

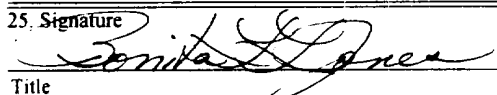
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NM-2512</b>
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator <b>Apache Corporation</b>		7. If Unit or CA Agreement, Name and No. <b>Northeast Drinkard Unit</b>
3a. Address <b>c/o Bonnie Jones, P.O. Box 8309, Roswell, NM 88202</b>	3b. Phone No. (include area code) <b>505-624-9799</b>	8. Lease Name and Well No. <b>#138</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>330' FNL, 2619' FWL, Lot 3</b> <b>SUBJECT TO LIKE APPROVAL BY STATE</b> At proposed prod. zone <b>330' FNL, 2619' FWL, Lot 3</b> <b>C/3</b>		9. API Well No. <b>30-025-35609</b>
14. Distance in miles and direction from nearest town or post office* <b>Approximately 5.5 miles northwest of Eunice, NM</b>		10. Field and Pool, or Exploratory <b>Eunice; Bl-Tu-Dr, North(22900)</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>330'</b>	16. No. of Acres in lease <b>708.67</b>	11. Sec., T., R., M., or Blk. and Survey or Area <b>Sec. 3, T21S-R37E, NMPM</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>712'</b>	19. Proposed Depth <b>6,990'</b>	12. County or Parish <b>Lea</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>3,493'</b>	22. Approximate date work will start* <b>ASAP</b>	13. State <b>NM</b>
23. Estimated duration <b>8 days drilling</b>		17. Spacing Unit dedicated to this well <b>37.75</b>
24. Attachments <b>Captain Controlled Water Basin</b>		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed Typed) <b>Bonita L. L. Jones</b>	Date <b>4-23-01</b>
Title <b>Agent for Apache Corporation</b>		
Approved by (Signature) <b>/S/ JOE G. LARA</b>	Name (Printed Typed) <b>/S/ JOE G. LARA</b>	Date <b>JUN 19 2001</b>
Title <b>Acting FIELD MANAGER</b>		
Office <b>CARLSBAD FIELD OFFICE</b>		

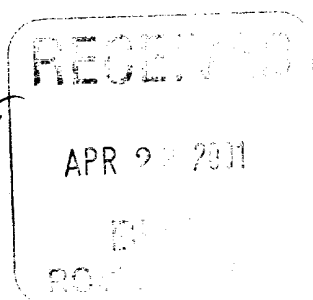
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

**APPROVAL FOR 1 YEAR**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person 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.

\*(Instructions on reverse)



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

OPER. OGRID NO. **873**  
PROPERTY NO. **22503**  
POOL CODE **22900**  
EFF. DATE **6-20-01**  
API NO. **30-025-35609**

**DECLARED WATER BASIN  
CEMENT BEHIND THE 8 5/8"  
CASING MUST BE CIRCULATED**



SEN. JOE G. LARA

SEN. JOE G. LARA

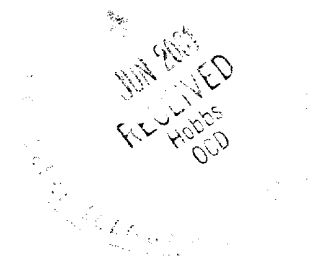


EXHIBIT "A"  
NEDU #138

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>
Quaternary alluvials	Surface
Rustler	1245'
Yates	2580'
San Andres	3710'
Glorietta	5130'
Blinbry	5740'
Tubb	6250'
Drinkard	6600'
TD	6990'

- 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	Blinbry/ Tubb/ Drinkard at 5560'
Gas	None anticipated
Fresh Water	None anticipated

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 1/4"	8 5/8"	J55 STC	24#	1,300'
7 7/8"	5 1/2"	J55 STC	17#	6,710'

- B. Proposed Cement Program: See pages 2 through 9

- V. Proposed Mud Program: See pages 2 through 9

- VI. Proposed Control Equipment:

Will install on the 8 5/8" surface casing an 11" x 3000 PSI shafter, Double hydrolic BOP and will test before drilling out of surface casing. See Exhibit "H" for BOP layout.

