

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. NMNM-100590
b. TYPE OF WELL OR WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR HARVEY E. YATES COMPANY		7. UNIT AGREEMENT NAME PEARSALL 6 FED
3. ADDRESS AND TELEPHONE NO. P.O. BOX 1933, ROSWELL, NEW MEXICO 88202 505-623-6601		8. FARM OR LEASE NAME, WELL NO. 2
4. LOCATION OF WELL (REPORT LOCATION CLEARLY AND IN ACCORDANCE WITH ANY STATE REQUIREMENTS) AT SURFACE 660' FSL & 1,980' FEL AT PROPOSED PROD. ZONE SAME 0		9. API WELL NO. 30-025-35588
		10. FIELD AND POOL, OR WILDCAT YOUNG BONE SPRINGS NORTH
		11. SEC., T., R., M., OR BLK AND SURVEY OR AREA SEC 6, T18S, R32E
		12. COUNTY OR PARISH LEA
		13. STATE NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 20 MILES SW OF MALJAMAR, NM		
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 660'	16. NO. OF ACRES IN LEASE 480	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. N/A	19. PROPOSED DEPTH 9,600'	20. ROTARY OR CABLE TOOLS ROTARY
21. ELEVATIONS (Show whether OF, RT, GR, etc.) 3,809'		APPROX. DATE WORK WILL START 06/01/01

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WT PER FT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" H-40	48#	400' (See Exhibit G)	425 SX "C" W/2% CACL & 1/4# CELLOSEAL
12 1/4"	8 5/8" J-55	32#	3,100'	350 SX "C" W/2% CACL & 1/4# CELLOSEAL, 1,000 SX FILLER
7 7/8"	5 1/2" J-55	17#	9,600'	1000 SX LEAD & 400 SX TAIL
(SEE EXHIBIT "E")				

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

\*\* LEAD: 1000 SX "H" POZ w/ 2% GEL & 5# SALT PER SACK

TAIL: 400 SX "H" w/ 3% KCL, .5% FLUID LOSS, .3% DISPERSANT, 1% BONDING AGENT, .3% RETARDER, & .2% SODIUM METASILICATE PER SACK

PROPOSED MUD PROGRAM	
0-400'	FRESH WATER, PAPER, & EZ MUD. MW-9.0 VIS-31
400'-3,100'	BRINE WATER AFTER TOP OF RUSTLER, PAPER, & EZ MUD. MW-10.0, VIS-31
3,100'-9,600'	FRESH WATER, PAPER, EZ MUD, & AMMONIA NITRATE. 30-60,000 CHLORIDES MW-9.0 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 <u>Bob Williams</u>	Bob Williams	TITLE <u>Drilling Superintendent</u>	DATE <u>3/27/01</u>
--------------------------------	--------------	--------------------------------------	---------------------

(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 _____	TITLE <u>Acting FIELD MANAGER</u>	DATE <u>JUN 05 2001</u>
-------------------	-----------------------------------	-------------------------

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

APPROVAL FOR 1 YEAR

8  
mP

**Application  
Harvey E. Yates Company  
Pearsall 6 Fed #2  
Section 6, T18S, R32E  
Eddy 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 940', Yates 2,310', Bowers 3,360', Queen 3,630', Penrose 3,890', Grayburg 4,210', Loco Hills 4,335', San Andres 4,710', Delaware 5,000', Bone Springs 6,050', BSPG 1<sup>st</sup> Sand 7,850', Top "B" Sand 8,620', Top "C" Sand 8,790', Base "C" Sand 8,930', "C" Zone 9,050, 3<sup>rd</sup> Sand 9,200', Wolfcamp 9,480, PTD 9,600'.
3. **Estimated Depths at which Water, Oil, or Gas Formations are expected:**  
Oil: Bone Spring 1<sup>st</sup> sand @ 7,850  
Gas: Bone Spring 1<sup>st</sup> sand @ 7,850
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:**  
One DST is planned for the "B-C" Zone Carbonates. The planned logs are GR, CNL-ZDEN, DACS, DLL-MLL logs.
9. **Abnormal Conditions, Pressures, Temperature, or Potential Hazards:**  
No abnormal conditions are anticipated in this well bore.  
BHST 160 deg F  
BHP 2000 psi
10. **Anticipated Starting Date & Duration of Operation:**  
Spud Date: Approximately June 1, 2001. Duration of this project will be approximately 40 days from start of Construction of drilling pad until finish of completion operations

**Surface Use Plan**  
Harvey E. Yates Company  
Pearsall 6 Fed #2  
Section 6, T18S, R31E  
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 20 miles SouthWest of Maljamar, NM. Leave Artesia on U.S. 82 & travel 31 miles east to the junction of NM 529. Turn Southeast and go 7 miles to NM 126. Turn South & go 2.6 miles. Turn right & go .6 miles. Turn right & go .4 miles. Turn left & go .5 miles. Turn right & go .3 miles to location.

