

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## 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

Apache Corporation, 2000 Post Oak, Suite 100, Houston, TX 77056

## 3. ADDRESS AND TELEPHONE NO.

c/o J. O. Easley, Inc., P. O. Box 2691, Roswell, NM 88211-0245 (505) 625-8807

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

At Surface 1208' FNL &amp; 1745' FWL, Unit C UNORTHODOX LOCATION

At proposed prod. Zone 1208' FNL &amp; 1745' FWL, Unit C

SUBJECT TO  
LIKE APPROVAL  
BY STATE

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

±4 miles North of Eunice, New Mexico

15. DISTANCE FROM PROPOSED \*  
LOCATION TO NEARESTPROPERTY OR LEASE LINE, FT. 1208'  
(Also to nearest drlg. unit line, if any)

## 16. NO. OF ACRES IN LEASE

708.67

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40.00

## 18. DISTANCE FROM PROPOSED LOCATION \*

TO NEAREST WELL, DRILLING, COMPLETED  
OR APPLIED FOR, ON THIS LEASE, FT. 909.2'

## 19. PROPOSED DEPTH

7,000'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

3454'

## 22. APPROX. DATE WORK WILL START \*

ASAP

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	WITNESS 1365'	480 sx PBCZ-Circulate to surf
7 7/8"	5 1/2"	17#	7000'	870 sxs Hal. Interfill "C"
				+455 sxs 50/50 Pozmix

CAPITAN CONTROLLED WATER BASIN

Circulate to surface

Anticipated Duration of Program: Drilling - Sixteen (16) days  
Completion - Twenty (20) days

See attached for complete Drilling Program

## EXHIBITS

Exhibit "A": Drilling Program

Exhibit "D": Land Survey Plat

Exhibit "G": Rig Layout

Exhibit "B": H<sub>2</sub>S Plan

Exhibit "E": Vicinity Plat

Exhibit "H": BOP Layout

Exhibit "C": Surface Use Plan

Exhibit "F": Existing Well Plat

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.

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SIGNED

Bonita L. L. Jones, RLP, Consulting Landman for J. O. Easley, Inc.

TITLE Permit Agent for Apache Corporation

DATE 7-10-99

(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.

APPROVED BY S/LARRY D. BRAY

Assistant Field Office Manager.  
Lands and Minerals

DATE 8-30-99

Title 18 U.S.C. Section 1001, makes it a crime for any fraudulent statements or representations as to any ma

OPER. GRID NO. 873

PROPERTY NO. 22503

PLAT NO. 22900

EST. DATE 9-13-99

API NO 30-025-34661

APPROVED FOR 1 YEAR  
Department or agency of the United States any false, fictitious or

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EXHIBIT "A"  
NEDU #415

DRILLING PROGRAM

I. The geological surface formation is recent Permian with quaternary alluvium and other surficial deposits.

II. Estimated Tops of Geological Markers:

<u>FORMATION</u>	<u>DEPTH</u>	<u>SUBSEA</u>
Quaternary alluvials	Surface	
Rustler	1365'	2111'
Yates	2775'	701'
Seven Rivers	3025'	451'
San Andres	4200'	-724'
Glorieta	5468'	-1992'
Paddock	5550'	-2074'
Blaine	5600'	-2124'
Tubb	6130'	-2654'
Drinkard	6470'	-2994'
TD	7000'	-3524'

III. Estimated depths at which water, oil, gas, or other mineral-bearing formations are expected to be encountered:

<u>SUBSTANCE</u>	<u>DEPTH</u>
Oil	Blaine at 5600'

Tubb at 6130'

Drinkard at 6470'

Gas	None anticipated
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Water	None anticipated
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All fresh water and prospectively valuable minerals (as described by BLM) encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows within zones of correlative rights will be tested to determine commercial potential.

IV. A. Proposed Casing Program:

<u>HOLE SIZE</u>	<u>CASING SIZE</u>	<u>GRADE</u>	<u>WEIGHT PER FOOT</u>	<u>DEPTH</u>
12 ¼"	8 5/8"	K-55 STC	24#	1365'
7 7/8"	5 ½"	K-55 LTC	17#	7000'



B. Proposed Cement Program:  
See pages 3 through 9

V. Proposed Mud Program:  
See pages 3 through 9

VI. Proposed Control Equipment:  
Will install on the 8 5/8" surface casing a 10" Series 900 Type "E" Shaffer Double Hydraulic BOP and will test before drilling in the Queen formation. BOP working pressure: 3000 psi. See Exhibit "H" for BOP layout.

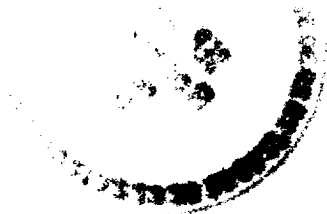
VII. Auxiliary Equipment:  
Blowout preventor, gas detector, kelly cock, pit level monitor, flow sensors, and stabbing valve.

VIII A. Testing Program:  
Drill Stem Tests: None planned

B. Logging Program:  
GR-DLL-MSFL-Cal TD-2300'  
GR-CNL-CDL-Cal TD - Surface

C. Coring Program:  
None planned

IX. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, however, the proposed mud program will be modified to increase the mud-weight. The estimated maximum bottom hole pressure is 1980 psi.





Operator Name: Apache Corporation  
Well Name: NEDU Package  
Job Description: 8 5/8" Surface Casing  
Date: March 11, 1999



Proposal No: 128850946F

### JOB AT A GLANCE

Depth (TVD)	1,365 ft
Depth (MD)	1,365 ft
Hole Size	11 in
Casing Size/Weight :	8 5/8 in, 24 lbs/ft
Pump Via	Casing 8 5/8" O.D. (8.097" I.D) 24 #
Total Mix Water Required	4,064 gals
Lead Slurry	
Class C + 6% Gel	275 sacks
Density	12.8 ppg
Yield	2.06 cf/sack
Tail Slurry	
Class C + additives	105 sacks
Density	13.5 ppg
Yield	1.69 cf/sack
Displacement	
Fresh Water	84 bbls
Density	8.3 ppg

13 14 15 16 17 18 19 20 21 22 23 24



Operator Name: Apache Corporation  
 Well Name: NEDU Package  
 Job Description: 8 5/8" Surface Casing  
 Date: March 11, 1999



Proposal No: 128850946F

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
15.376 CASING	40	40
11.000 HOLE	1,365	1,365

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
8.625	8.097	24	1,365	1,365

Float Collar set @ 1,325 ft  
 Mud Density 8.40 ppg  
 Est. Static Temp. 88 ° F  
 Est. Circ. Temp. 83 ° F