- VII. Auxiliary Equipment:

11" x 3000 psi double BOP/blind & pipe ram  
11" x 3000 psi Kelly Lock  
11" x 3000 psi mud cross – H<sub>2</sub>S detector or production hole  
TIW type safety valve 4" choke line from BOP to manifold  
2" adjustable chokes – 1.4 blowdown line

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

- B. Logging Program:

CNL, LDT, GR, Cal, Laterolog, MSFL from TD-4900'  
CNL, GR from 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 2001  
**Job Description:** 8 5/8" Surface Casing  
**Date:** November 1, 2000



**Proposal No:** 128868448A

### **JOB AT A GLANCE**

<b>Depth (TVD)</b>	1,300 ft
<b>Depth (MD)</b>	1,300 ft
<b>Hole Size</b>	12.25 in
<b>Casing Size/Weight :</b>	8 5/8in, 24 lbs/ft
<b>Pump Via</b>	Casing 8 5/8" O.D. (8.097" I.D) 24 #
<b>Total Mix Water Required</b>	5,731 gals
<b>Lead Slurry</b>	
<b>Class C + Additives</b>	400 sacks
<b>Density</b>	12.8 ppg
<b>Yield</b>	2.06 cf/sack
<b>Tail Slurry</b>	
<b>Class C + additives</b>	185 sacks
<b>Density</b>	14.8 ppg
<b>Yield</b>	1.34 cf/sack
<b>Displacement</b>	
<b>Fresh Water</b>	80 bbls
<b>Density</b>	8.3 ppg

Operator Name: Apache Corporation  
 Well Name: Nedu Package 2001  
 Job Description: 8 5/8" Surface Casing  
 Date: November 1, 2000



Proposal No: 128868448A

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
15.376 CASING	40	40
12.250 HOLE	1,300	1,300

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
8.625	8.097	24	1,300	1,300

Float Collar set @ 1,260 ft  
 Mud Density 8.40 ppg  
 Mud Type Water Based  
 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
976 ft	x	0.4127 cf/ft	with	95 % excess	=	786.9 cf
284 ft	x	0.4127 cf/ft	with	100 % excess	=	234.5 cf
40 ft	x	0.3576 cf/ft	with	0 % excess	=	14.3 cf (inside pipe)
<b>TOTAL SLURRY VOLUME</b>					=	1071.0 cf
					=	191 bbls

Operator Name: Apache Corporation  
 Well Name: Nedu Package 2001  
 Job Description: 8 5/8" Surface Casing  
 Date: November 1, 2000



Proposal No: 128868448A

## FLUID SPECIFICATIONS

<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>
Lead Slurry	822	/ 2.06	= 400 sacks Class C Cement + 2% bwow Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 6% bwoc Bentonite + 101.1% Fresh Water
Tail Slurry	249	/ 1.34	= 185 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.005 gps FP-6L + 56.3% Fresh Water
Displacement			80.2 bbls Fresh Water @ 8.34 ppg

## **CEMENT PROPERTIES**

	<b>SLURRY NO. 1</b>	<b>SLURRY NO. 2</b>
Slurry Weight (ppg)	12.80	14.80
Slurry Yield (cf/sack)	2.06	1.34
Amount of Mix Water (gps)	11.39	6.35
Amount of Mix Fluid (gps)	11.39	6.35
Estimated Pumping Time - 70 BC (HH:MM)	3:30	2:20
Free Water (mls) @ 85 ° F @ 45 ° angle	1.0	0.0
Fluid Loss (cc/30min) at 1000 psi and 85 ° F	750.0	850.0
<b>COMPRESSIVE STRENGTH</b>		
12 hrs @ 85 ° F (psi)		1092
24 hrs @ 85 ° F (psi)		1789
72 hrs @ 85 ° F (psi)		3000
12 hrs @ 114 ° F (psi)	200	
24 hrs @ 114 ° F (psi)	350	
72 hrs @ 114 ° F (psi)	500	

Thickening time, compressive strength and fluid loss numbers quoted are approximate. Apache will be furnished lab reports with actual test results for each slurry. Standard lab testing will be performed for each slurry. Field blend testing will be performed on all slurries with fluid loss or special additives to confirm the thickening times, fluid loss and fluid rheologies.

