

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

| | | |
|--|--|--|
| 1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> | | 5. LEASE DESIGNATION AND SERIAL NO. NM-103883 |
| b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> | | 6. IF INDIAN, ALLOTEE OR TRIBE NAME |
| 2. NAME OF OPERATOR HARVEY E. YATES COMPANY | | 7. UNIT AGREEMENT NAME TUNA BOAT 4 FED |
| 3. ADDRESS AND TELEPHONE NO. P.O. BOX 1933, ROSWELL, NEW MEXICO 88202 505-623-6601 | | 8. FARM OR LEASE NAME, WELL NO. #1 |
| 4. LOCATION OF WELL (REPORT LOCATION CLEARLY AND IN ACCORDANCE WITH ANY STATE REQUIREMENTS) AT SURFACE 1650' FSL & 1980' FWL | | 9. API WELL NO. 30-025-35036 |
| AT PROPOSED PROD. ZONE SAME (K) | | 10. FIELD AND POOL, OR WILDCAT Tears; SAN MIGUEL YATES-SEVEN RIVERS, west |
| | | 11. SEC., T., R., M., OR BLK AND SURVEY OR AREA SEC 4, T20S, R33E |
| | | 12. COUNTY OR PARISH LEA |
| | | 13. STATE NM |

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE
20 MILES NE OF CARLSBAD, NM

| | | |
|--|---------------------------------|--|
| 15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1650' | 16. NO. OF ACRES IN LEASE 40 | 17. NO. OF ACRES ASSIGNED TO THIS WELL 40 |
| 18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. NONE | 19. PROPOSED DEPTH 3525 | 20. ROTARY OR CABLE TOOLS ROTARY |
| 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3560 (GR) | | APPROX. DATE WORK WILL START 20-Jun-00 |

23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | GRADE, SIZE OF CASING | WT PER FT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|-----------------------|-----------------|---------------|---|
| 12 1/4" | 8 5/8" J-55 | 32# ST&C 8RD | 1,250' | 800 SX "C" w/ 2% CACL & 1/4# FLOEAL |
| 7 7/8" | 4 1/2" J-55 | 10.5 & 11.6# | 3,525' | 350 SX "C" w/ 2% CACL & 1/4# FLOEAL 600 SX FILLER * |
| 0 | | ST&C & LT&C 8RD | | |

ALL CASING WILL BE NEW, OR USED MEETING BLM SPECS.
CEMENT WILL BE CIRCULATED ON 13 3/8" AND 8 5/8" CASING.
CEMENT QUANTITIES AND ADDITIVES ARE SUBJECT TO CHANGE DUE TO HOLE CONDITIONS.
* FILLER CEMENT 35/65 "C" POZ w/ 6% GEL, 5# SALT, & 1/4# FLOEAL
EXCEPTION TO SALT STRING APPROVED BY MIKE STOGNER/PAUL KAUTZ W/ HOBBS OCD

CAPITAN OCT. 1992 WATER BASIN

PROPOSED MUD PROGRAM

| | |
|-----------|--|
| 0-1250 | FRESH WATER w/ PAPER & SHALE GUARD. MW-9.0 VIS-31 |
| 1250-3525 | BRINE WATER w/ PAPER, SHALE GUARD, & AMMONIA NITRATE. MW-10.0 VIS-31 |
| | |

MUD PROGRAM SUBJECT TO CHANGE DUE TO HOLE CONDITIONS

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 Bob Williams Bob Williams TITLE Drilling Superintendent DATE 3/16/2000

(THIS SPACE FOR FEDERAL OR STATE OFFICE USE)
ORIG. NO. 10179 DATE 3/16/2000

PERMIT NO. 10179 APPROVAL DATE 3/16/2000

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:

(ORIG. SGD.) M. J. CHÁVEZ

STATE DIRECTOR

APPROVED BY M. J. CHÁVEZ TITLE STATE DIRECTOR DATE MAY 15 2000

TITLE 18 U.S.C. SECTION 1001, MAKES IT A CRIME FOR ANY PERSONS 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

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

OPER. OGRID NO. 10179
PROPERTY NO. 25923
POOL CODE 59110
EFF. DATE 5-22-00
API NO. 30-025-35036
MP
1/2000

RECEIVED
MAR 16 2000
BLM
ROSWELL, NM

APR 2000
Received
Hobbs
ODD

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|-----------------------------------|---|---|
| API Number 30-025-35036 | Pool Code 59110 | Pool Name Teas; Yates - 7R West |
| Property Code 2.5903 | Property Name TUNA BOAT "4" FEDERAL | Well Number 1 |
| GRID No. 10179 | Operator Name HARVEY E. YATES COMPANY | Elevation 3560 |

Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| K | 4 | 20 S | 33 E | | 1650 | SOUTH | 1980 | WEST | LEA |

Bottom Hole Location If Different From Surface

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|------------------------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |
| Dedicated Acres 40 | 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

| | | | |
|-----------------------------|--------------------------|--|--------------------------|
| LOT 4 40.51 ACRES | LOT 3 40.41 ACRES | LOT 2 40.31 ACRES | LOT 1 40.21 ACRES |
| NM-103883 SEE DETAIL | | 3565.0' 3560.1' 3565.1' 3562.9' DETAIL | |
| 1980' | | 1650' | |

OPERATOR CERTIFICATION

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

Bob Williams
Signature
Bob Williams
Printed Name
Drilling Superintendent
Title
March 16, 2000
Date

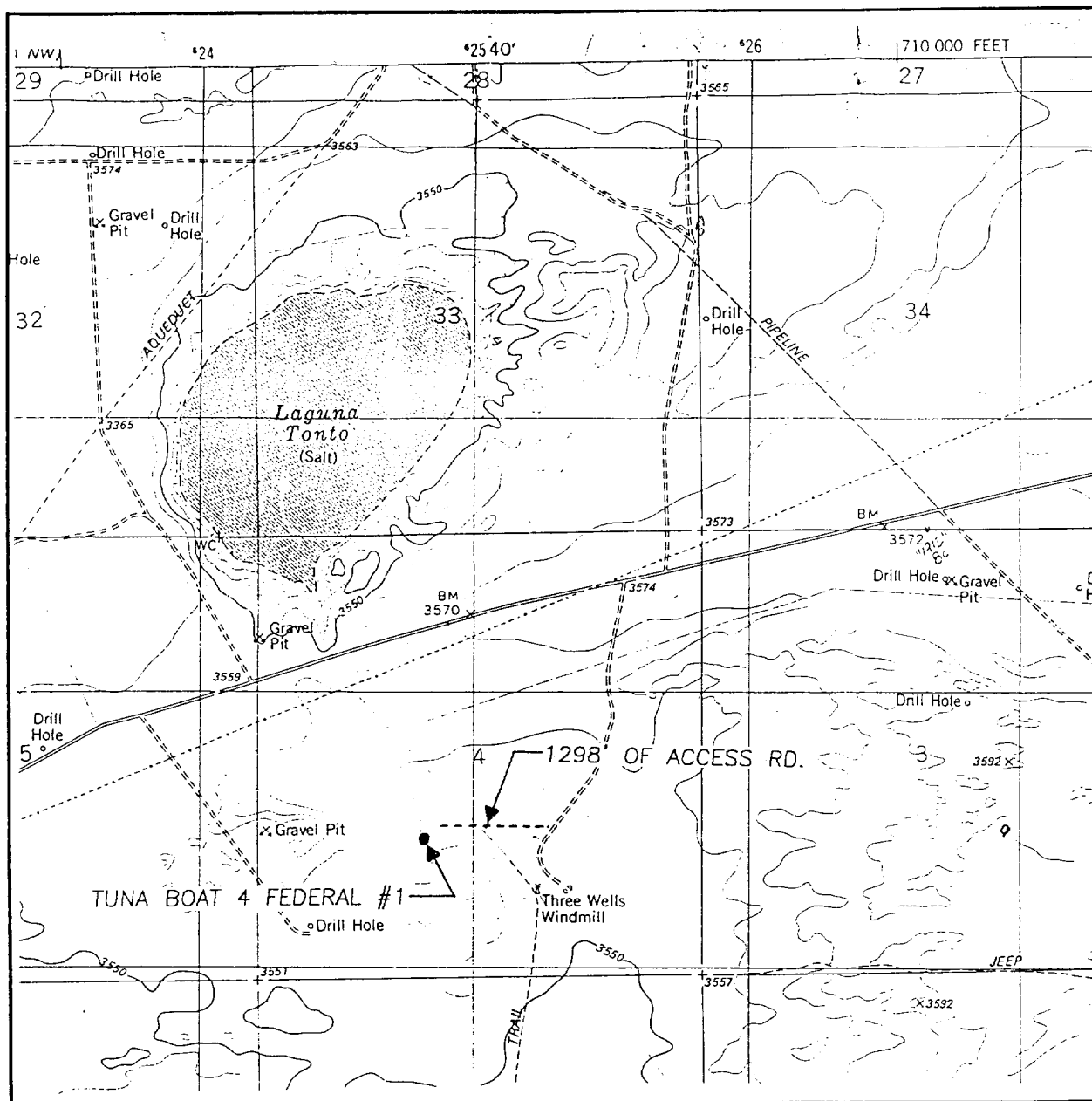
SURVEYOR CERTIFICATION

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.

MARCH 9, 2000

Date Surveyed LMP
Signature & Seal of Professional Surveyor
Gary Edson
00-11-0329
Certificate No. RONALD L. EDSON 3239
GARY EDSON 12641
MACON McDONALD 12185

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
LAGUANA GATUNA, N.M. - 10'

SEC. 4 TWP. 20-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1650' FSL & 1980' FWL

ELEVATION 3560

OPERATOR HARVEY E. YATES COMPANY

LEASE TUNA BOAT 4 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
LAGUANA GATUNA, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505 393-3117)

SEC. 4 TWP. 20-S RGE. 33-E
SURVEY _____ N.M.P.M. _____
COUNTY _____ LEA _____
DESCRIPTION 1650' FSL & 1980' FWL
ELEVATION _____ 3560 _____
OPERATOR _____ HARVEY E. YATES COMPANY _____
LEASE _____ TUNA BOAT 4 FEDERAL _____

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505 393-3117)

Application
Harvey E. Yates Company
Tuna Boat 4 Fed #1
Section 4, T20S, R33E
Lea County, New Mexico

In conjunction with Form 3160-3, Application For Permit To Drill Or Deepen subject well, Harvey E. Yates Company submits the following ten items of pertinent information in accordance with Onshore Oil & Gas Order No. 10.

1. **Geologic Name of Surface Formation:**
Quaternary alluvium and bolson deposits
2. **Estimated Tops of Significant Geologic Markers:**
Rustler 1,400', B/Salt 2,975', Yates (Zone 1) 3,180', Yates (Zone 2) 3,300', Yates (Zone 3) 3,345', Seven Rivers 3,425', TD 3,525'.
3. **Estimated Depths at which Water, Oil, or Gas Formations are expected:**
Oil: Yates (Zone 1) 3,180'
Gas: Yates (Zone 1) 3,180'
4. **Proposed Casing Program:**
See Form 3160-3
5. **Pressure Control Equipment:**
BOP & Annular. See Exhibit C.
6. **Drilling Fluid Program:**
See Form 3160-3
7. **Auxiliary Equipment:**
H2S Compliance package
8. **Testing, Logging, & Coring Program:**
The planned logs are Schlumberger Platform Express w/HALS.
9. **Abnormal Conditions, Pressures, Temperature, or Potential Hazards:**
No abnormal conditions are anticipated in this well bore.
BHST: 115 deg F
BHP: 500 psi
10. **Anticipated Starting Date & Duration of Operation:**
Spud Date: Approximately June 20, 2000. Duration of this project will be approximately 20 days from start of Construction of drilling pad until finish of completion operations

Surface Use Plan
Harvey E. Yates Company
Tuna Boat 4 Fed #1
Section 4, T20S, R33E
Lea County, New Mexico