### VOLUME CALCULATIONS

40 ft	x	0.8837 cf/ft	with	0 % excess	=	35.3 cf
685 ft	x	0.2542 cf/ft	with	188 % excess	=	500.9 cf
640 ft	x	0.2542 cf/ft	with	0 % excess	=	162.7 cf
40 ft	x	0.3576 cf/ft	with	0 % excess	=	14.3 cf (inside pipe)
<b>TOTAL SLURRY VOLUME</b>					<b>=</b>	<b>713.2 cf</b>
					<b>=</b>	<b>127 bbls</b>

Operator Name: Apache Corporation  
 Well Name: NEDU Package  
 Job Description: 8 5/8" Surface Casing  
 Date: March 11, 1999



Proposal No: 128850946F

## FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	536	/ 2.06	= 275 sacks Class C Cement + 0.005 lbs/sack Static Free + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 6% bwoc Bentonite + 101% Fresh Water
Tail Slurry	177	/ 1.69	= 105 sacks Class C Cement + 0.005 lbs/sack Static Free + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 78.8% Fresh Water
Displacement			84.4 bbls Fresh Water @ 8.34 ppg

## CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	12.80	13.50
Slurry Yield (cf/sack)	2.06	1.69
Amount of Mix Water (gps)	11.39	8.88
Amount of Mix Fluid (gps)	11.39	8.88
Estimated Pumping Time - 70 BC (HH:MM)	3:30	3:00

## COMPRESSIVE STRENGTH

12 hrs @ 83 ° F (psi)  
 24 hrs @ 83 ° F (psi)  
 72 hrs @ 83 ° F (psi)

Operator Name: Apache Corporation  
Well Name: NEDU Package  
Job Description: 5 1/2" Production Casing  
Date: March 11, 1999



Proposal No: 128850946F

### JOB AT A GLANCE

Depth (TVD)	7,000 ft
Depth (MD)	7,000 ft
Hole Size	7.875 in
Casing Size/Weight :	5 1/2 in, 17 lbs/ft
Pump Via	Casing 5 1/2" O.D. (4.892" I.D) 17 #
Total Mix Water Required	15,556 gals
Lead Slurry	
35:65:8 (Poz:C:Gel) + Salt	870 sacks
Density	11.8 ppg
Yield	2.54 cf/sack
Tail Slurry	
50:50:2 Class C	455 sacks
Density	14.2 ppg
Yield	1.30 cf/sack
Displacement	
Fresh Water	156 bbls
Density	8.3 ppg

Operator Name: Apache Corporation  
 Well Name: NEDU Package  
 Job Description: 5 1/2" Production Casing  
 Date: March 11, 1999



Proposal No: 128850946F

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
8.097 CASING	1,365	1,365
7.875 HOLE	7,000	7,000

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
5.500	4.892	17	7,000	7,000

Float Collar set @ 6,720 ft  
 Mud Density 10.00 ppg  
 Est. Static Temp. 121 ° F  
 Est. Circ. Temp. 114 ° F

### VOLUME CALCULATIONS

1,365 ft	x	0.1926 cf/ft	with	0 % excess	=	262.9 cf
3,635 ft	x	0.1733 cf/ft	with	209 % excess	=	1943.2 cf
1,800 ft	x	0.1733 cf/ft	with	86 % excess	=	579.0 cf
80 ft	x	0.1305 cf/ft	with	0 % excess	=	10.4 cf (inside pipe)
<b>TOTAL SLURRY VOLUME</b>					<b>=</b>	<b>2795.5 cf</b>
					<b>=</b>	<b>498 bbls</b>

Operator Name: Apache Corporation  
 Well Name: NEDU Package  
 Job Description: 5 1/2" Production Casing  
 Date: March 11, 1999



Proposal No: 128850946F

## FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	2206	/ 2.54	= 870 sacks (35:65) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 8% bwoc Bentonite + 141.8% Fresh Water
Tail Slurry	589	/ 1.3	= 455 sacks (50:50) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 2% bwoc Bentonite + 58.5% Fresh Water
Displacement			156.2 bbls Fresh Water @ 8.34 ppg

## CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	11.80	14.20
Slurry Yield (cf/sack)	2.54	1.30
Amount of Mix Water (gps)	14.80	5.90
Amount of Mix Fluid (gps)	14.80	5.90
Estimated Pumping Time - 70 BC (HH:MM)	3:30	3:30
Free Water (mls) @ 114 ° F @ 45 ° angle	1.0	0.8
Fluid Loss (cc/30min) at 1000 psi and 114 ° F	750.0	850.0
COMPRESSIVE STRENGTH		
12 hrs @ 114 ° F (psi)	200	800
24 hrs @ 114 ° F (psi)	350	1500
72 hrs @ 114 ° F (psi)	500	2000

Operator Name: Apache Corporation  
Well Name: NEDU Package  
Date: March 11, 1999



Proposal No: 128850946F

## PRODUCT DESCRIPTIONS

### **Bentonite**

Commonly called gel, it is a clay material used as a cement extender and to control excessive free water.

### **Calcium Chloride**

A powdered, flaked or pelletized material used to decrease thickening time and increase the rate of strength development.

### **Cello Flake**

Graded (3/8 to 3/4 inch) cellophane flakes used as a lost circulation material.

### **Class C Cement**

Intended for use from surface to 6000 ft., and for conditions requiring high early strength and/or sulfate resistance.

### **FP-6L**

A clear liquid that decreases foaming in slurries during mixing.

### **Poz (Fly Ash)**

A synthetic pozzolan, (primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement.

### **Sodium Chloride**

At low concentrations, it is used as an accelerator for cement slurries. At high concentrations, it is used for formation compatibility.

### **Static Free**

An anti-static additive for resin coated proppants used to prevent air entrainment due to agglomerated particles.

EXHIBIT "B"  
NEDU #415

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this 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 systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of  $H_2S$  on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the  $H_2S$  Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable  $H_2S$  zone (within 3 days or 500 feet) and weekly  $H_2S$  and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific  $H_2S$  Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II.  $H_2S$  Safety Equipment and Systems

Note: All  $H_2S$  safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating, the first zone containing, or reasonably expected to contain,  $H_2S$ .

