages. Set DV Tools At 6500'± & 3800'±. Cement 1st stage with 750 Sx. of Class "H" cement + additives, cement 2nd stage with 400 Sx. of Class "C" cement + 8# of Gilsonite/Sx., cement 3rd stage with 300 Sx. of Class "C" light weight cement + additives, circulate cement to surface.
5. Drill 6 1/8" hole to 12,800'. Run and set a 1400' 5" 18# P-110 LT&C liner from 12,800' back to 11,400'. Cement with 400 Sx. of Class "H" Premium Plus cement + additives, cement back to liner hanger.

SECTION 3, TOWNSHIP 22 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

AT MILE MARKER #3 FROM LOUIS WHITLOCK RD. (WHIPP RD.) GO SE ON WHIPP RD. FOR APPROX. 0.4 MILES TO A CALICHE ROAD ON THE LEFT. TURN LEFT (NORTH) AND GO APPROX. 0.8 MILES. TURN RIGHT (EAST) AND GO APPROX. 0.5 MILES. TURN LEFT (NORTH) AND GO APPROX. 0.9 MILES. TURN RIGHT (EAST) AND GO APPROX. 0.7 MILES TO A CALICHE ROAD ON THE RIGHT. TURN RIGHT AND GO APPROX. 0.1 MILES TO THIS LOCATION.

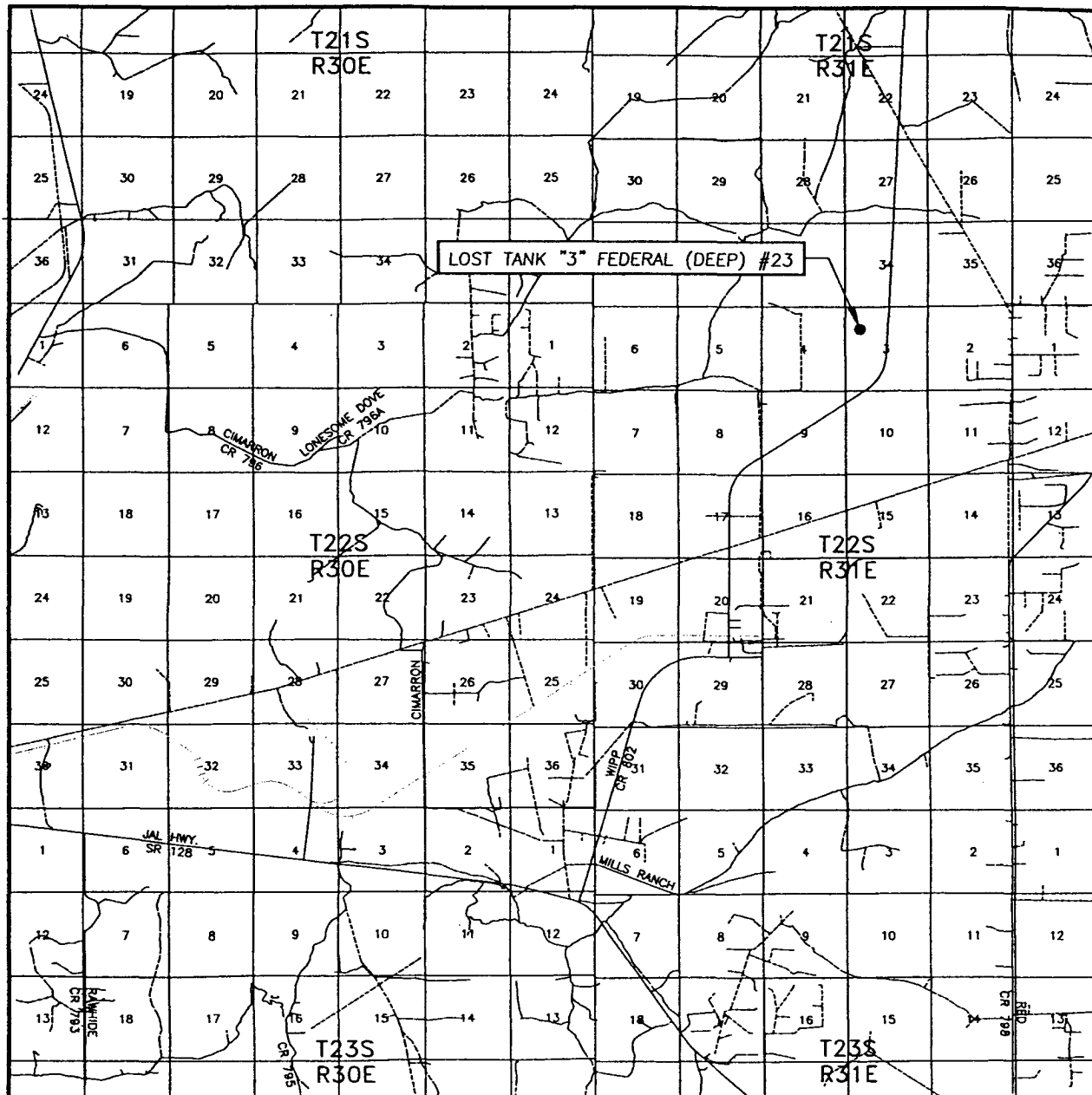


POGO PRODUCING COMPANY

LOST TANK "3" FEDERAL (DEEP) #23 WELL
 LOCATED 1405 FEET FROM THE NORTH LINE
 AND 630 FEET FROM THE WEST LINE OF SECTION 3,
 TOWNSHIP 22 SOUTH, RANGE 31 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

Survey Date: 05/20/05	Sheet 1 of 1 Sheets
W.O. Number: 05.11.0684	Dr By: J.R.
Date: 05/23/05	Disk: CD#5
05110684	Scale: 1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 3 TWP. 22-S RGE. 31-E

SURVEY N.M.P.M.

