

UNITED STATES N.M. Oil Cons. Div-Dist. 2
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
1301 W. Grand Avenue
Alamosa, NM 88210

PHASE DESIGNATION AND SERIAL NO.
NMC504364-B

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
 UNIT PETROLEUM COMPANY (432-685-9020) (GARY LANG)

3. ADDRESS AND TELEPHONE NO.
 407 NORTH BIG SPRING STREET SUITE 101 MIDLAND, TEXAS 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface: 800' FNL & 1650' FEL SECTION 34 T19S-R25E EDDY CO. NM
 At proposed prod. zone: SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approximately 18 miles North 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)
 800'

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.
 990'

19. PROPOSED DEPTH
 9,500'

20. ROTARY OR CABLE TOOLS
 ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 3516' GR.

22. APPROX. DATE WORK WILL START*
 WHEN APPROVED

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
 PAN CANADIAN "34" FED. #4

9. API WELL NO.
 30-015-33949

10. FIELD AND POOL, OR WILDCAT
 CEMETARY-MORROW

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 SECTION 34 T19S-R25E

12. COUNTY OR PARISH
 EDDY CO.

13. STATE
 NEW MEXICO

RECEIVED
FEB 11 2005
ALAMOSA

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor	NA	40'	Cement to surface w/Redi-mix
17 1/2"	13 3/8"	48#	400'	450 Sx. Circulate cement to surf
12 1/4"	WITNESS 5/8"	36#	1300' / 1125'	650 Sx. " WITNESS " "
8 1/2"	5 1/2"	17#	9500'	400 Sx.

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17 1/2" hole to 400'. Run and set 400' of 13 3/8" 48# H-40 ST&C casing. Cement with 450 Sx. of Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. Circulate cement to surface.
3. Drill 12 1/4" hole to 1300'. Run and set 1125' of 9 5/8" 36# J-55 ST&C casing. Cement with 450 Sx. of Class "C" POZ, tail in with 200 Sx. of Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. circulate cement to surface.
4. Drill 8 1/2" hole to 9500'. Run and set 9500' of 5 1/2" 17# N-80 LT&C casing. Cement with 400 Sx. of Class "H" Premium Plus cement + additives. Top of cement at least 500' above upper most pay interval.

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED**

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

24. SIGNED Joe G. Lara TITLE Agent DATE 06/04/04

(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 FEB 10 2005

*See Instructions On Reverse Side APPROVAL FOR 1 YEAR

State of New Mexico

Energy, Minerals and Natural Resources Department

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

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

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

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

OIL CONSERVATION DIVISION

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

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
	74640	CEMETARY-MORROW (GAS)
Property Code	Property Name	Well Number
	PAN CANADIAN FEDERAL	4
OGRID No.	Operator Name	Elevation
115970	UNIT PETROLEUM COMPANY	3516'