**Operator Name:** Apache Corporation  
**Well Name:** Nedu Package 2001  
**Job Description:** 5 1/2" Production Casing  
**Date:** November 1, 2000



**Proposal No:** 128868448A

## JOB AT A GLANCE

Depth (TVD)	4990 <del>6800</del> ft
Depth (MD)	6990 <del>6800</del> 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	9,165 gals
Spacer	
Mud Clean	20 bbls
Density	8.3 ppg
Lead Slurry	
35:65:8 (Poz:C:Gel) + Salt	477 sacks
Density	11.8 ppg
Yield	2.54 cf/sack
Tail Slurry	
50:50:2 (Poz:H:Gel) + F.L.	360 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 2001  
 Job Description: 5 1/2" Production Casing  
 Date: November 1, 2000



Proposal No: 128868448A

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
8.097 CASING	<del>1,210</del> 1300	<del>1,210</del> 1300
7.875 HOLE	<del>6,800</del> 6990	<del>6,800</del> 6990

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
5.500	4.892	17	<del>6,800</del> 6990	<del>6,800</del> 6990

Float Collar set @ 6,720 ft  
 Mud Density 10.00 ppg  
 Mud Type Water Based  
 Est. Static Temp. 124 ° F  
 Est. Circ. Temp. 115 ° F

### VOLUME CALCULATIONS

1,210 ft	x	0.1926 cf/ft	with	0 % excess	=	233.0 cf
3,790 ft	x	0.1733 cf/ft	with	49 % excess	=	976.5 cf
1,800 ft	x	0.1733 cf/ft	with	47 % excess	=	457.5 cf
80 ft	x	0.1305 cf/ft	with	0 % excess	=	10.4 cf (inside pipe)
TOTAL SLURRY VOLUME					=	1677.4 cf
					=	299 bbls



Operator Name: Apache Corporation  
 Well Name: Nedu Package 2001  
 Job Description: 5 1/2" Production Casin  
 Date: November 1, 2000



Proposal No: 128868448A

## FLUID SPECIFICATIONS

Spacer			20.0 bbls Mud Clean @ 8.34 ppg	
FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT	
Lead Slurry	1210	/ 2.54	= 477 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	468	/ 1.3	= 360 sacks (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 1% bwoc FL-25 + 0.005 gps FP-6L + 2% bwoc Bentonite + 58.1% 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	5.85
Amount of Mix Fluid (gps)	14.80	5.86
Estimated Pumping Time - 70 BC (HH:MM)	3:30	4:00
Free Water (mls) @ 114 ° F @ 45 ° angle	1.0	0.0
Fluid Loss (cc/30min) at 1000 psi and 114 ° F	750.0	208.0
COMPRESSIVE STRENGTH		
12 hrs @ 114 ° F (psi)	200	800
24 hrs @ 114 ° F (psi)	350	1500
72 hrs @ 114 ° F (psi)	500	2000

All slurries will be tested prior to loading to confirm thickening times. Fluid loss will be tested and reported on slurries with fluid loss additives. Lab test report will be furnished prior to pumping cement. Thickening time, compressive strength and fluid loss numbers quoted are approximate. Apache will be furnished lab reports with actual field blend test results for each slurry.



# Drilling Fluids Recommendations

OPERATOR Apache Corporation LEGAL T-21-S, R-37-E  
WELL NAME N.E.D.U. Wells COUNTY Lea, New Mexico

## ANTICIPATED FORMATION TOPS

Rustler	@	1,280'	ft.	Blinebry	@	5,560'	ft.
Salt	@	1,400'	ft.	Tubb	@	6,020'	ft.
Yates	@	2,620'	ft.	Drinkard	@	6,460'	ft.
Queen	@	3,670'	ft.	Abo	@	6,750'	ft.
Grayburg	@	3,720'	ft.		@		ft.
San Andres	@	3,990'	ft.		@		ft.
Glorietta	@	5,160'	ft.		@		ft.