1. Well Control Equipment:
  - A. Flare line with electronic igniter or continuous pilot.
  - B. Choke manifold with a minimum of one remote choke.
  - C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
  - D. Auxiliary equipment to include annular preventer, mud-gas separator, rotating head, and flare gun with flares.
2. Protective equipment for essential personnel:
  - A. Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

3. H<sub>2</sub>S detection and monitoring equipment:
  - A. Two portable H<sub>2</sub>S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H<sub>2</sub>S levels of 20 ppm are reached.
  - B. One portable SO<sub>2</sub> monitor positioned near flare line.
4. Visual warning systems:
  - A. Wind direction indicators.
  - B. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used when appropriate.
5. Mud program:
  - A. The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H<sub>2</sub>S scavengers will minimize hazards when penetrating H<sub>2</sub>S-bearing zones.
  - B. A mud-gas separator and an H<sub>2</sub>S gas buster will be utilized.
6. Metallurgy:
  - A. All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.
  - B. All elastomers used for packing and seals shall be H<sub>2</sub>S trim.
7. Communication:
  - A. Radio communications in company vehicles including cellular telephone and 2-way radio.
  - B. Land Line (telephone) communications at field office.
8. Well testing:
  - A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours, and formation fluids will not be flowed to the surface. All drill stem testing operations conducted in an H<sub>2</sub>S environment will use the closed chamber method of testing.



**EXHIBIT "C"**  
**SURFACE USE AND OPERATIONS PLAN**  
**CULTURAL RESOURCES SURVEY**  
**APPROXIMATE REHABILITATION SCHEDULE**

**LOCALITY: NEDU #415**

**LOCATION: NE¼NW¼ OF SECTION 10, T21S-R37E, N.M.P.M.**  
**LEA COUNTY, NEW MEXICO**

**OPERATOR: APACHE CORPORATION**

**SUBMITTED TO:**

**UNITED STATES DEPARTMENT OF THE INTERIOR**

**BUREAU OF LAND MANAGEMENT**

**ROSWELL DISTRICT OFFICE**

**2909 WEST 2<sup>ND</sup> STREET**

**ROSWELL, NEW MEXICO 88201**

**TELEPHONE (505) 627-0272**



This plan is submitted to provide permitting agencies with information necessary to allow an appraisal of the environmental effects associated with the proposed drilling operations. Within the context of typical drilling operations, this plan provides for protection of surface resources and other environmental components. This plan has been developed in conformity with the United States Geological Survey NTL-6 guidelines, Bureau of Land Management Oil and Gas Order No. 1, and in connection and consultation with the private surface owner of record, if other than the United States of America, as well as the Roswell District Office for the Bureau of Land Management and the United States Department of the Interior personnel.

PART #1:

1) Surface Location:

NE $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 10, Township 21 South, Range 37 East, N.M.P.M.  
Lea County, New Mexico  
1208' FNL & 1745' FWL, Unit C  
See attached Exhibits "D" and "E"

2) Bottom Hole Location:

NE $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 10, Township 21 South, Range 37 East, N.M.P.M.  
Lea County, New Mexico  
1208' FNL & 1745' FWL, Unit C  
See attached Exhibits "D" and "E"

3) Leases Issued: NM-2512

4) Record Lessee:

Conoco, Inc. 25%  
Amoco Production Company 25%  
Atlantic Richfield Company 25%  
Chevron U.S.A. Inc. 25%

5) Acres in Lease:

Section 3: Lots 1, 2, 3, 4, 7, 8, 12, 15, 16,  
N $\frac{1}{2}$ SE $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$   
Section 4: Lot 1  
Section 10: E $\frac{1}{2}$ NW $\frac{1}{4}$ , NW $\frac{1}{4}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$ NE $\frac{1}{4}$

Total Acres: 708.67

6) Acres Dedicated to Well:

There are 40.0000 acres dedicated to this well which takes the NE $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 10, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

## PART #2:

### 1) Existing Roads:

Exhibit "E" comprises 2 maps showing the proposed well site in relation to existing roads and State Highway 18 (Loop). The well is  $\pm 4$  miles North of Eunice, New Mexico. From Eunice, go north approximately 4.25 miles on State Highway Loop 18. Turn east on existing lease road and go approximately 150' to location. Access is highlighted on Exhibit "E-2".

### 2) Planned Access:

A. Length and Width: No new access road will be necessary as the existing lease/access road crosses the well site.

Application for a buried pipeline will be made if it becomes necessary.

B. Construction: The existing roads will be lightly graded and topped with compacted caliche as needed.

C. Turnouts: None required.

D. Culverts: None required.

E. Cuts and Fills: As needed.

F. Gates and Cattleguards: None required.

### 3) Location of Existing Wells:

Exhibit "F" shows existing wells within a 1-mile radius of the proposed well.

### 4) Location of Existing and/or Proposed Facilities:

A. There are production facilities within the area of the Northeast Drinkard Unit.

B. If the oil well proves to be commercial, any necessary production facilities will be installed on the drilling pad, and flow lines will be installed along the proposed and existing roads to the production facilities and storage tanks.

### 5) Location and Type of Water Supply:

Apache Corporation plans to drill the proposed well with fresh and brine water which will be obtained from commercial sources. The water will be transported over proposed and existing access roads.

### 6) Source of Construction Materials:

Caliche for surfacing access roads and the wellsite pad will be obtained from the location itself or from BLM pits in the area.

### 7) Method of Handling Waste Material:

A. Drill cuttings will be disposed of in the reserve pits.

B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.

C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.

D. Water produced during operations will be collected in tanks until hauled to an approved disposal system.

E. Oil produced during operation will be stored in tanks until sold.



- F. Apache Corporation will comply with current laws and regulations pertaining to the disposal of human waste.
  - G. All waste materials will be contained to prevent scattering by the wind and will be removed from the well site within 30 days after drilling and/or completion operations are finished.
- 8) Ancillary Facilities: None planned.
- 9) Well Site Layout:
- A. Exhibit "G" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area have been staked and flagged.
  - B. Mat Size: 125' x 235' including reserve pits as shown on Exhibit "G".
  - C. Cut & Fill: Only minor leveling of the drilling site is anticipated.
  - D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.
- 10) Plans for Restoration of the Surface:
- A. After completion of drilling and/or completion operations, all equipment and other material, not needed for operations, will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
  - B. Any unguarded pits containing fluids will be fenced until they are filled.
  - C. If the proposed well is non-productive, Apache Corporation will comply with all rehabilitation and/or vegetation requirements of the Bureau of Land Management, and such rehabilitation will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.
- 11) Other Information:
- A. Topography: The wellsite and access road are located in the Querecho Plains and are relatively flat.
  - B. Soil: The proposed location, access road and production facilities consist of sandy soil. Slope in the proposed area ranges from zero (0) to five (5) degrees.
  - C. Flora and Fauna: Vegetation is one of a grassland environment and a scrub-grass, scrub disclimax community. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
  - D. Ponds and Streams: There are no ponds, lakes, streams or feeder creeks in the immediate area.
  - E. Residences and Other Structures: There are no occupied residences or other structures on or near the proposed location.
  - F. Land Use: The land is used for grazing cattle.
  - G. Surface Ownership: The surface is owned by Robert McCasland, P. O. Box 206, Eunice, New Mexico 88231, 505-394-2553. A surface damage agreement is being negotiated for this tract.