**2. Planned Access Roads:**

1,020' of new road will be built to access this 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 Williams & Son Cattle Company, and they have been contacted regarding operations.
- 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:**

I 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, true and correct; that the work associated with operations proposed herein will be performed by Harvey E. Yates Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Bob Williams Drilling Superintendent  
Harvey E. Yates Company  
P.O. Box 1933  
Roswell, NM  
505-623-6601

March 27, 2001

*Bob Williams*

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.: NMNM-100590**

**Lease Name: Pearsall 6 Fed #2**

**Legal description of land: Sec 6, T18S, R32E, Lea County, New Mexico**

**Formation(s) (if applicable): Bone Springs**

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

**BLM Bond File No.:**

**Authorized Signature: Bob Williams**

**Title: Drilling Superintendent**

**Date: 3-27-01**

## State of New Mexico

DISTRICT I

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

Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT II

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

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number <b>30-025-35588</b>	Pool Code 65350	Pool Name Young Bone Springs North
Property Code <b>28097</b>	Property Name <b>PEARSALL 6 FEDERAL</b>	Well Number 2
OGRID No. 10179	Operator Name <b>HARVEY E. YATES COMPANY</b>	Elevation 3809'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	6	18-S	32-E		660	SOUTH	1980	EAST	LEA

## Bottom Hole Location If Different From Surface

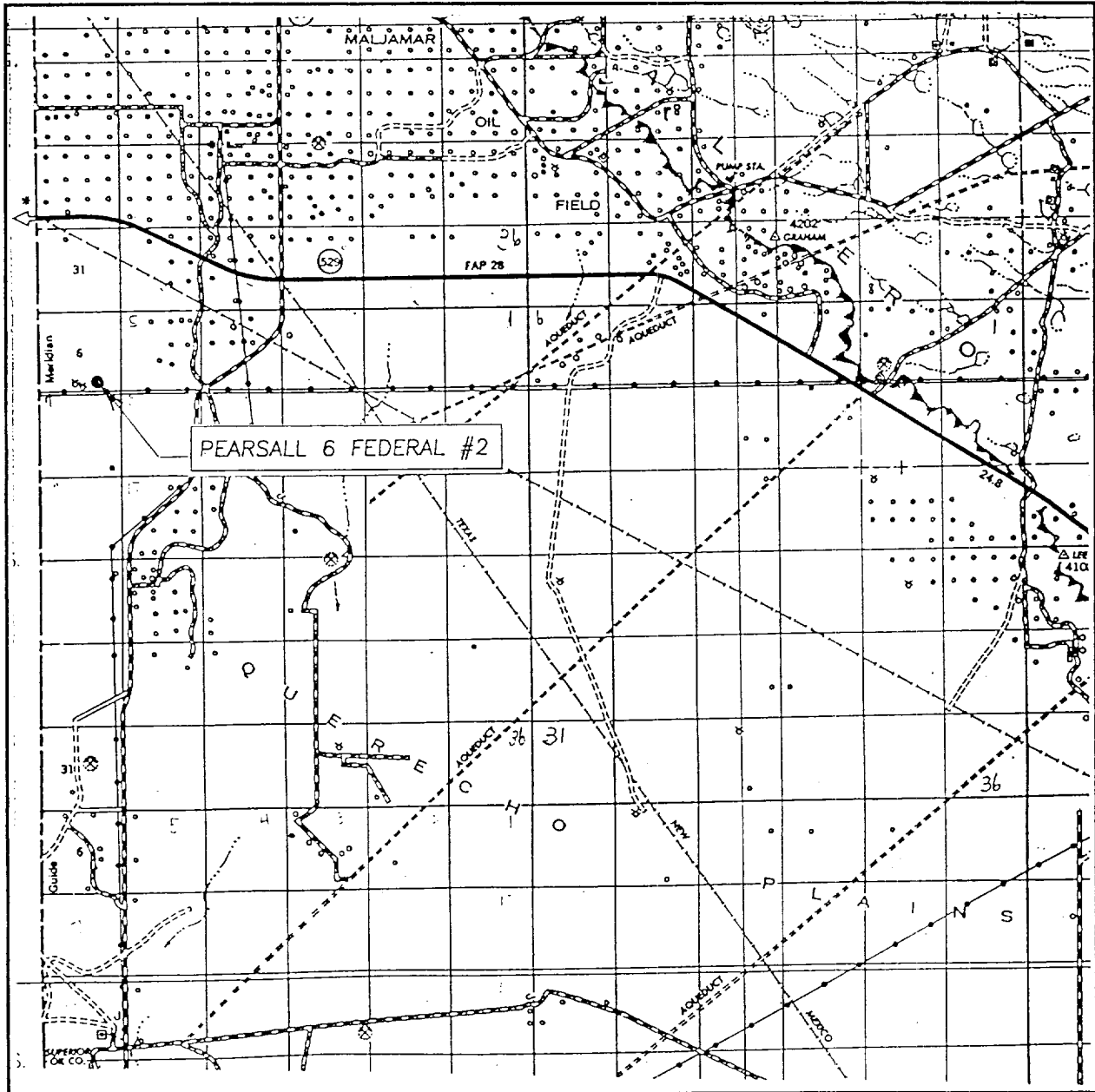
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres <b>40</b>	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  40.94 AC	LOT 3  40.02 AC	LOT 2  40.04 AC	LOT 1  40.05 AC	<b>OPERATOR CERTIFICATION</b>  <i>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i>  <u>Bob Williams</u> Signature  <u>Bob Williams</u> Printed Name  <u>Drilling Superintendent</u> Title  <u>March 27, 2001</u> Date
LOT 5  40.95 AC				
LOT 6  40.97 AC				
LOT 7  40.99 AC		NMNM-100590 3808.2' 3813.5'  3805.0' 3807.6' 660'		<b>SURVEYOR CERTIFICATION</b>  <i>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.</i>  MARCH 19, 2001  Date Surveyed Signature & Seal of Professional Surveyor <u>Ronald J. Eidson 03/22/01</u> 01-11-0361 Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641