1. **Existing Roads:**
Exhibit A is a portion of a New Mexico map showing the location of the proposed location. The location is approximately 25 miles Northeast of Carlsbad, NM. Leave Carlsbad on U.S. 62-180 & travel east to .1 miles West of mile marker 72. Turn North on caliche road. Road turns immediately West. Go .4 miles & road turns North. Go .8 miles. After crossing cattle guard, turn left. Go .7 miles & turn right at Mitchell Energy sign. Go .3 miles & turn left. Go .8 miles and turn left, 1,000' to location.
2. **Planned Access Roads:**
1,000' of new road will be built to access location.
3. **Location of Existing Wells:**
See EXHIBIT B
4. **Location of Tank Batteries, Electric Lines, Etc:**
In the event a producing well is drilled, a tank battery will be built on the location.
5. **Location and Type of Water Supply:**
Water will be obtained from commercial sources.
6. **Source of Construction Material:**
We will use materials from the primary and auxillary reserve pits to build the location.
7. **Methods of Handling Waste Disposal:**
Waste will be handled in an approved manner. The wellsite will be cleaned of all waste within 30 days of final completion of the well.
8. **Ancillary Facilities:**
N/A
9. **Wellsite Layout:**
 - a. EXHIBIT D shows the relative location and dimensions of the well pad, reserve pits, and major rig components.
 - b. The land is relatively flat with sandy soil and sand dunes.
 - c. The pad and pit area have been staked.
10. **Plan for Restoration of the Surface:**
 - a. After drilling and completion operations are completed, all equipment and other materials not needed for further operations will be removed. Pits will be back filled and the location cleaned of all trash to leave the wellsite as pleasant in appearance as possible.
 - b. If the proposed operation is nonproductive, all restoration and/or vegetation requirements of the BLM will be complied with, and will be accomplished as quickly as possible. All pits will be filled and leveled within 90 days after abandonment.

11. Other Information:

a. The surface and mineral owner is the Federal Government. The grazing Lessee is Kenneth Smith.

b. The topography consists of sandy soil with native grasses. No wildlife was observed, but the usual inhabitants of this region are Jackrabbits, Reptiles, Coyotes, etc.

c. There are no ponds, lakes, or rivers in this area.

d. An Archaeological Survey has been made and a copy has been sent to the Roswell BLM office. There is no evidence of any significant archaeological, historical, or cultural sites in the area. Further, there are no occupied dwellings or windmills in the area.

e. Should any incidental oil be recovered during testing of this well, this oil will be considered waste oil and not sellable due to contamination by drilling and/or completion fluids.

12. Operator's Representative:

The field representative for assuring compliance with the approved surface use and operation plan is:

Bob Williams

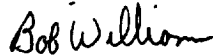
Harvey E. Yates Company

P.O. Box 1933

Roswell, NM

505-623-6601

March 14, 2000



Bob Williams

Drilling Superintendent

United States Department of the Interior

**BUREAU OF LAND MANAGEMENT
Roswell Resource Area
P.O. Drawer 1857
Roswell, New Mexico 88202-1857**

Statement Accepting Responsibilities for Operations

**Operator Name: Harvey E. Yates Company
Street or Box: P.O. Box 1933
City, State: Roswell, New Mexico
Zip Code: 88202**

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below.

Lease No.: NM-103883

Lease Name: Tuna Boat 4 Fed #1

Legal description of land: Sec 4, T20S, R33E, Lea County, New Mexico

Formation(s) (if applicable): Yates

Bond Coverage: (State if individually bonded or another's bond): Blanket Bond

BLM Bond File No.:

Authorized Signature: Bob Wellion

Title: Drilling Superintendent

Date: March 14, 2000

EXHIBIT C BOP STACK

Tuna Boat 4 Fed #1
1650' FSL & 1980' FWL
Sec 4, T20S, R33E
Lea County, NM

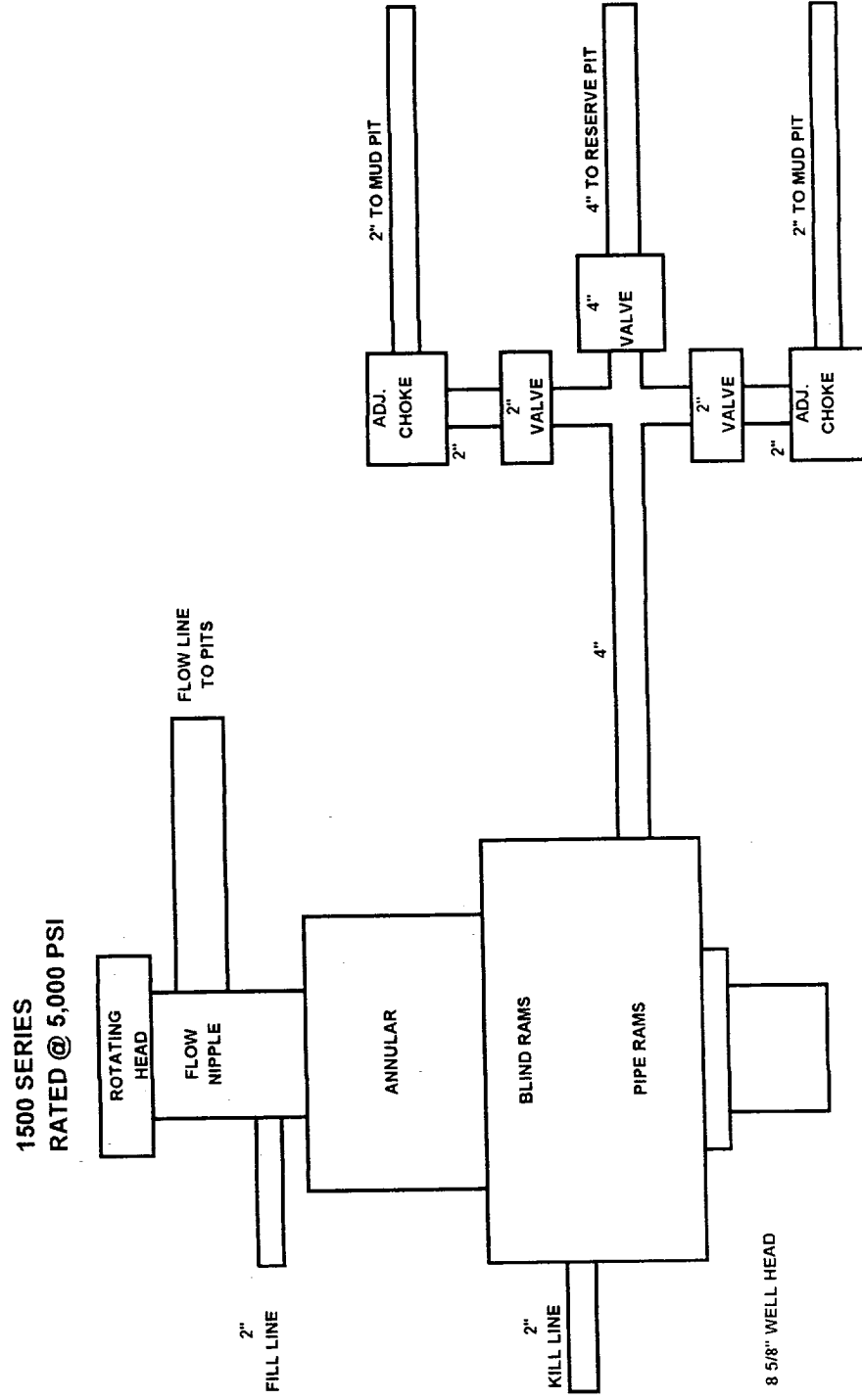
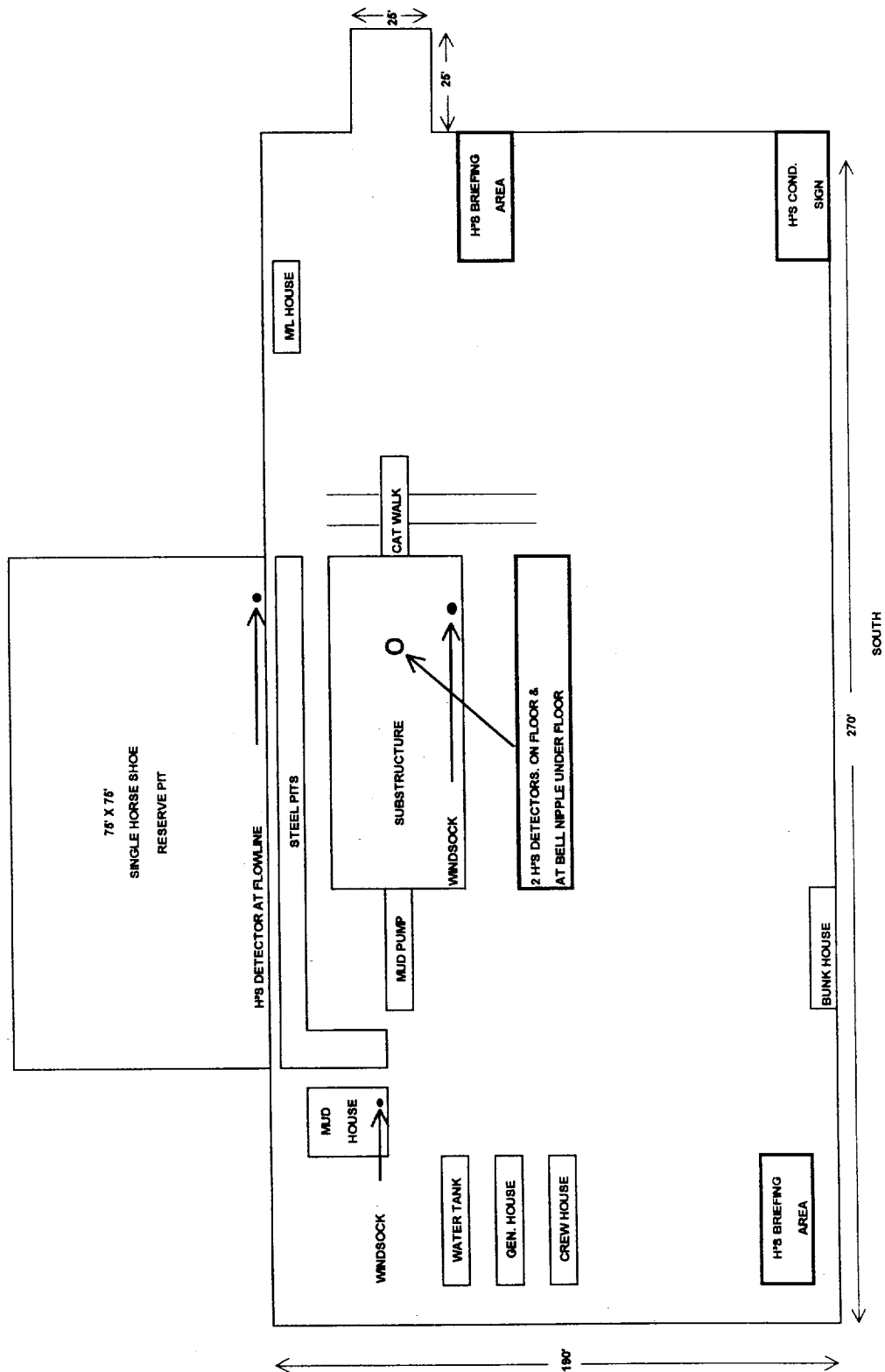