Surface Location

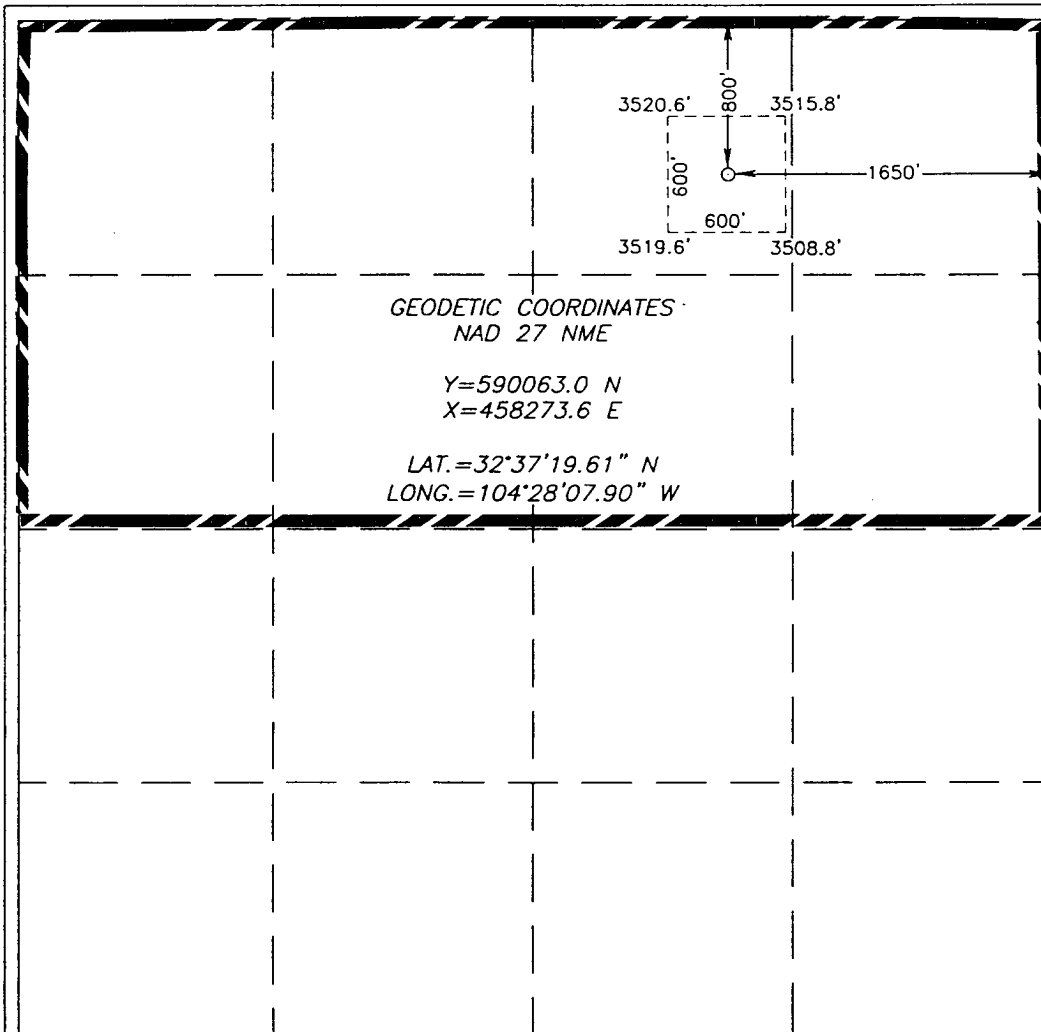
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	34	19-S	25-E		800'	NORTH	1650'	EAST	EDDY

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.
320			

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



OPERATOR CERTIFICATION

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

Joe T. Janica
 Signature
 Joe T. Janica
 Printed Name
 Agent
 Title
 06/04/04
 Date