# VICINITY MAP



SEC. 6 TWP. 18-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 660' FSL & 1980' FEL

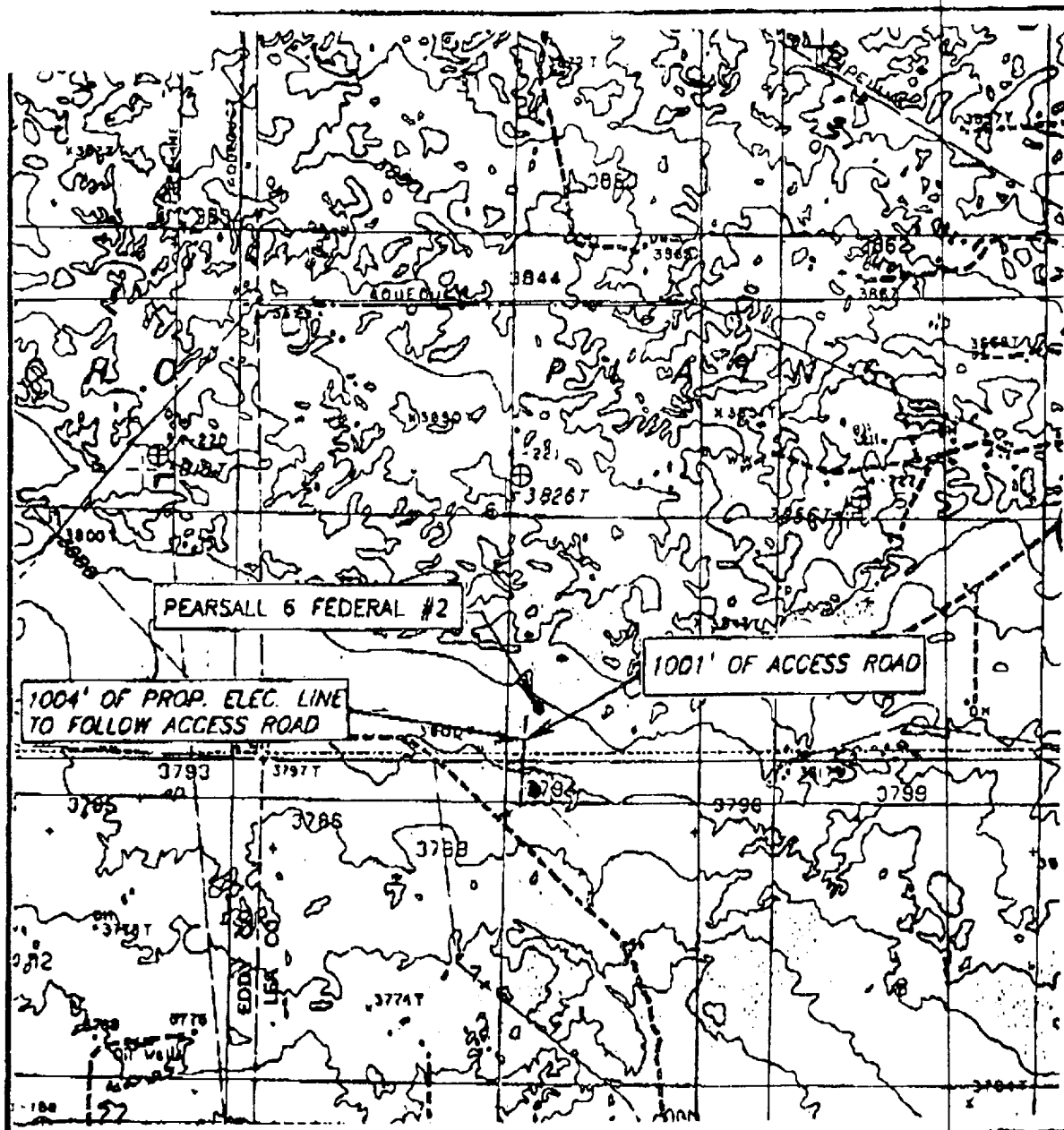
ELEVATION 3809'