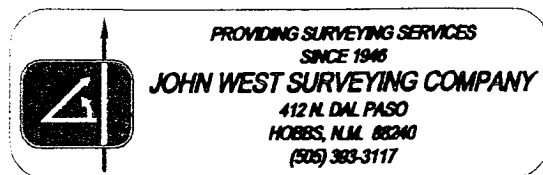
COUNTY EDDY

DESCRIPTION 1405' FNL & 630' FWL

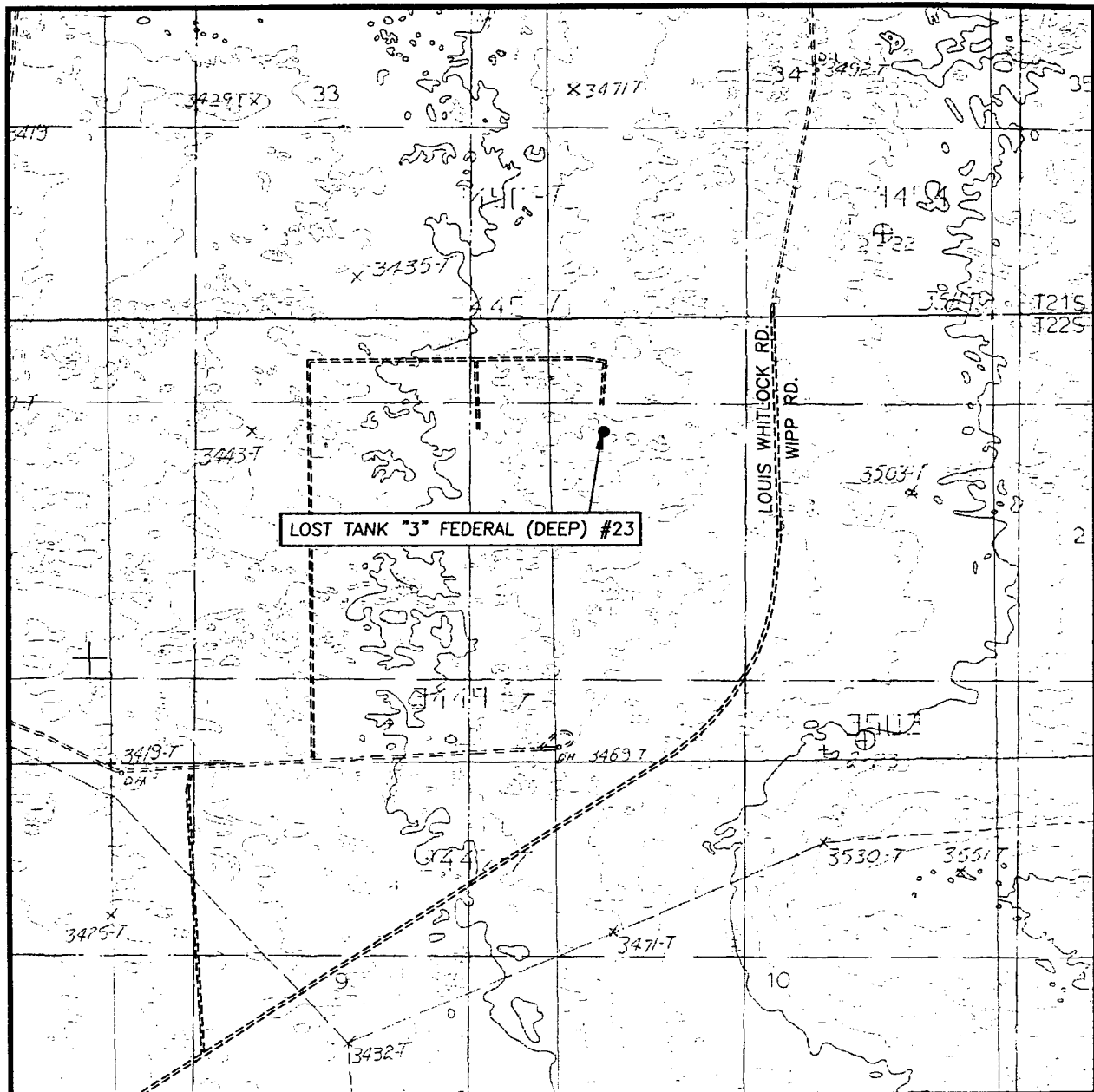
ELEVATION 3477'

OPERATOR POGO PRODUCING COMPANY

LEASE LOST TANK "3" FEDERAL (DEEP)



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
LIVINGSTON RIDGE, N.M. - 10'

SEC. 3 TWP. 22-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

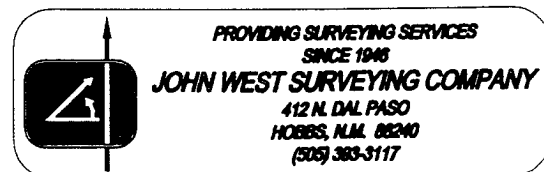
DESCRIPTION 1405' FNL & 630' FWL

ELEVATION 3477'

OPERATOR POGO PRODUCING
COMPANY

LEASE LOST TANK "3" FEDERAL (DEEP)

U.S.G.S. TOPOGRAPHIC MAP
LIVINGSTON RIDGE, N.M.



APPLICATION TO DRILL

POGO PRODUCING COMPANY
 LOST TANK "3" FEDERAL DEEP # 23
 UNIT "E" SECTION 3
 T22S-R31E EDDY CO. NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

1. Location: 1405' FNL & 630' FWL SECTION 3 T22S-R31E EDDY CO. NM
2. Elevation above sea level: 3477' GR.
3. Geologic name of surface formation:
4. Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
5. Proposed drilling depth: 12,800'
6. Estimated tops of geological markers:

Base of Salt	3900'	Brushy Canyon	6450'
Delaware Lime	4200'	Bone Spring	8100'
Bell Canyon	4270'	Wolfcamp	11,650'
Cherry Canyon	5150'	Strawn	12,700'
7. Possible mineral bearing formation:

Brushy Canyon	Oil	Wolfcamp	Oil
Bone Spring	Oil	Strawn	Oil

8. Casing program:

<u>Hole size</u>	<u>Interval</u>	<u>OD casing</u>	<u>Weight</u>	<u>Thread</u>	<u>Collar</u>	<u>Grade</u>
25"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-950'	13 3/8"	48#	8-R	ST&C	H-40
12½"	0-4000'	9 5/8"	40#	8-R	ST&C	N-80
8½"	0-11,600'	7"	29#	8-R	LT&C	P-110
6 1/8"	11400-12800'	5"	13#			

APPLICATION TO DRILL

POGO PRODUCING COMPANY
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T22S-R31E EDDY CO. NM

9. CASING CEMENTING AND SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 950' of 13 3/8" 48# H-40 ST&C casing. Cement with 850 Sx. of Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. Circulate cement to surface.
9 5/8"	1st Intermediate	Set 4000' of 9 5/8" 40# N-80 ST&C casing. Cement with 1200 Sx. of Class "C" cement + additives, circulate cement to surface.
7"	2nd Intermediate	Set 11,600' of 7" 29# P-110 LT&C casing. Cement in 3 stages with DV Tools at 6500' & 3800". Cement 1st stage with 750 Sx. of Class "H" Premium Plus cement + additives, cement 2nd stage with 400 Sx. of Class "C" cement + 8# of Gilsonite/Sx, cement 3rd stage with 300 Sx. of Class "C" Light Weight cement + additives, circulate cement to surface.
5"	Production Liner.	Set a 5"

10. PRESSURE CONTROL EQUIPMENT:

Nipple up a 2000# PSI B.O.P. on the 13 3/8" casing and keep on hole to till 4000', after running 9 5/8" casing, nipple up a 5000 PSI B.O.P. on the 9 5/8" casing. Keep this B.O.P. on the hole till the 7" casing is cemented in place. Nipple up 10,000PSI B.O.P. equipment on the 7" casing and keep on the hole to TD and the 5" liner is run and cemented. All B.O.P.'s will be operated at least once in each 24Hour period, and blind rams will be operated when the drill pipe is out of the hole on trips. Exhibits "E", "E-1", "E-2" show skematic drawing of B.O.P.s that may be used, each will have an annular bag type preventor, a set of pipe rams, and a set of blind rams, pipe rams will depend on the size of drill pipe that is being used to drill the well. Exhibit "F" shows a 5000 PSI Choke manifold and a hydraulically operated closing unit. Exhibit "F-1" shows a 10,000 PSI choke manifold to be used on the bottom portion of the hole.