H. Archaeological, Historical, and Other Cultural Sites:

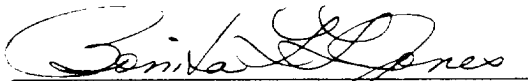
Desert West Archaeological Services will be conducting an archaeological survey of the proposed NEDU #415 well which covers the drilling location, production facilities, and access road, including a corridor along said access road for power and flow lines. Their report will be filed under separate cover.

I. Operator's Representative:

Dennis Bickford  
Apache Corporation  
2000 Post Oak Blvd., Suite 100  
Houston, Texas 77056  
(713) 296-7121  
FAX: (713) 296-7207

## CERTIFICATION

I hereby certify that Apache Corporation has inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in the 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 Apache Corporation 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.



Bonita L. L. Jones, RLP, Consulting Landman  
J. O. Easley, Inc., Agent for Apache Corporation  
P. O. Box 2691  
Roswell, New Mexico 88202-2691  
(505) 625-8807 FAX (505) 625-8827

Date: 7-10-99



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

State of New Mexico  
Energy, Minerals and Natural Resources Department

DISTRICT II  
P.O. Drawer DD, Artesia, NM 86211-0719

DISTRICT III  
1000 Rio Brazos Rd., Artec, 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

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-25-	Pool Code 22900	Pool Name Eunice; Blinbry-Tubb-Drinkard
Property Code 22503	Property Name NEDU	Well Number 415
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3454'

## Surface Location

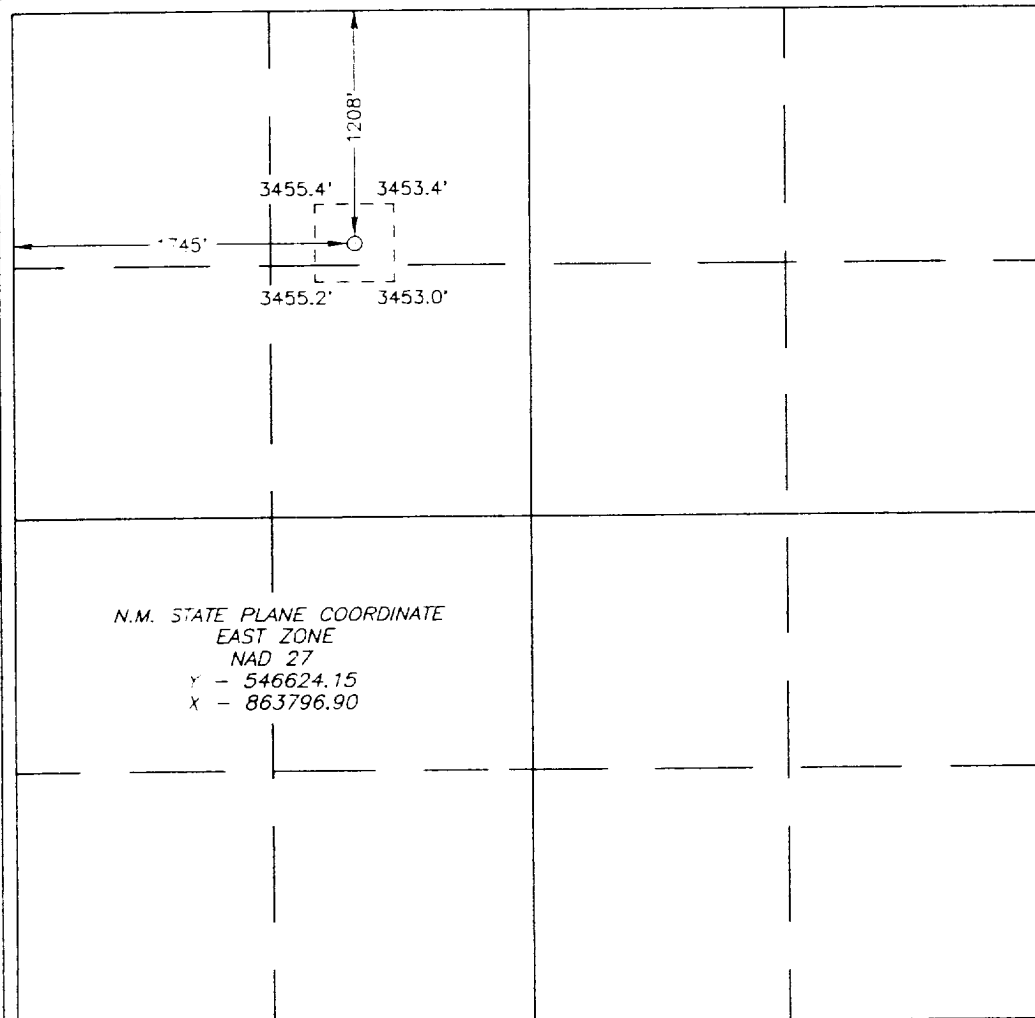
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	10	21 S	37 E		1208	NORTH	1745	WEST	LEA

## 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.
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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.

*Everett Guzts*  
Signature

Everett Guzts  
Printed Name

Eng. Tech.  
Title

6/28/99  
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.