SURVEYOR CERTIFICATION

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

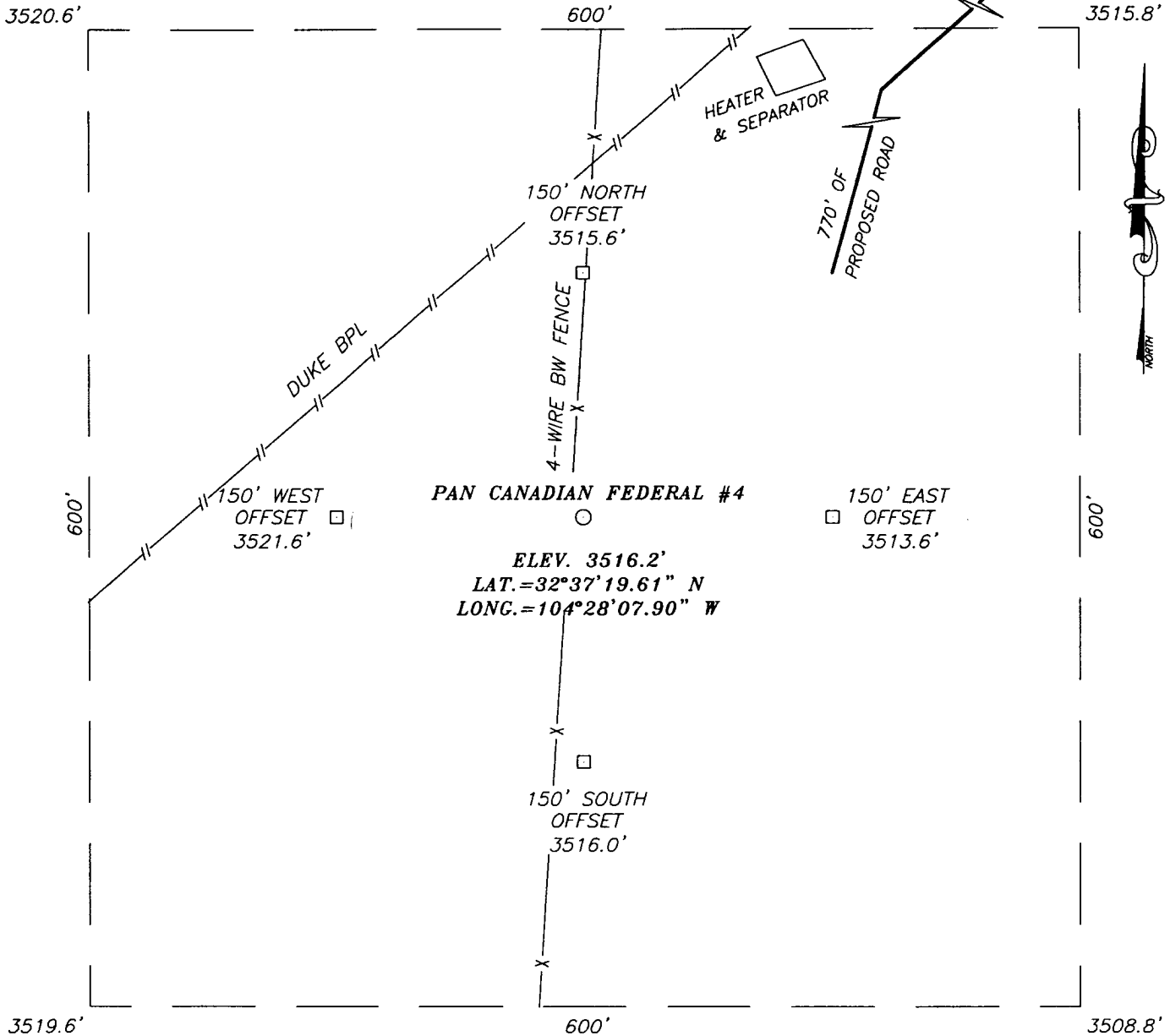
MAY 18, 2004
 Date Surveyed JR

Signature & Seal of Professional Surveyor
Gary E. Eidsen 5/24/04
 04.11.0590

Certificate No. GARY EIDSON 12841

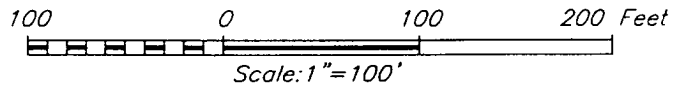
SECTION 34, TOWNSHIP 19 SOUTH, RANGE 25 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO

EDDY CO. RD. 23



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY #285 AND EDDY CO. RD. #23 (ROCK DAISY). TURN WEST ON EDDY CO. RD. #23 AND GO 3.5 MILES TO CATTLE GUARD. TURN SOUTH AND FOLLOW FENCE LINE FOR 800' TO LOCATION.



UNIT PETROLEUM CO.