11. MUD CIRCULAING SYSTEM:

SEE PAGE 2-A

APPLICATION TO DRILL

POGO PRODUCING COMPANY
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T22S-R31E EDDY CO. NM

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-950'	8.4-8.8	29-34	NC	Fresh water spud mud use paper to control seepage
950-4000'	10.0-10.3	29-36	NC	Brine water use paper to control seepage and high viscosity sweeps to clean hole.
4000-11,600'	9.8-10.0	29-38	NC	Cut Brine using high viscosity sweeps to clean hole.
11,600-12,800'	9.8-10.0	29-40	10 cc or less	Same as above but start Dris-Pac, and Starch to control water loss. use salt gel for high viscosity sweeps to clean hole.

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
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T22S-R31E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Laterolog, MSFL, LDT, SNP, Gamma Ray and Caliper from 4000' to 13 3/8" casing shoe. Gamma Ray Neutron from 13 3/8" casing shoe to surface. Dual laterolog, MSFL, LDT, SNP, Gamma Ray and Caliper from 11,600' back to 9 5/8" casing shoe. Same set of logs from TD back to 7" casing shoe.
- B. Rig up mudlogger on hole at 4000'± and keep on hole to TD.
- C. Cores and DST's may be taken as deemed necessary.

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 6000± PSI, and Estimated BHT 200°.

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 48 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 Strawn formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialized as an oil 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.

8. Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
9. If H₂S 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 H₂S scavengers if necessary.

SURFACE USE PLAN

POGO PRODUCING COMPANY
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T22S-R31E EDDY CO. NM

1. EXISTING 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 location of the proposed well site as staked.

B. From Hobbs New Mexico take U.S. Hi-way 62-180 West toward Carlsbad New Mexico, go 40± miles to WIPP road, turn South go 10.75± miles turn Right go .75 miles, turn Right go .4 miles, turn Left go .9 miles, turn Right (East) go .7± miles, turn Right (South) go .25 miles to location. Location is just East of Well # 4.

C. Topographic map Exhibit "C" shows flowinne route.

2. PLANNED ACCESS ROADS: No new roads will be required for this location.

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

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

C. Turn-outs will be constructed where necessary.

D. If needed the roads will be surfaced to the BLM requirements with material obtained from from a local source.

E. Center line for the new access road will be flagged.

F. The road will be constructed to utilize low water crossings where drainage currently exist, and Culverts will be installed where necessary.

3. EXHIBIT "A-1" SHOWS WELLS AND DRY HOLES WITHIN A 1 MILE RAIDUS.

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"

SURFACE USE PLAN

POGO PRODUCING COMPANY
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T22S-R31E EDDY CO. NM

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 "C".

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 minimum 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 further 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 pits 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

POGO PRODUCING COMPANY
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T22S-R31E EDDY CO. NM

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 encountered 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 completion phases. 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 future 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
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T22S-R31E EDDY 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. 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 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.

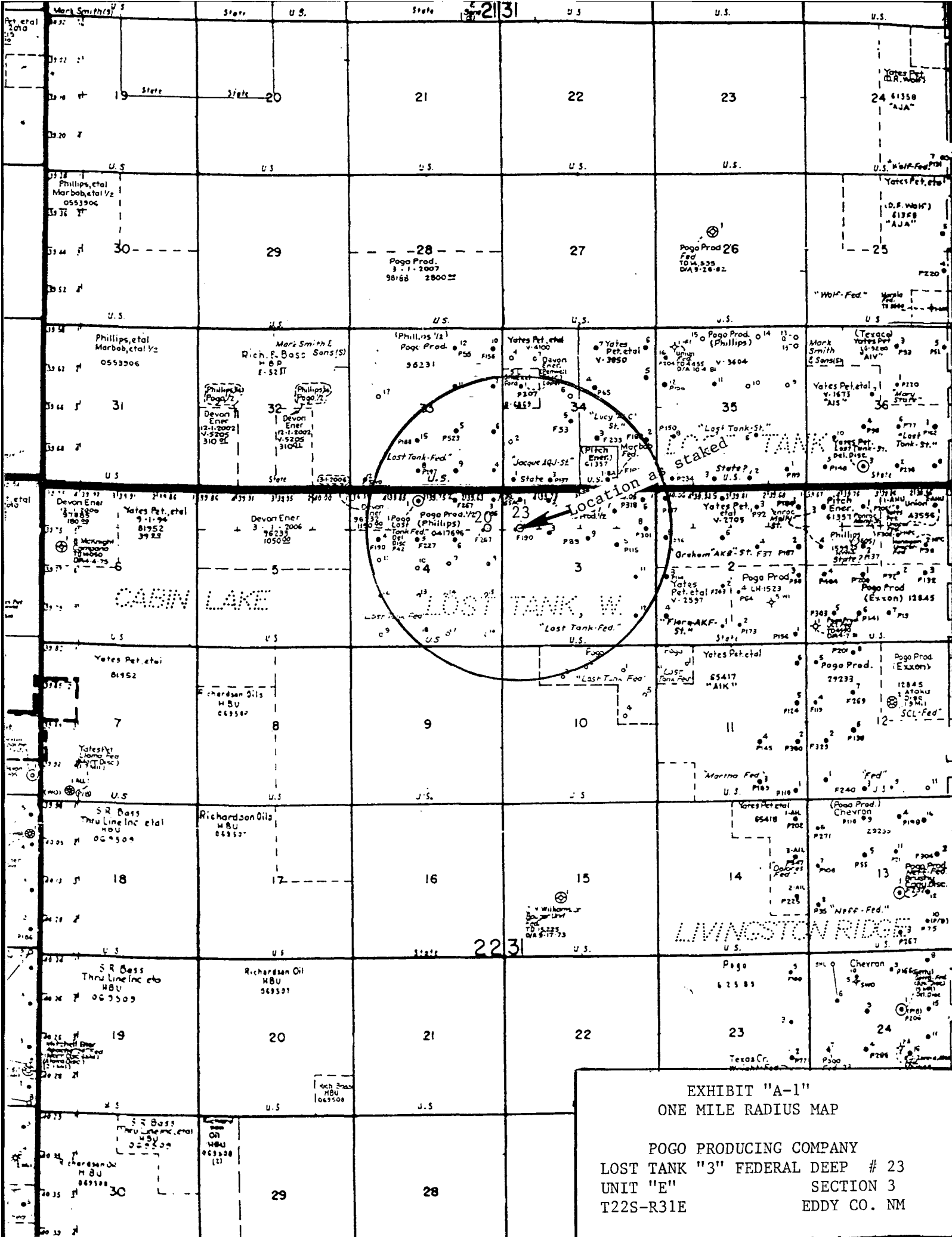
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DATE :