## ANTICIPATED DRILLING PROGRAM

CASING SIZE	DEPTH	BIT SIZE	NUMBER BITS	NUMBER DAYS
8-5/8"	1,280'	12-1/4"	1	2
	6,990'	7-7/8"	2	11

Total Days 13

## RECOMMENDED DRILLING FLUID PROPERTIES

DEPTH	MUD PROPERTIES	REMARKS
0 - 1,280'	Weight: 8.6 - 9.2 ppg Viscosity: 32 - 36 sec/1000cc Filtrate: N/C pH: 9 - 10	Spud with a conventional Fresh Water Gel / Lime spud mud. Control native viscosity with fresh water. Use Paper as needed to control seepage loss. Maintain sufficient viscosity to keep the hole clean.  A minimal supply of coarse LCM (Cottonseed Hulls and Fiber) should be kept on location in case of severe lost circulation.
		8



## Drilling Fluids Recommendations

OPERATOR Apache Corporation

WELL NAME N.E.D.U. Wells

### Recommended Drilling Fluid Properties (cont'd)

DEPTH	MUD PROPERTIES	REMARKS
1,280' - 5,000'	Weight: 10.0 - 10.1 ppg Viscosity: 28 - 29 sec/1000cc Filtrate: N/C pH: 9 - 10	Drill out below surface casing with saturated Brine. Circulate through the reserve pit for gravitational solids removal. Mix Lime as needed to maintain pH and Paper as needed to retard seepage loss.
5,000' - 6,990'	Weight: 10.0 - 10.2 ppg Viscosity: 31 - 38 sec/1000cc Filtrate: 10 - 15 cc/30min pH: 9 - 10	<p>Confine circulation to the working pits. Discontinue Lime and begin using Caustic Soda for pH. Mix Starch for filtration control and Salt Water Gel if needed for viscosity. Small quantities of defoamer (D-76) may be required while mixing Starch. Add Xcide-102 to preserve the Starch only if the Salt concentration is below saturation.</p> <p>In some wells (usually in the South part of the Township) seepage loss becomes severe (100-120 bph) around 4,600' - 5,200'. Addition of Starch for filtration control and the addition of a small quantity of fine/medium LCM will reduce seepage loss to within tolerable limits.</p> <p>Toward the North part of the Township, seepage loss is usually minimal and addition of Starch for filtration control is not required until very near total depth.</p>

EXHIBIT "B"  
NEDU #138

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

No H<sub>2</sub>S is anticipated.

EXHIBIT "C"

SURFACE USE AND OPERATIONS PLAN  
CULTURAL RESOURCES SURVEY  
APPROXIMATE REHABILITATION SCHEDULE

LOCALITY: **NEDU #138**  
OPERATOR: **APACHE CORPORATION**

LOCATION: LOT 3 OF SECTION 3, T21S-R37E, N.M.P.M.  
LEA COUNTY, NEW MEXICO

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:  
Lot 3 of Section 3, Township 21 South, Range 37 East, N.M.P.M.  
Lea County, New Mexico  
330' FNL, 2619' FWL, Lot 3  
See attached Exhibits "D" and "E"
- 2) Bottom Hole Location:  
Lot 3 of Section 3, Township 21 South, Range 37 East, N.M.P.M.  
Lea County, New Mexico  
330' FNL, 2619' FWL, Lot 3  
See attached Exhibits "D" and "E"

- 3) Leases Issued: NM-2512
- 4) Record Lessee:

Apache Corporation	50%
Atlantic Richfield Company	25%
Chevron USA Inc.	25%
- 5) Acres in Lease:

Township 21 South, Range 37 East, NMPM  
Section 3: Lots 1, 2, 3, 4, 7, 8, 12, 15, 16,  
N½SE¼, SE¼SE¼  
Section 4: Lot 1  
Section 10: W½NE¼, SE¼NE¼, E½NW¼  

Total Acres: 708.67
- 6) Acres Dedicated to Well:

There are 40.00 acres dedicated to this well, which takes in Lot 3 of Section 3, Township 21 South, Range 37 East, Lea County, New Mexico.

**PART #2:**

- 1) Existing Roads:

Exhibit "E-1" comprises 2 maps showing the proposed well site in relation to existing roads and State Highway 18. The well is ±5½ miles north of Eunice, New Mexico. From Eunice, go north approximately 5 miles on State Highway Loop 18. Turn north on old carbon plant road and follow existing lease roads to location. Access is highlighted on Exhibit "E-1B".
- 2) Planned Access:
  - A. Length and Width: A 703' access road, 20' wide, will be constructed from the existing lease/access road to the well site. Extra width may be needed in the turns. Application for a buried pipeline will be made if it becomes necessary.
  - B. Construction: The new road will be 20' wide with a center crown, with 6 inches compacted caliche. 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. See Exhibit "E-2"
- 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 Chapporal Services and will be transported by truck over proposed and existing access roads.
- 6) Source of Construction Materials:

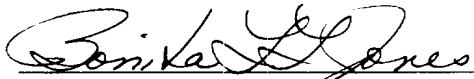
- Caliche for surfacing access roads and the wellsite pad will be obtained from the location itself or from BLM pits in the area.
- 7) Method of Handling Waste Material:
- A. Drill cuttings will be disposed of in the reserve pits.
  - B. Drilling fluids will be allowed to evaporate in the reserve pits 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: 195' x 240' 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 lined with 6 mil plastic.
- 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, 505-394-3022. Exhibit "I" is a copy of the acknowledgment that Apache and the surface owner have reached an agreement on surface damages for this tract.
- H. Archaeological, Historical, and Other Cultural Sites:  
Archaeological Survey Consultants, of Roswell, New Mexico, will be conducting an archaeological survey of the proposed NEDU #138 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  
Agent for Apache Corporation  
P. O. Box 8309  
Roswell, New Mexico 88202-8309  
(505) 624-9799 FAX (505) 624-9799  
E-Mail: senoj@dfn.com

Date: 4-23-01

**EXHIBIT "D-1"**  
**State of New Mexico**

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

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

**DISTRICT II**  
P.O. Drawer 80, Artesia, NM 86211-0719

**OIL CONSERVATION DIVISION**  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

**DISTRICT III**  
1000 Rio Brazos Rd., Artec, NM 87410

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

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

☐ AMENDED REPORT

API Number 30-025- <b>35609</b>	Pool Code 22900	Pool Name Eunice: Bli-Tu-Dr, North (22900)
Property Code 22503	Property Name N.E.D.U.	Well Number 138
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3493'

**Surface Location**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
3	3	21S	37E		330	NORTH	2619	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 <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**

**GEODETIC COORDINATES**  
NAD 27 NME  
Y = 555356.9  
X = 864593.4

**GEOGRAPHIC LOCATION**  
NAD 27  
LAT= 32°31'16.40"N  
LONG= 103°09'01.80"W

SCALE: 1" = 2000'

**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  
03-14-01  
\_\_\_\_\_  
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 03, 2001

Date Surveyed \_\_\_\_\_ AWB  
Signature & Seal of Professional Surveyor  
*Ronald J. Eidson* 3/6/01  
01-11-0308  
\_\_\_\_\_  
Certificate No. RONALD J. EIDSON 3239  
GARY EIDSON 12641

EXHIBIT "D-2"  
State of New Mexico

DISTRICT I  
P.O. Box 1880, Hobbs, NM 88241-1880

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

DISTRICT II  
P.O. Drawer 22, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

DISTRICT IV  
P.O. Box 2088, Santa Fe, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name N.E.D.U.	Well Number 138
OGRID No.	Operator Name APACHE CORPORATION	Elevation 3493'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
3	3	21S	37E		330	NORTH	2619	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	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

**GEODETTIC COORDINATES**

NAD 27 NME  
Y = 555356.9  
X = 864593.4

**GEOGRAPHIC LOCATION**  
NAD 27  
LAT= 32°31'16.40"N  
LONG= 103°09'01.80"W

SCALE: 1" = 2000'