PAN CANADIAN FEDERAL #4 WELL
 LOCATED 800 FEET FROM THE NORTH LINE
 AND 1650 FEET FROM THE EAST LINE OF SECTION 34,
 TOWNSHIP 19 SOUTH, RANGE 25 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

Survey Date: 05/18/04	Sheet 1 of 1 Sheets		
W.O. Number: 04.11.0590	Dr By: J. RIVERO	Rev 1: N/A	
Date: 05/19/04	Disk: CD#10	04110590	Scale: 1" = 100'



PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 383-3117

APPLICATION TO DRILL

UNIT PETROLEUM COMPANY
 PAN CANADIAN "34" FEDERAL #4
 UNIT "B" SECTION 34
 T19S-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: 800' FNL & 165-' FEL SECTION 34 T19S-R25E EDDY CO. NM
2. Ground Elevation above Sea Level: 3516' 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: 9500'

6. Estimated tops of geological markers:

Yeso	2500'	Strawn	8300'
Bone Spring Sand	6200'	Atoka	8580'
Wolfcamp	6950'	Morrow	9000'
Cisco Canyon	7850'		

7. Possible mineral bearing formations:

Wolfcamp	Gas	Morrow	Gas
Strawn	Gas		
Atoka	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
12¼"	0- 1300 ¹¹²⁵ '	9 5/8"	36#	8-R	ST&C	J-55
8½"	0-9500'	5½"	17#	8-R	LT&C	N-80

APPLICATION TO DRILL

UNIT PETROLEUM COMPANY
 PAN CANADIAN "34" FEDERAL #4
 UNIT "B" SECTION 34
 T19S-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 450 Sx. of Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. Circulate cement to surface.
9 5/8"	Intermediate	Set 1300' of 9 5/8" 36# J-55 ST&C casing. Cement with 450 Sx. of Class "C" POZ, tail in with 200 Sx. of Class "C" cement + additives.
5 1/2"	Production	Set 9500' of 5 1/2" 17# N-80 LT&C casing. Cement with 400 Sx. of Class "H" Premium Plus cement + additives. Top of cement 500' above the top of upper most pay.

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'	8.4-9.4	29-30	NC	Fresh water Spud Mud add paper to control seepage.
400- ^{1125'} 1300'	10.0-10.2	29-36	NC	Brine ^{FRESH} water use paper to control seepage & High viscosity to clean Hole ^{MUD}
1300-8500'	9.5-10.0	30-38	25 cc or less	Cut Brine with a Dris-Pac system to control water loss.
8500-9500'	9.5-10.0	35-40	10 cc or less	Same as above, use 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

UNIT PETROLEUM COMPANY
PAN CANADIAN "34" FEDERAL #4
UNIT "B" SECTION 34
T19S-R25E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Lateeolog, MSFL, Compensated Neutron Density, Gamma Ray, Caliper from TD Bsck to the 9 5/8" casing shoe. Gamma Ray, Neutron from 9 5/8" casing shoe back to surface.
- B. Mud logger will be rigged up on hole at 5000'± and remain on hole to TD.
- C. No cores or DST's are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of 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 165°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 25 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.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

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 bloopie line (mud pit) and on derrick floor or doghouse.
3. Windssock and/or wind streamers
 - A. Windssock at mudpit area should be high enough to be visible.
 - B. Windssock at briefing area should be high enough to be visible.
 - C. There should be a windssock 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 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

UNIT PETROLEUM COMPANY
PAN CANADIAN "34" FEDERAL #4
UNIT "B" SECTION 34
T19S-R25E EDDY 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 REPRESENTATIVE:

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:

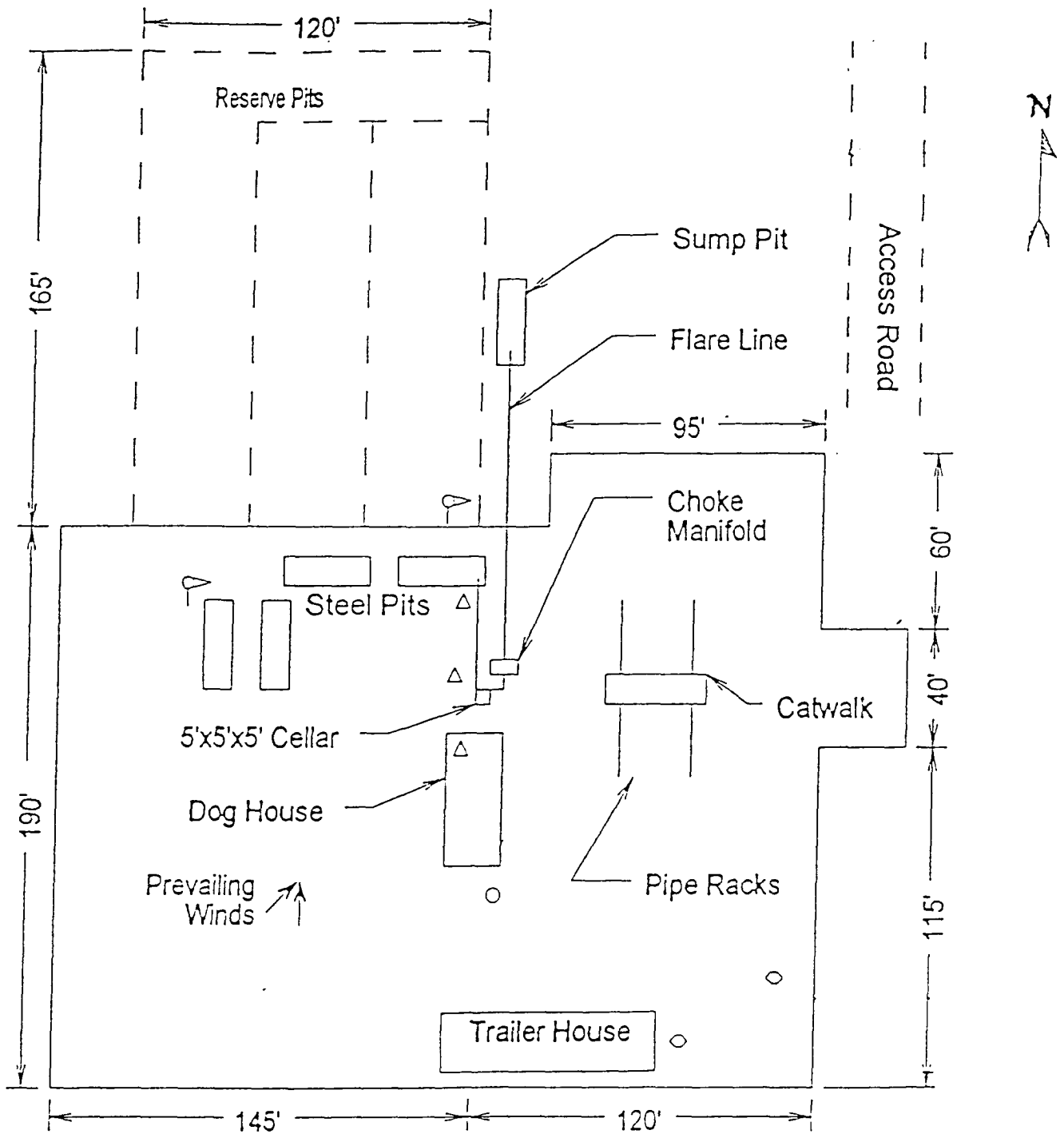
UNIT PETROLEUM COMPANY
407 NORTH BIG SPRING SUITE 101
MIDLAND, TEXAS 79701
GARLAND H. LANG
OFFICE PHONE 432-685-9020

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 UNIT PETROLEUM 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 : 06/04/04