TITLE :

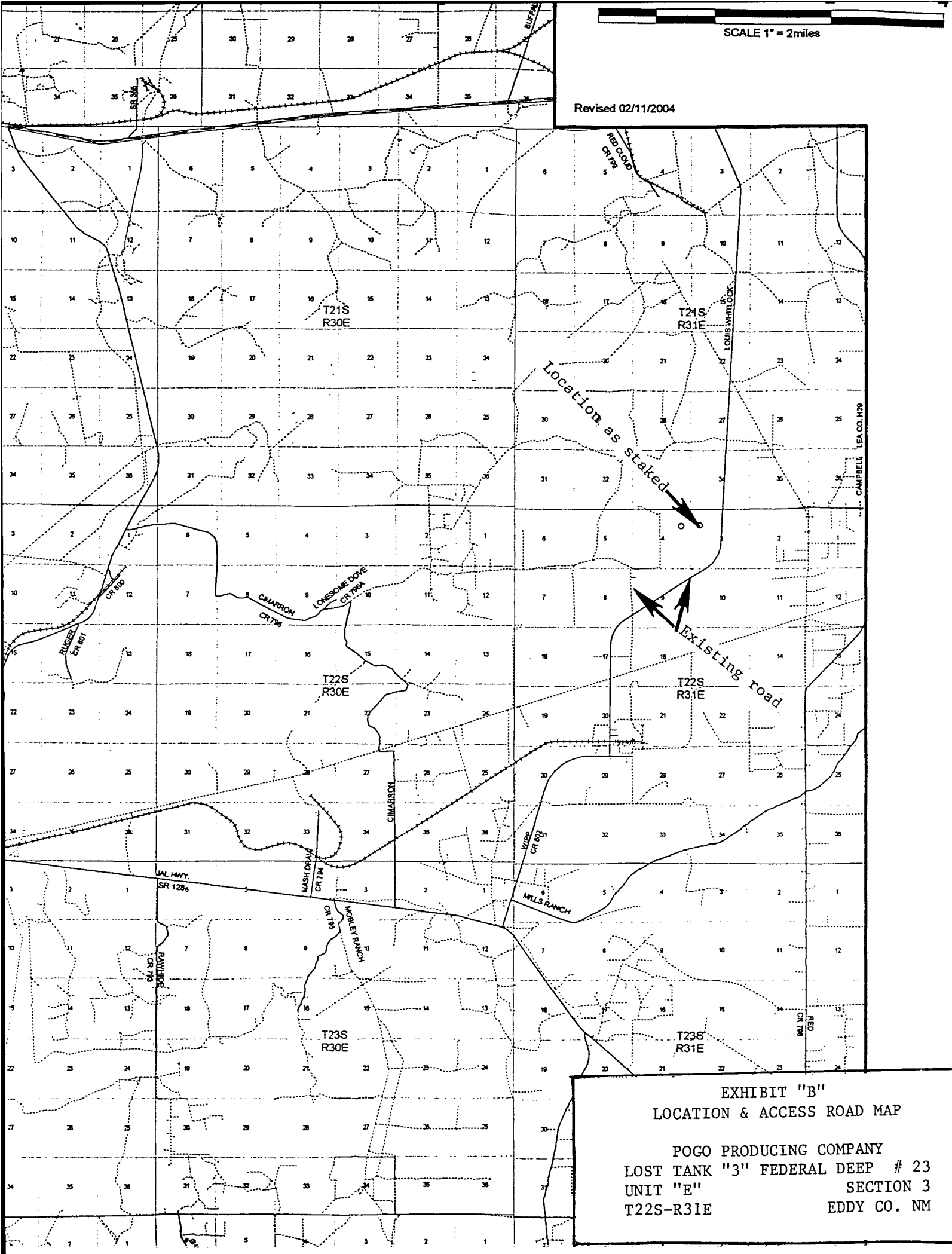
05/24/05

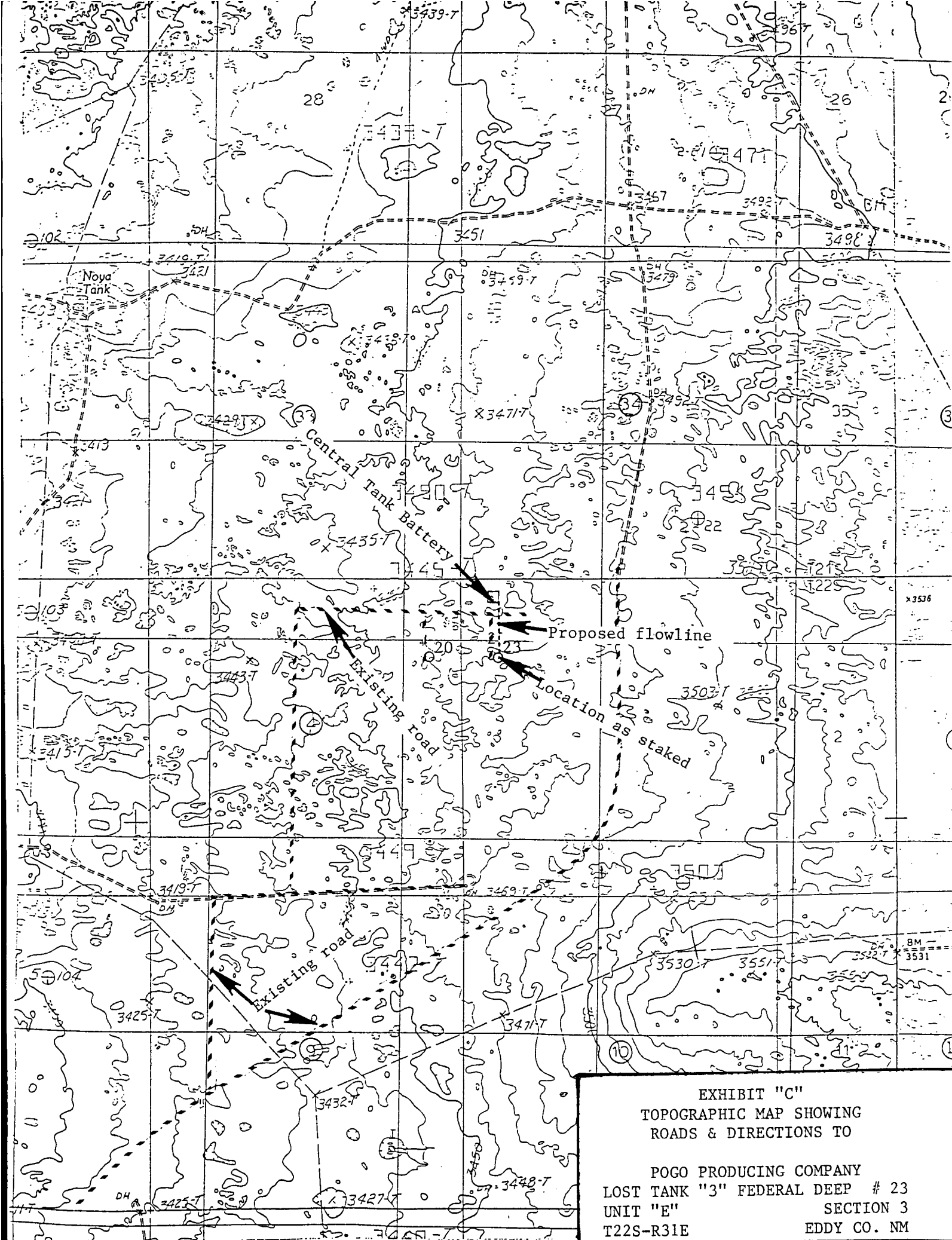
Agent

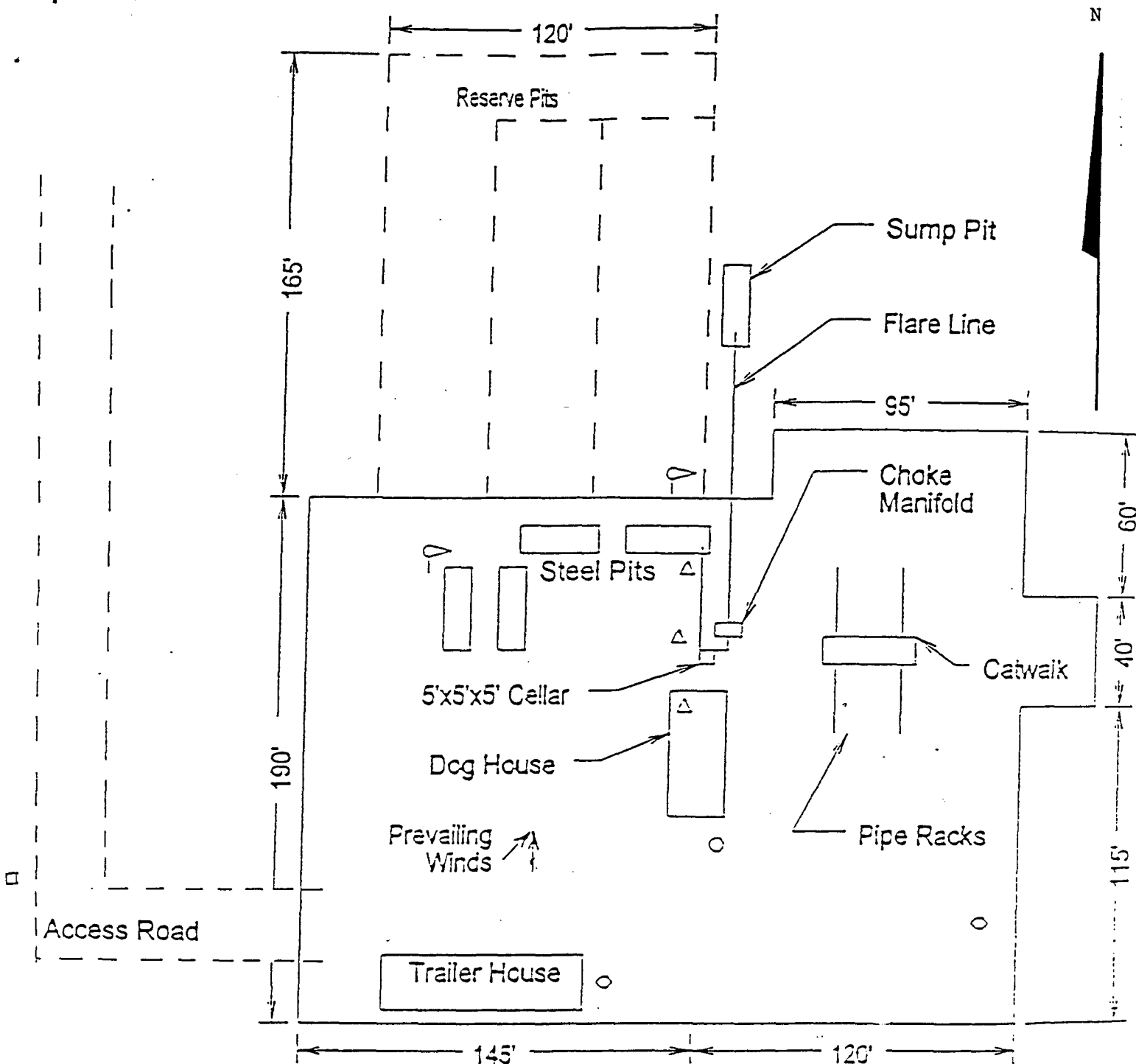


SCALE 1" = 2miles

Revised 02/11/2004







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

EXHIBIT "D"
RIG LAY OUT PLAT

POGO PRODUCING COMPANY
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T22S-R31E EDDY CO. NM