*GARY G. EIDSON*  
Date Surveyed  
Signature & Seal of  
Professional Surveyor  
12641  
KJG

Certificate No. RONALD J. EIDSON 3239  
GAR EIDSON 12641

## 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

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-25-3466/	Pool Code 22900	Pool Name Eunice; Blinbry-Tubb-Drinkard, North
Property Code 22503	Property Name NEDU	Well Number 415
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3454'

## Surface Location

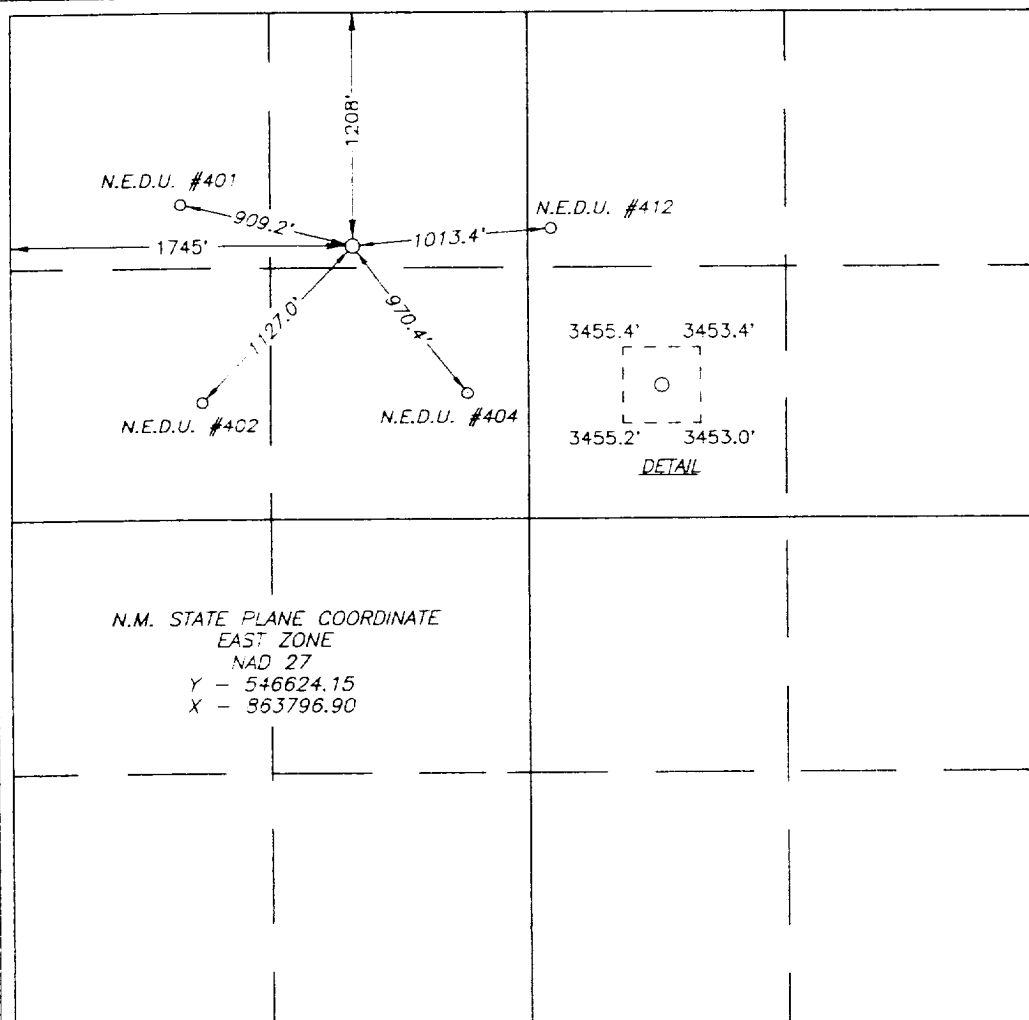
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	10	21 S	37 E		1208	NORTH	1745	WEST	LEA

## 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.
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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.

*Everett Ouzts*  
Signature

Everett Ouzts  
Printed Name

Eng. Tech.  
Title

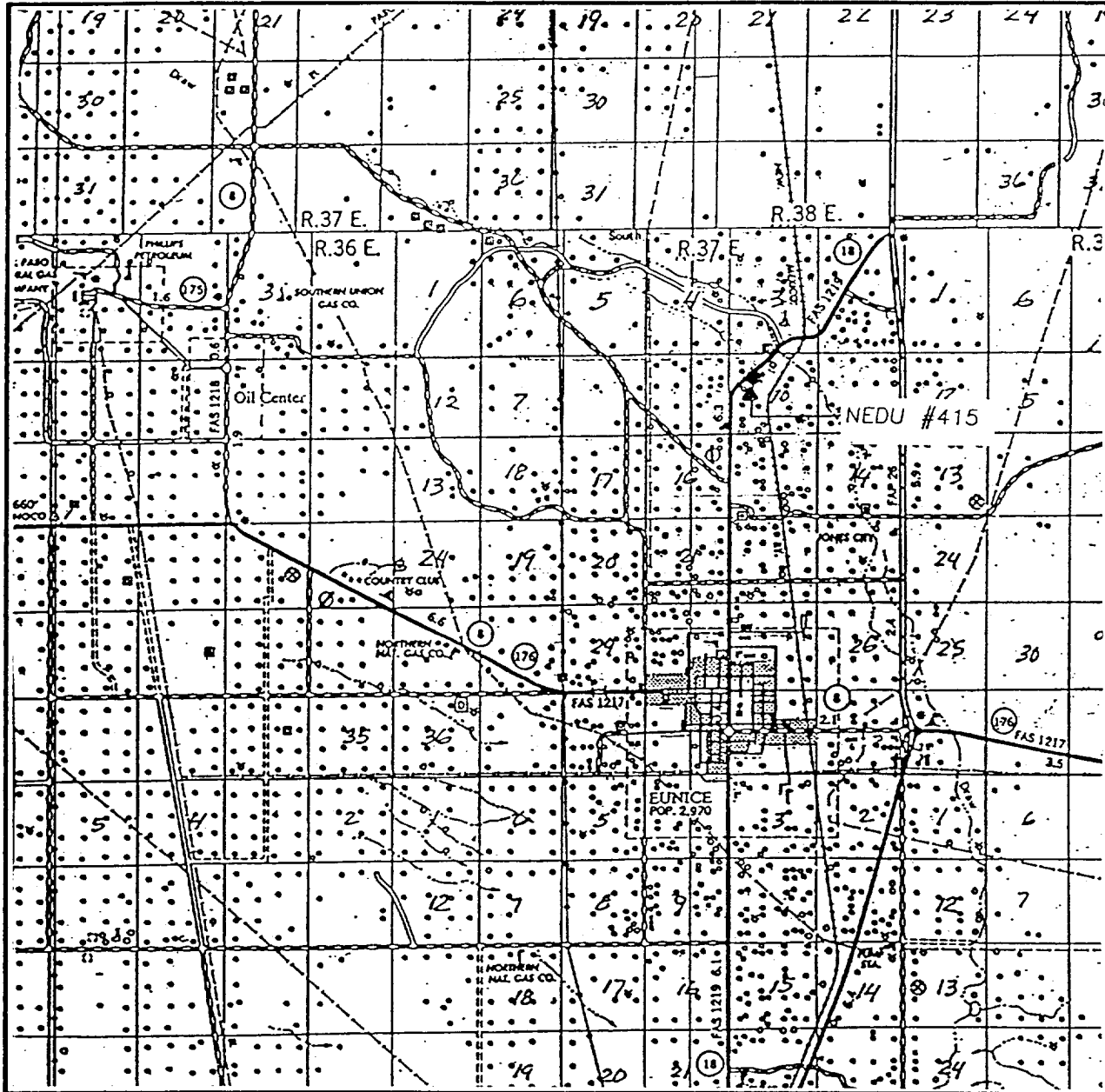
6/28/99  
Date

## 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.

DATE SURVEYED: 6/28/99  
SIGNATURE & SEAL OF  
PROFESSIONAL SURVEYOR  
12641  
6/28/99  
Certificate No. 12641  
RONALD J. EIDSON  
GARY EIDSON

## VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 10 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1208' FNL & 1745' FWL

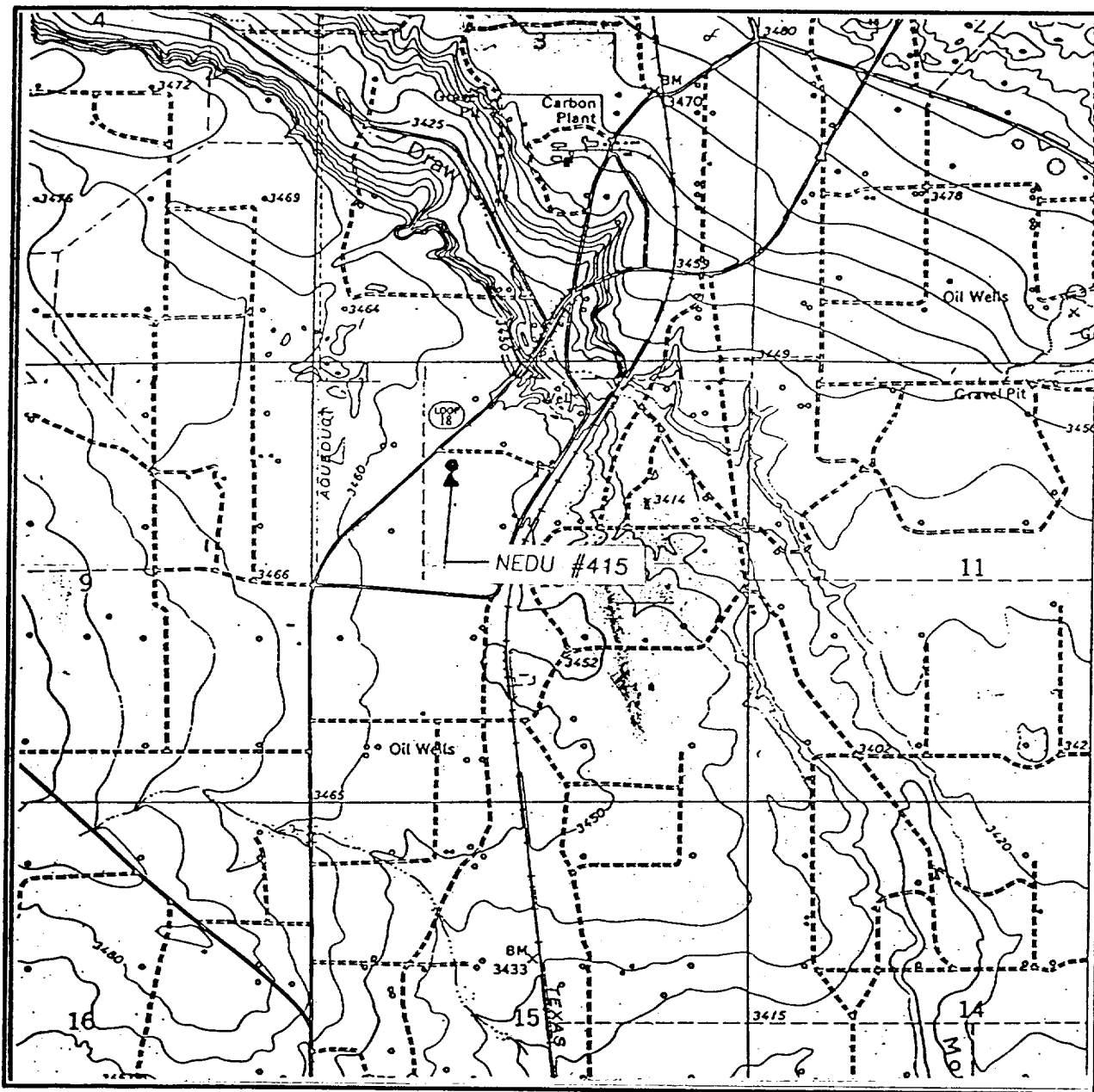
ELEVATION 3442'

OPERATOR APACHE CORPORATION

LEASE N.E.D.U.

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

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
HOBBS SW - 5'  
EUNICE - 10'

SEC. 10 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1208' FNL & 1745' FWL

ELEVATION 3454'