**OPERATOR CERTIFICATION**

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

Signature \_\_\_\_\_

Printed Name \_\_\_\_\_

Title \_\_\_\_\_

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 03, 2001

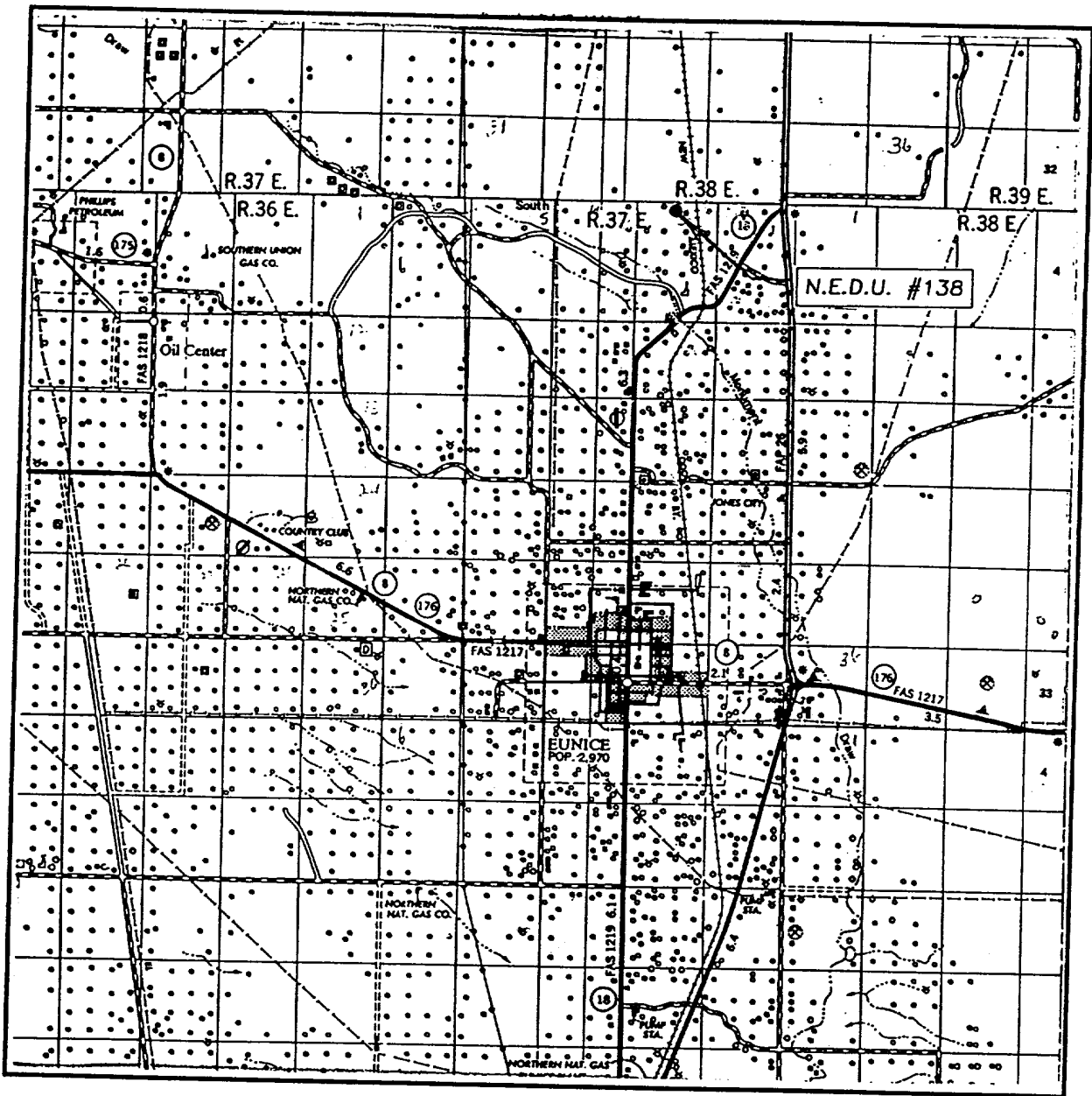
Date Surveyed \_\_\_\_\_ AWB

Signature & Seal of Professional Surveyor \_\_\_\_\_

01-11-0308

Certificate No. RONALD J. KIDSON 3239  
GARY KIDSON 12841

## VICINITY MAP



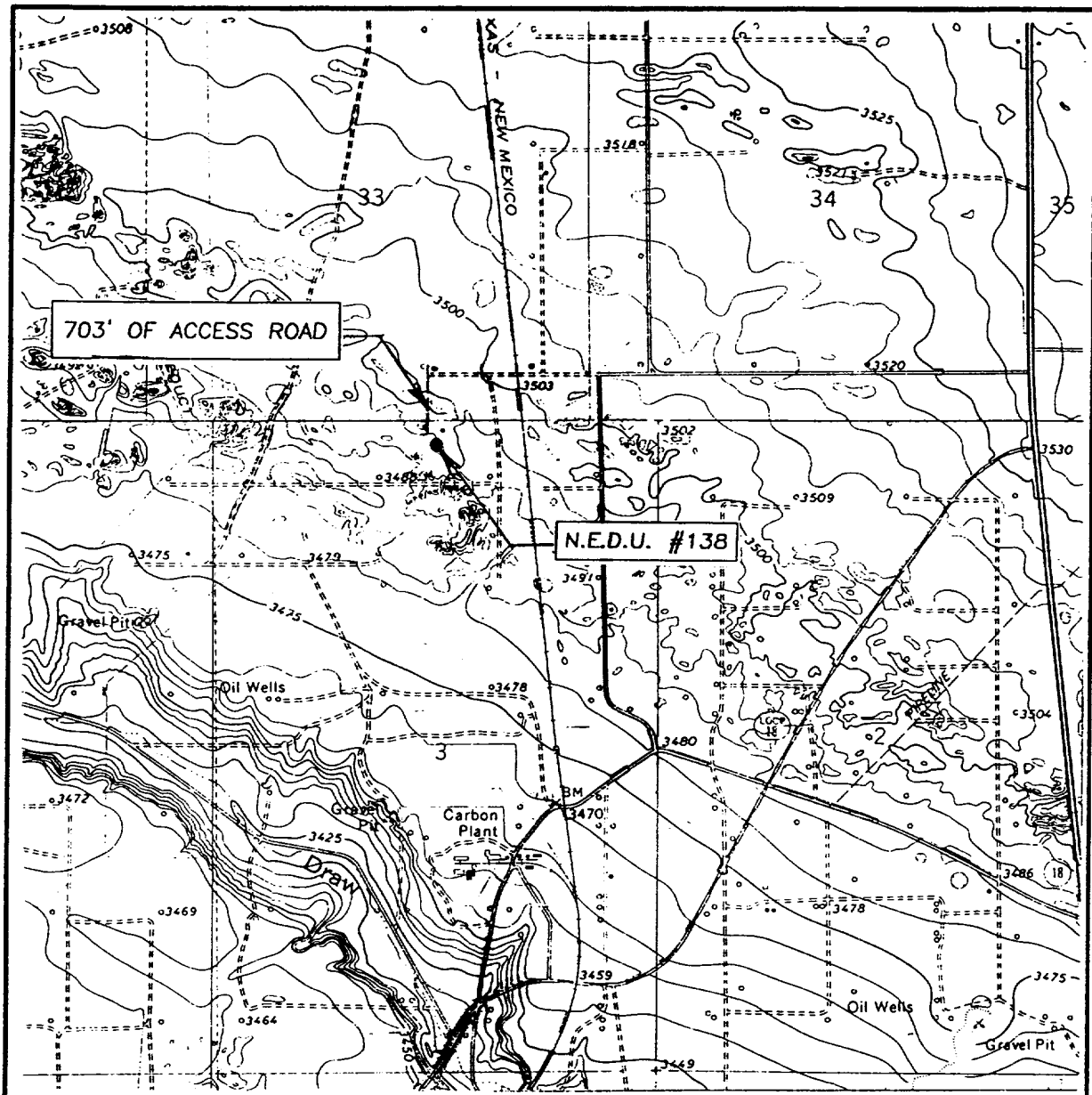
SCALE: 1" = 2 MILES

SEC. 3 TWP. 21-S RGE. 37-ESURVEY N.M.P.M.COUNTY LEADESCRIPTION 330'FNL & 2619'FWLELEVATION 3493'OPERATOR APACHE CORPORATIONLEASE N.E.D.U.

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

# LOCAT. IN VERIFICATION MAP

EXHIBIT "E-1B"



SCALE: 1" = 2000'

CONTOUR INTERVAL: 5'  
HOBBS, SW N.M.

SEC. 3 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330'FNL & 2619FWL

ELEVATION 3493'