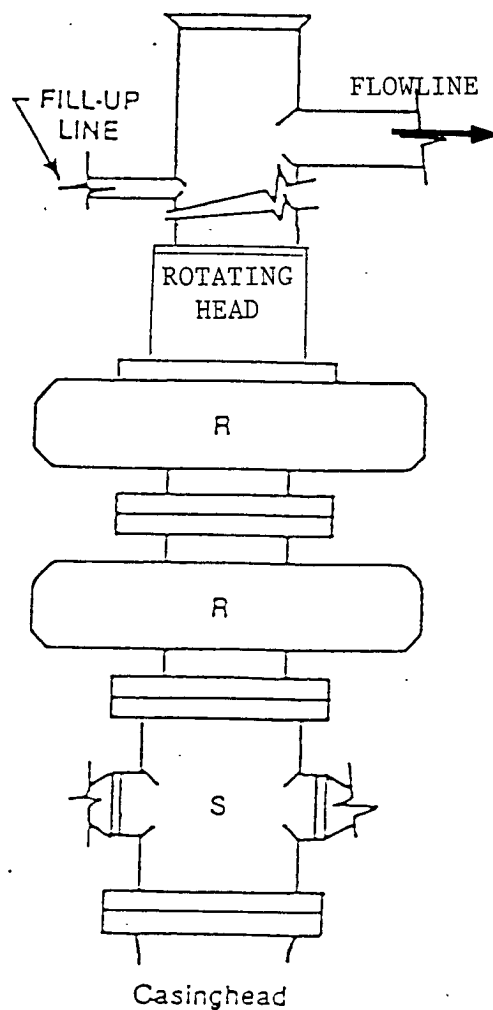
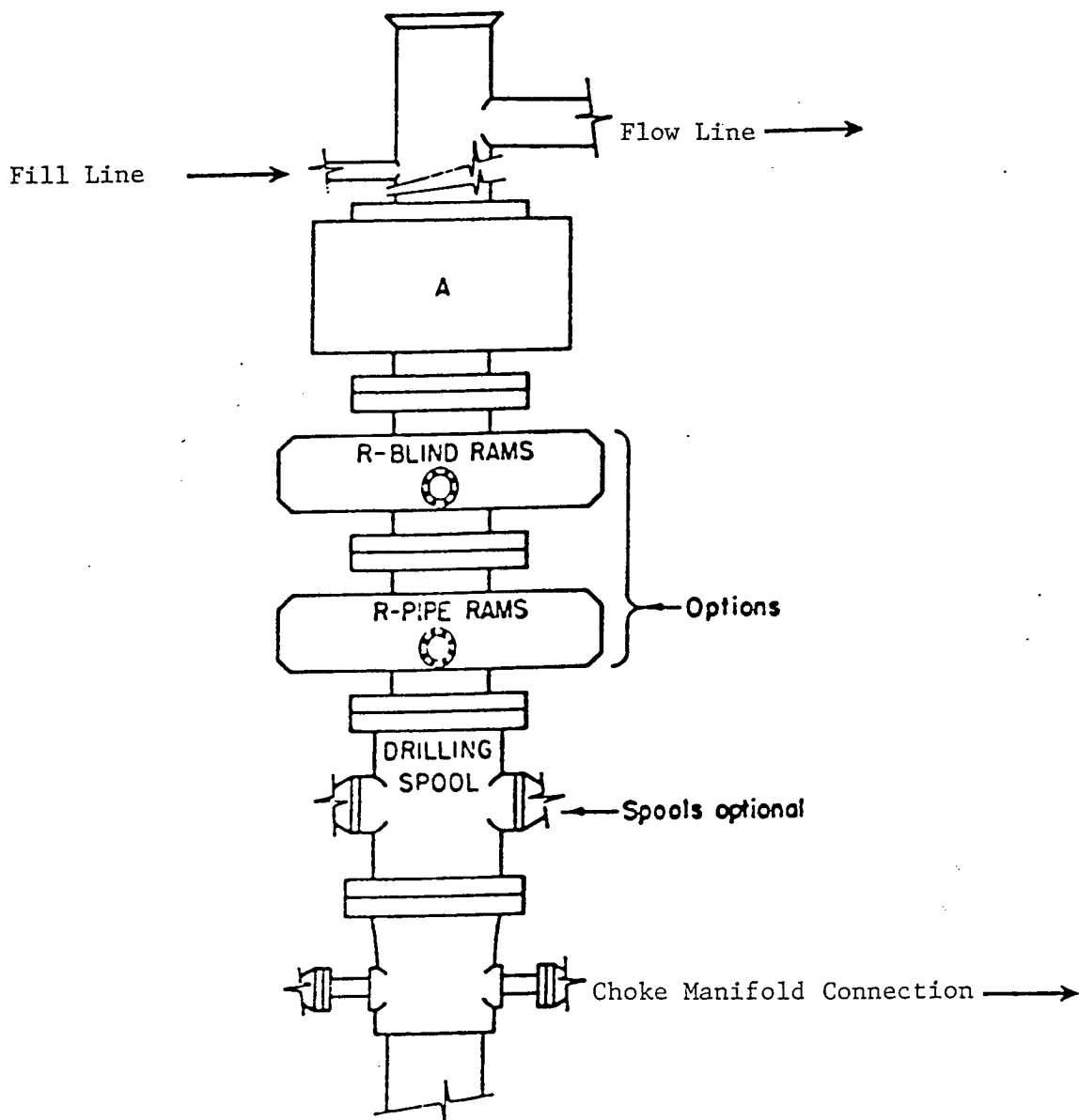


FIGURE K1-1. Recommended IADC Class 2 BOP stack, 2000 psi WP. Either SRd (left) or SA (right) arrangement is acceptable and drilling spool is optional.

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

POGO PRODUCING COMPANY
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T22S-R31E EDDY CO. NM
2000 PSI FROM 950'-4000'



ARRANGEMENT SRRA

1500 Series
5000 PSI WP

EXHIBIT "E-1"
SKETCH OF B.O.P. TO BE USED ON

POGO PRODUCING COMPANY
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T22S-R31E EDDY CO. NM
5000 PSI FROM 4000'-11,600'