OPERATOR APACHE CORPORATION

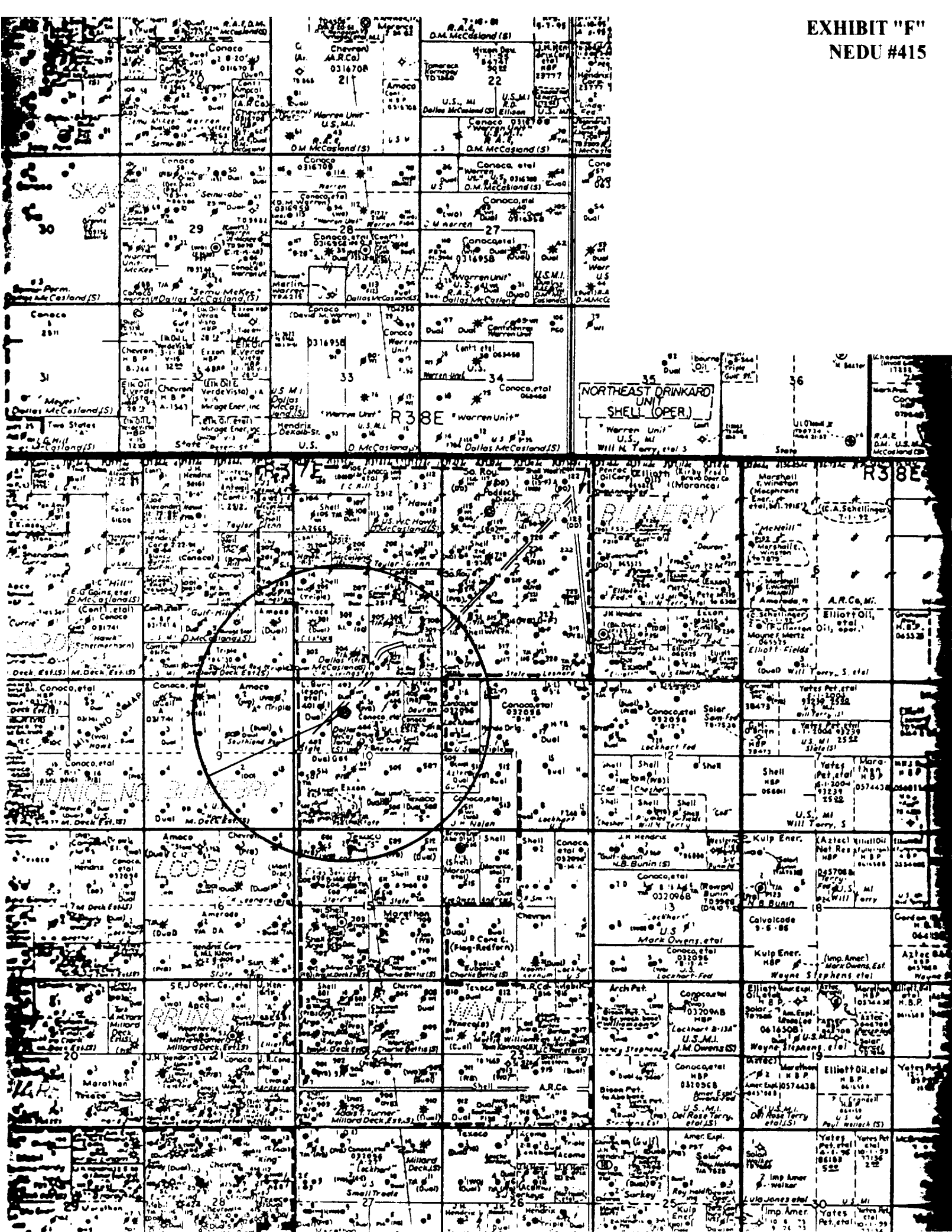
LEASE N.E.D.U.

U.S.G.S. TOPOGRAPHIC MAP

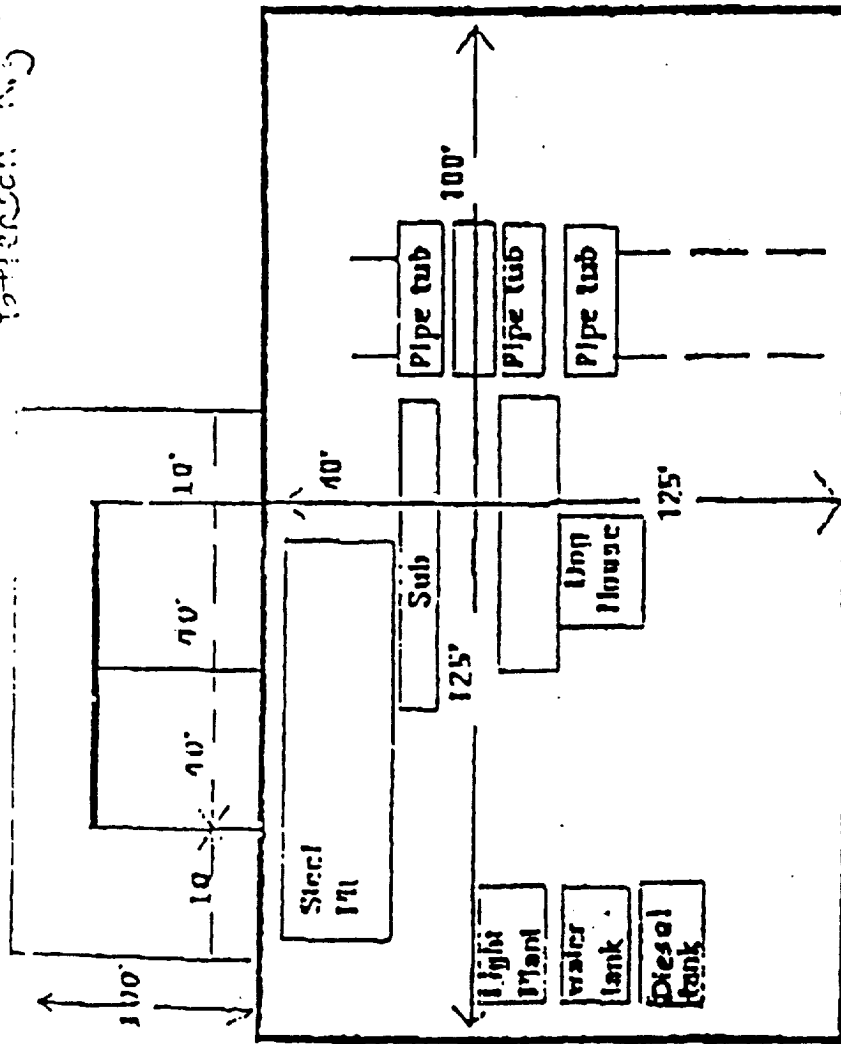
HOBBS SW, EUNICE, N.M.