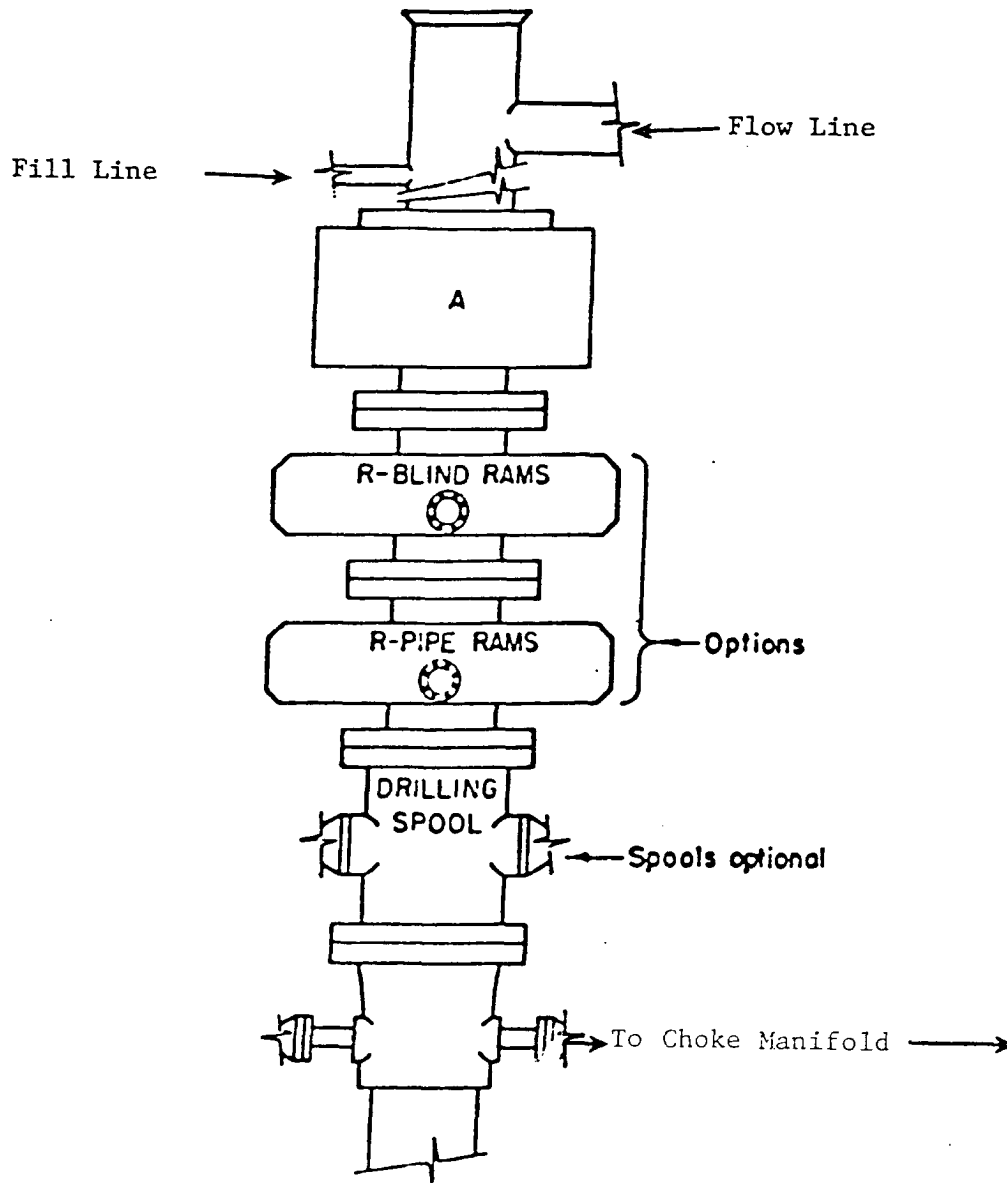
TITLE : Agent



- ⊙ 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

UNIT PETROLEUM COMPANY
 PAN CANADIAN "34" FEDERAL #4
 UNIT "B" SECTION 34
 T19S-R25E EDDY CO. NM



ARRANGEMENT SRRA

1500 Series
 5000# Working Pressure

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

UNIT PETROLEUM COMPANY
 PAN CANADIAN "34" FEDERAL #4