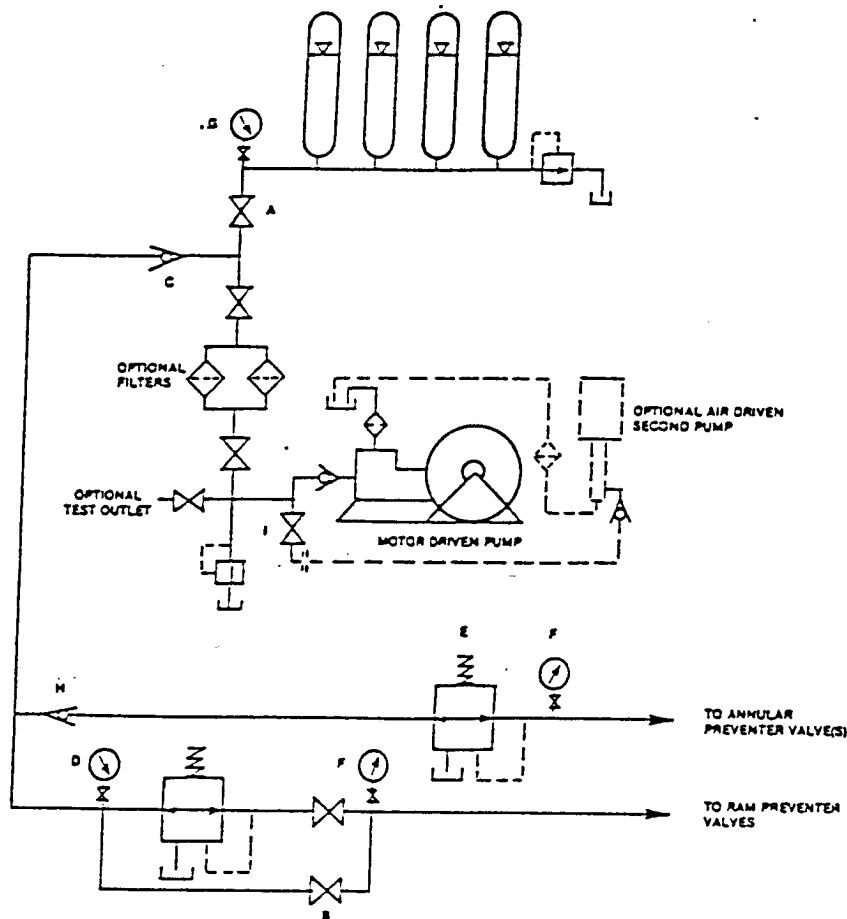


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

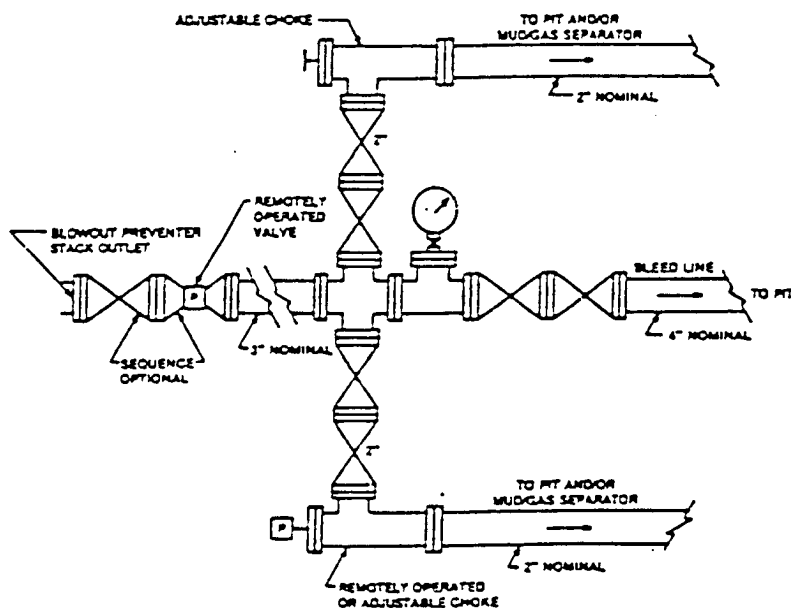


FIGURE K4-2. Typical choke manifold assembly for 3M rated working pressure service — surface installation.

EXHIBIT "F"
5,000 PSI
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T22S-R31E EDDY CO. NM

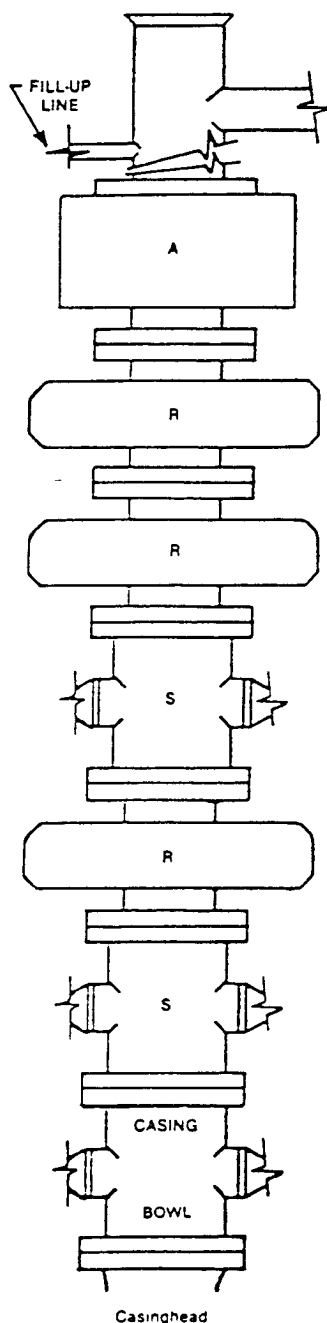


FIGURE K1-3. Recommended IADC Class 10 BOP stack arrangement SRSRRA, 10,000 psi WP. Lower drilling spool is optional with outlets on lower ram. Annular preventers 10,000 psi.

EXHIBIT "E-2"
SKETCH OF B.O.P. TO BE USED ON

POGO PRODUCING COMPANY
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T225-R31E EDDY CO. NM
10,000 PSI FROM 11,600'-TD