OPERATOR HARVEY E. YATES COMPANY

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

Corrected  
placement of  
access road

# ALION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'  
MALJAMAR, N.M.

SEC. 6 TWP. 18-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 680' FSL & 1980' FEL

ELEVATION 3809'

OPERATOR HARVEY E. YATES COMPANY

LEASE PEARSALL 6 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP  
MALJAMAR, N.M.

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

Revised 4.23.01  
01.11.0361



FROM

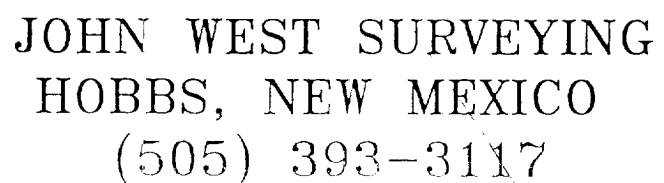


EXHIBIT "C" BOP STACK

Pearsall 6 Fed #2  
660' FSL & 1,980' FEL  
Sec 6, T18S, R32E  
Lea County, NM

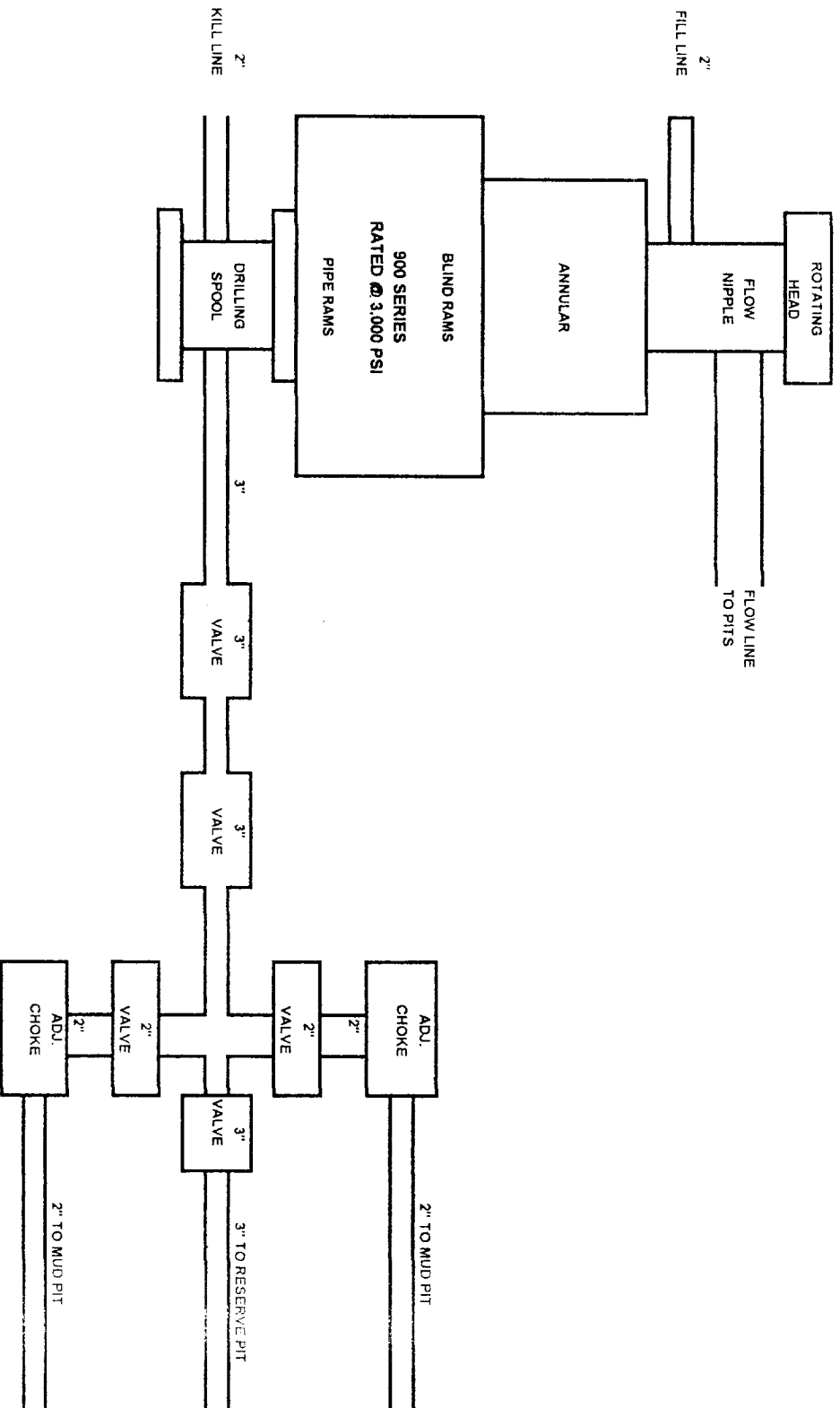
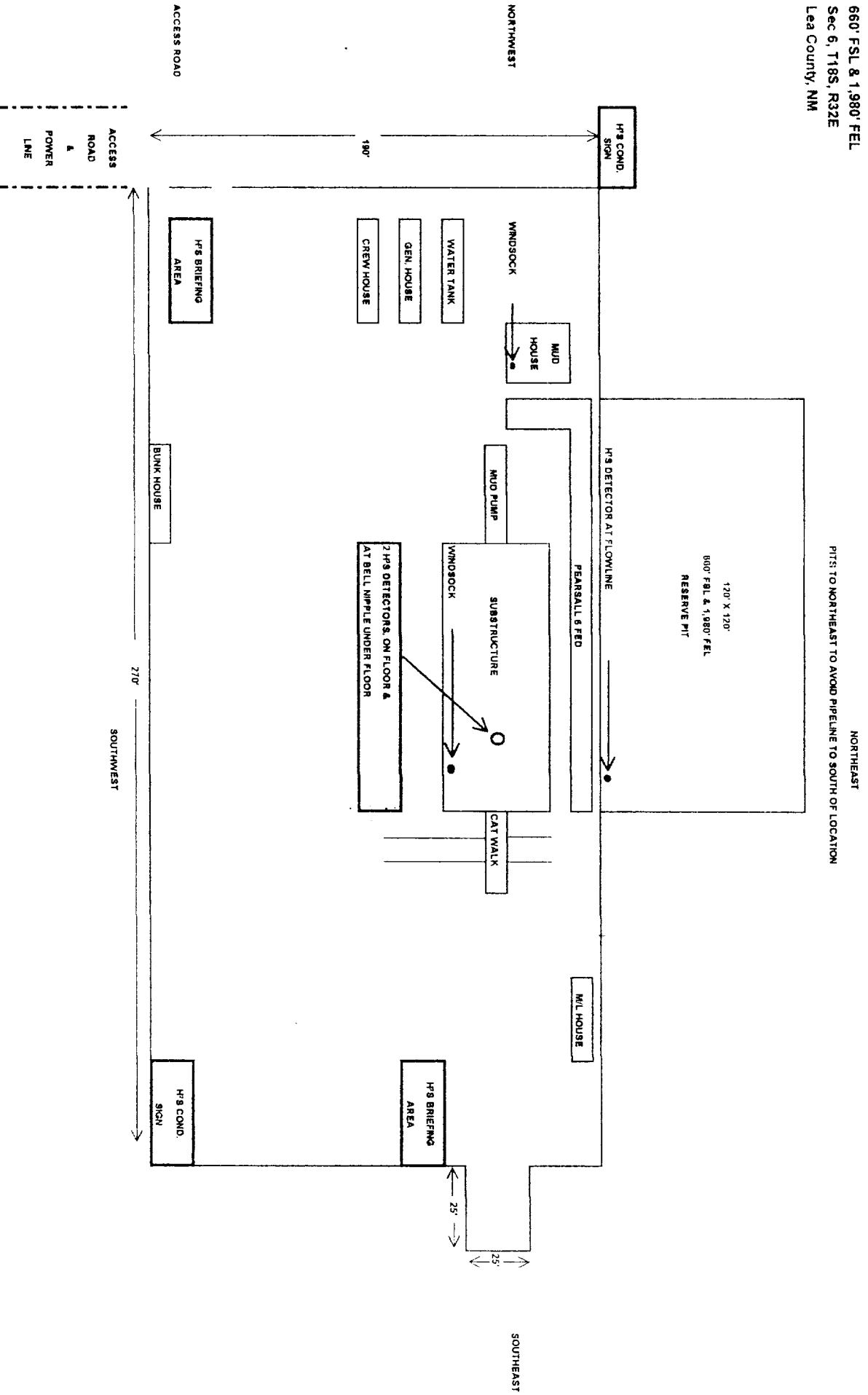
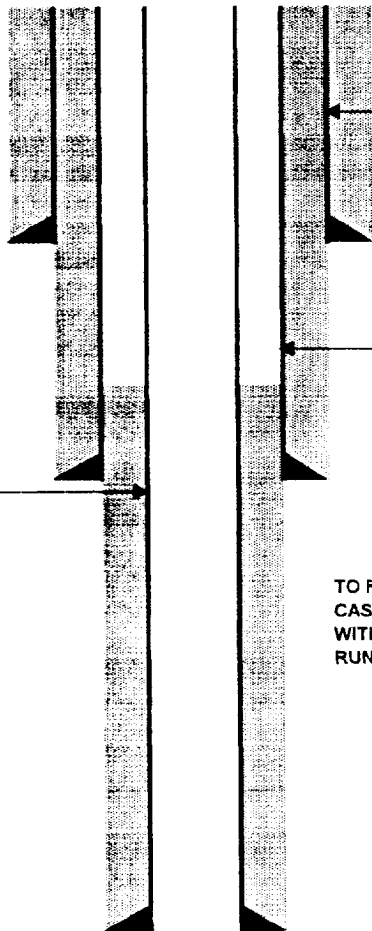


EXHIBIT "D" LOCATION DIAGRAM

Pearsall 6 Fed #2  
660' FSL & 1,980' FEL  
Sec 6, T18S, R32E  
Lea County, NM



## Casing Design



From surface to 400'  
400' 13 3/8", 48#/Ft, ST&C, H-40 Casing.  
Cement circulated to surface

From surface to 3,100'  
3,100' 8 5/8", 32#/Ft, ST&C, J-55 Casing  
Cement circulated to surface

TO REDUCE RISK OF COLLAPSE OF 5 1/2"  
CASING, WE WILL STOP AND FILL CASING  
WITH DRILLING MUD EVERY 50 JOINTS WHILE  
RUNNING CASING.

Y:

zones and cement  
surface casing should  
be related to the

formation or other  
causing an  
surface. In the case  
of the production

and that operators  
will filter cake across

drilling depth. If surface  
drilling mud may be  
fresh water may be

and gels may be used

in order to control

when the Rustler  
pH or pH control

referred to the Roswell

ABOVE DATE DOES NOT  
INDICATE WHEN  
CONFIDENTIAL LOGS  
WILL BE RELEASED

ELF

11/2/21