 UNIT "B" SECTION 34
 T19S-R25E EDDY CO. NM

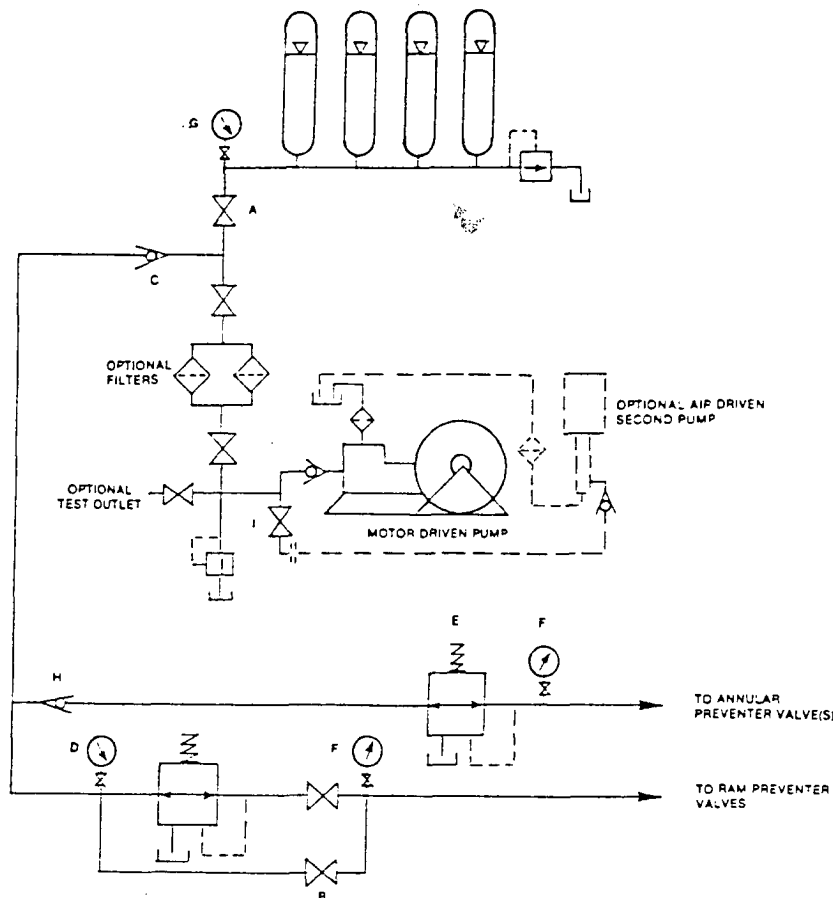


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

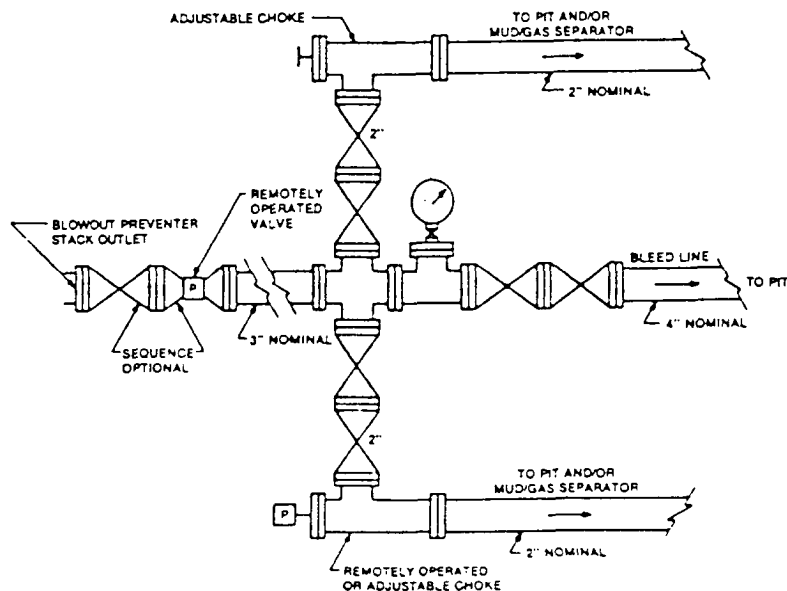


FIGURE K4-2. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

EXHIBIT "E-1
CHOKE MANIFOLD & CLOSING UNIT

UNIT PETROLEUM COMPANY
PAN CANADIAN "34" FEDERAL #4
UNIT "B" SECTION 34
T19S-R25E EDDY CO. NM