EXHIBIT D

Tuna Boat 4 Fed #1
1650' FSL & 1980' FWL
Sec 4, T20S, R33E
Lea County, NM

NORTH



EAST

WEST

SOUTH

EXHIBIT "E"

Harvey E. Yates Company
Tuna Boat 4 Fed #1
1,650' FSL & 1,980' FWL
Section 4, T20S, R33E
Lea County, New Mexico

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis will show proof of training from a qualified instructor in the following areas before commencing any work on the above named well.

1. The hazards and characteristics of hydrogen sulfide (H_2S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H_2S detectors, alarms, warning signs, briefing areas, and evacuation procedures.
5. The proper technique for rescues.

II H_2S Safety Equipment and Systems

All H_2S safety equipment and systems will be installed 1,000 feet prior to penetrating the first zone containing or reasonably expected to contain H_2S .

1. Well Control Equipment
 - A. Choke manifold with a minimum of two adjustable chokes.
 - B. Blind and pipe rams to accommodate all pipe in use.
 - C. Auxiliary equipment to include annular preventer and rotating head.
2. Protective equipment for essential personnel
 - A. Four 5 minute escape units in top dog house.
 - B. One 30 minute SCBA at each briefing area.
3. H_2S detection and monitoring equipment
 - A. Three channel monitor located on floor, with detectors located on floor, on flow nipple, and on flow line on mud pit.
4. Visual Warning Systems
 - A. Windsock located on floor and mud pits.
 - B. Briefing area signs located on NE & SW corners of pad.
 - C. H_2S Condition sign located at entrance to location.
5. Mud Program

The mud program has been designed to minimize the volume of possible H_2S circulated to surface. Proper weight, safe drilling practices, and the use of H_2S scavengers will minimize hazards when penetrating possible H_2S bearing zones.

6. Metallurgy

All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifolds, and associated lines and valves shall be suitable for an H²S environment.

7. Communications

Drilling rig and company vehicles will be equipped with two way radios or cellular telephones.

8. Well testing

No Drill Stem Tests are planned for this well.

Casing Design

Tuna Boat 4 Fed #1
1650' FSL & 1980' FWL
Sec 4, T20S, R33E
Lea County, NM