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

**EXHIBIT "F"**  
**NEDU #415**



Patterson Reg #415

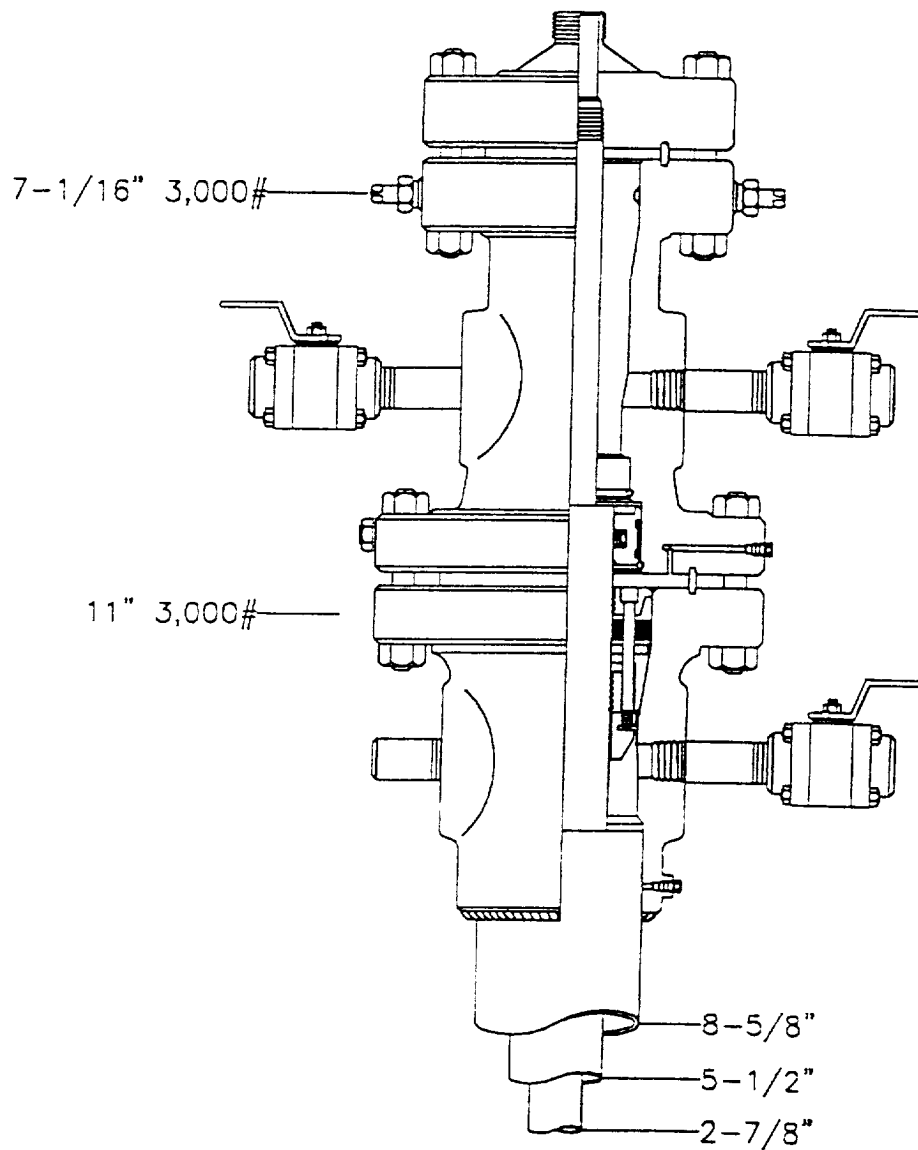


Apache Corporation  
WESTERN REGION

NEDU

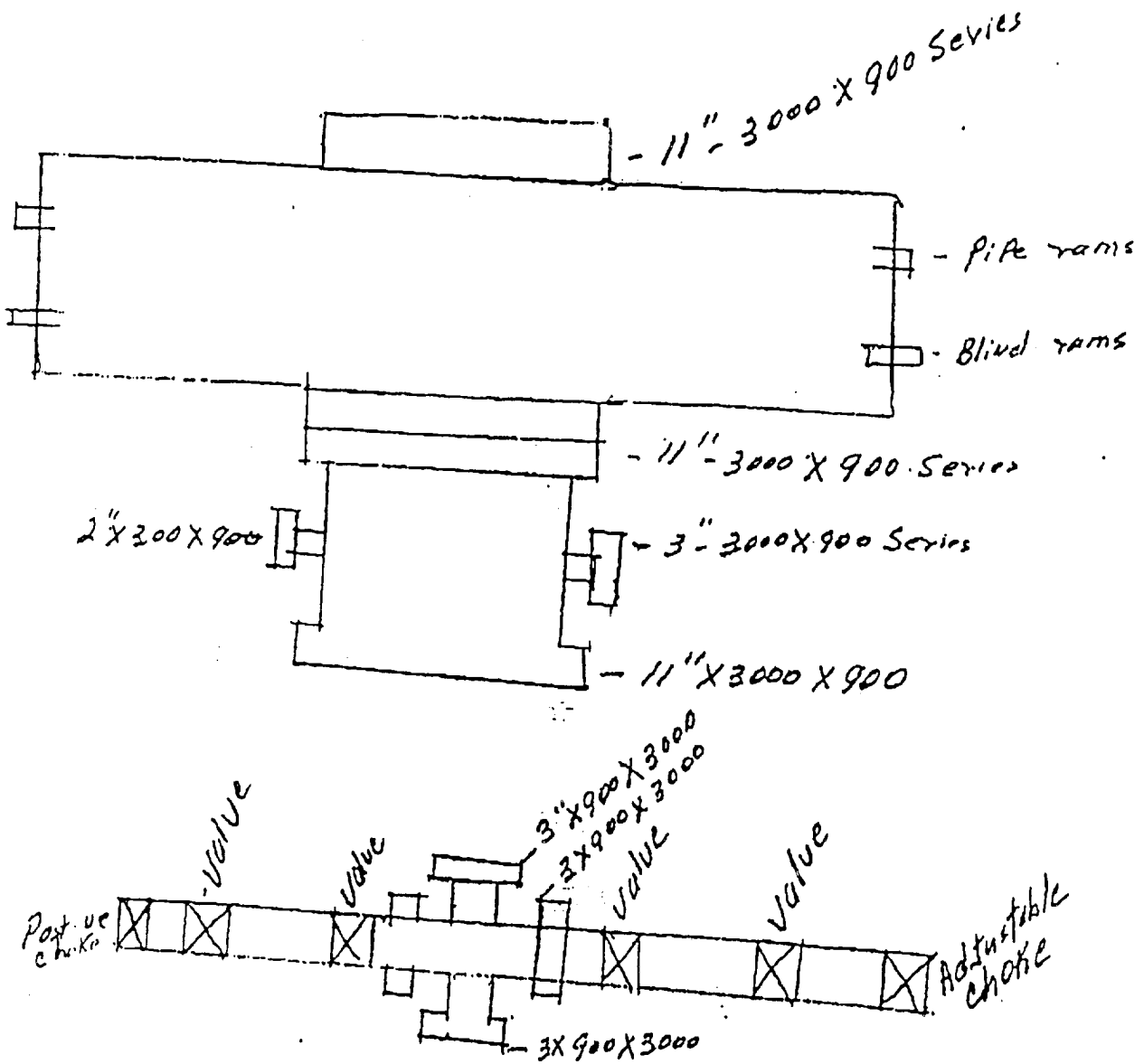
Eunice; Blinberry-Tubb-Drinkard, North  
LEA COUNTY, NEW MEXICO

WELL:	WELL NO. Cement Grout	DATE:	4/22/98
FLUID LOSS/24 HRS:	CHUCKER IN	LAST APPROVAL:	





## PATTERSON DRILLING COMPANY



All flanges &  
 Valves - 2" 3000-900 Series  
 Mud Cams - 3" 3000 X 900 Series