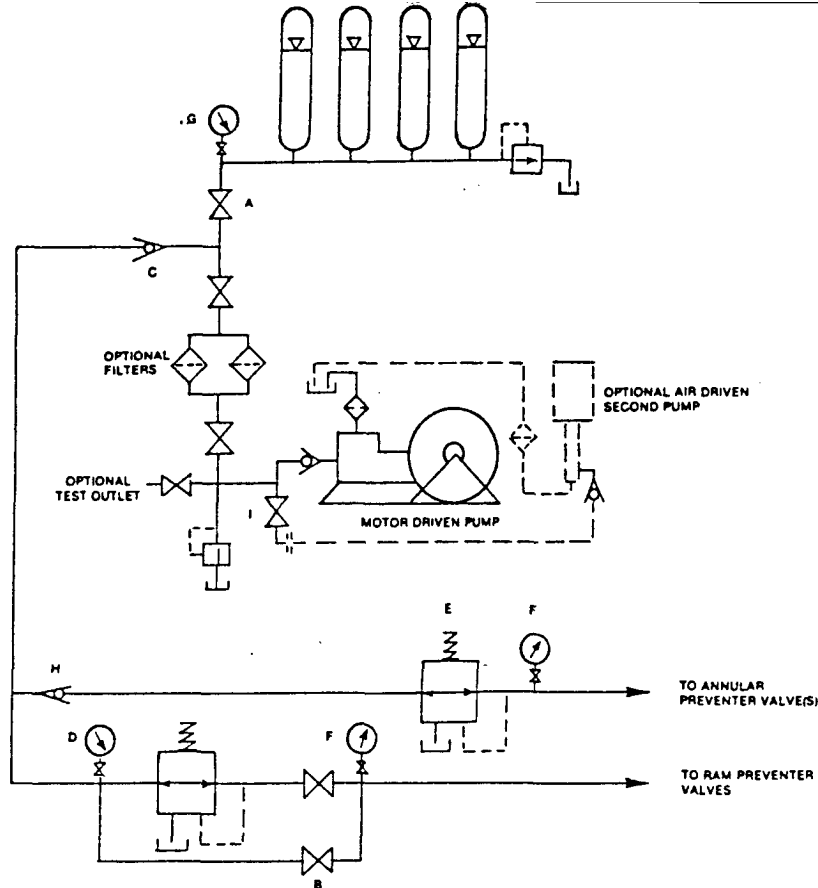


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

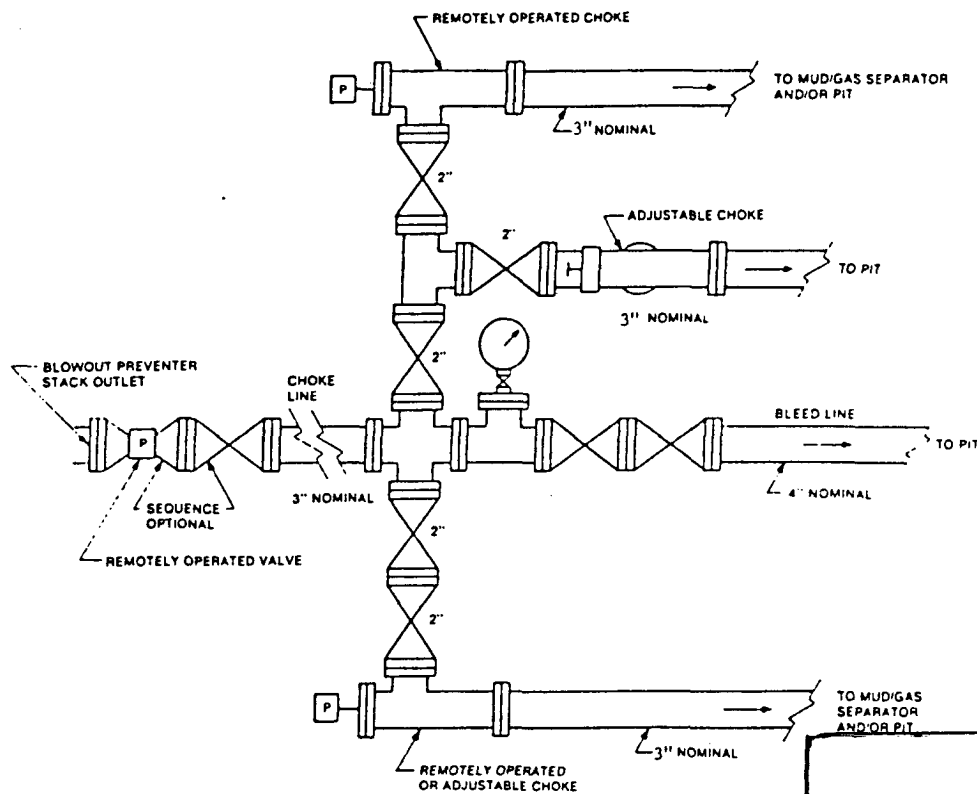


FIGURE K4-3. Typical choke manifold assembly for 10M and 15M rated working pressure service — surface installation.

EXHIBIT "F-1"
10,000 PSI
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
LOST TANK "3" FEDERAL DEEP # 23
UNIT "E" SECTION 3
T22S-R31E EDDY CO. NM

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: Pogo Producing Company Well Name & #: Lost Tank 3 Fed. Deep #23
Location 1405 F N L & 630 F W L; Sec. 03, T. 22 S., R. 31 E.
Lease #: NM-0417696 County: Eddy State: New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- ☒ Lesser Prairie Chicken (stips attached) ☐ Flood plain (stips attached)
☐ San Simon Swale (stips attached) ☐ Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

☒ The BLM will monitor construction of this drill site. Notify the ☒ Carlsbad Field Office at (505) 234-5972 ☐ Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

☒ Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche upon completion of well and it is determined to be a producer.

☐ All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____ inches in depth. Approximately _____ cubic yards of topsoil material will be stockpiled for reclamation.

☒ Other. **V-Door South (Reserve pits to the east).**

III. WELL COMPLETION REQUIREMENTS

☐ A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

☒ Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

- | | |
|--|---|
| <input type="checkbox"/> A. Seed Mixture 1 (Loamy Sites)
Side Oats Grama (<i>Bouteloua curtipendula</i>) 5.0
Sand Dropseed (<i>Sporobolus cryptandrus</i>) 1.0 | <input checked="" type="checkbox"/> B. Seed Mixture 2 (Sandy Sites)
Sand Dropseed (<i>Sporobolus crptandrus</i>) 1.0
Sand Lovegrass (<i>Eragostis trichodes</i>) 1.0
Plains Bristlegrass (<i>Setaria magrostachya</i>) 2.0 |
| <input type="checkbox"/> C. Seed Mixture 3 (Shallow Sites)
Side oats Grama (<i>Boute curtipendula</i>) 1.0 | <input type="checkbox"/> D. Seed Mixture 4 (Gypsum Sites)
Alkali Sacaton (<i>Sporobollud airoides</i>) 1.0
Four-Wing Saltbush (<i>Atriplex canescens</i>) 5.0 |

☐ OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

☐ Other

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic. Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- (1) Lined as specified above and
- (2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be re-contoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

On the lands described below:

T. 22 S., R. 31 E.
Section 03:ALL

For the purpose of: Protecting Prairie Chickens:

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 15 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a.m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Pogo Producing Company
Well Name & No. Lost Tank '3' Federal Deep #23
Location: 1405' FNL, 630' FWL, Section 3, T. 22 S., R. 31 E., Eddy County, New Mexico
Lease: NM-0417696

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) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:
 - A. Well spud
 - B. Cementing casing: 13-3/8 inch 9-5/8 inch 7 inch 5 inch liner
 - C. BOP tests
2. 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.
3. 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.
4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
5. 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 approximately 950 feet 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.
2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is to be circulated to the surface.
3. The minimum required fill of cement behind the 7 inch production casing is to be circulated to the surface.
4. The minimum required fill of cement behind the 5 inch production liner is to be circulated to the top of the liner.
5. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.
3. Minimum working pressure of the blowout preventer and related equipment (BOPE) below the 9-5/8 inch intermediate casing shall be 5000 psi.
4. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
 - The tests shall be done by an independent service company.
 - The results of the test shall be reported to the appropriate BLM office.
 - Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
 - Testing must be done in a safe workman-like manner. Hard line connections shall be required.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

6/7/2005
ACS

BLM Lease Number: NM-0417696
Company Reference: Pogo Producing Company
Well # & Name: Lost Tank 3 Fed. Deep #23

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
 - a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
 - b. Activities of other parties including, but not limited to:

- (1) Land clearing.
- (2) Earth-disturbing and earth-moving work.
- (3) Blasting.
- (4) Vandalism and sabotage.

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of 25 feet.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a

fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. Special Stipulations:

(March 1989)