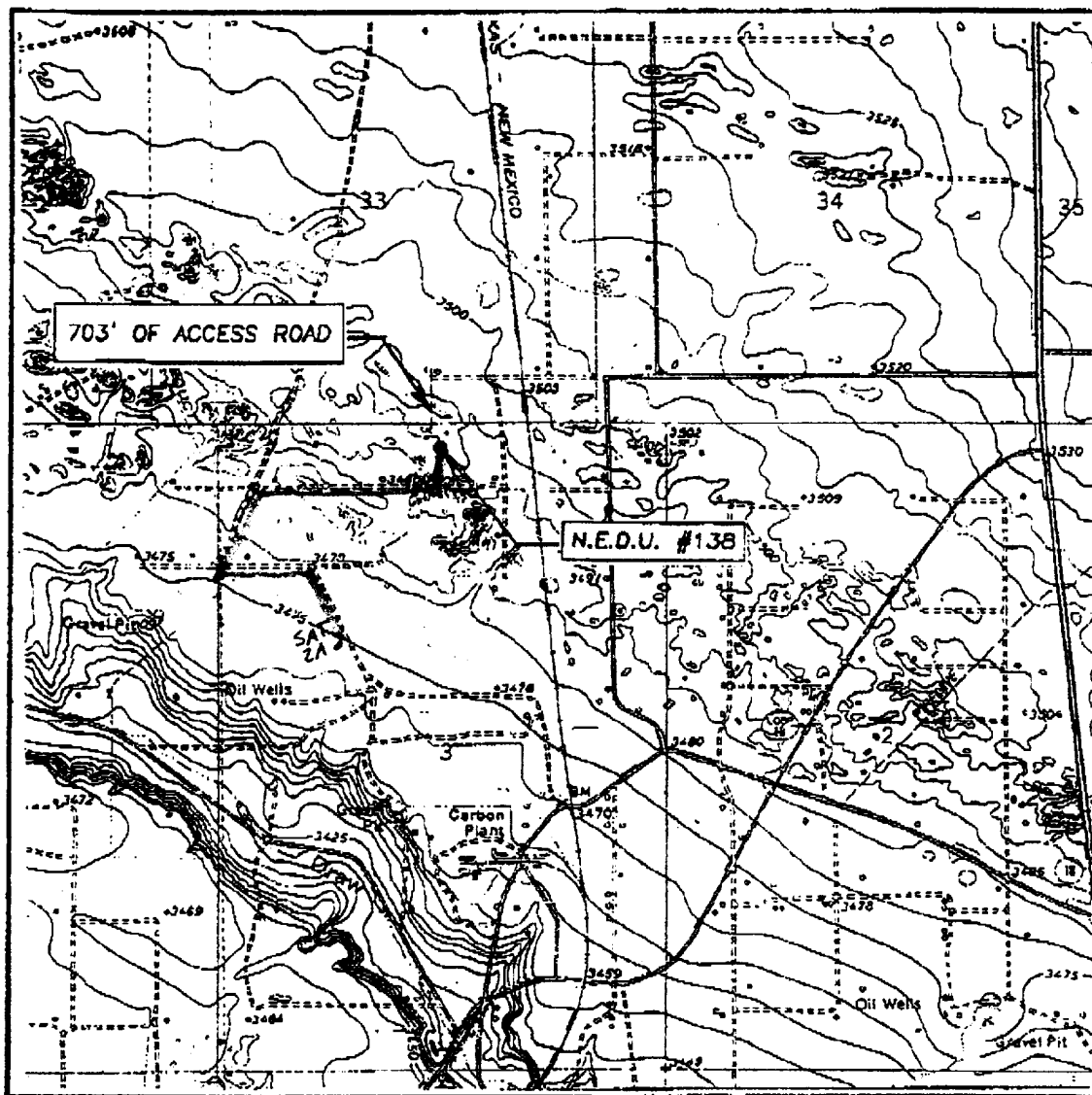
OPERATOR APACHE CORPORATION

LEASE N.E.D.U.

U.S.G.S. TOPOGRAPHIC MAP  
HOBBS, SW N.M.

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





SCALE: 1" = 2000'

CONTOUR INTERVAL: 5'  
HOBBS, SW N.M.SEC. 3 TWP. 21-S RGE. 37-ESURVEY N.M.P.M.COUNTY LEADESCRIPTION 330' FNL & 2619 FWLELEVATION 3493'OPERATOR APACHE CORPORATIONLEASE N.E.D.U.U.S.G.S. TOPOGRAPHIC MAP  
HOBBS, SW N.M.JOHN WEST SURVEYING  
HOBBS, NEW MEXICO  
(505) 393-3117

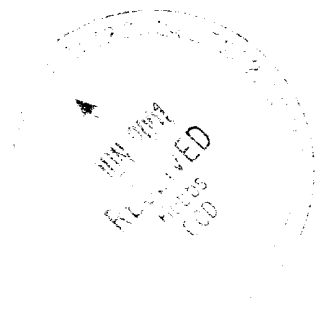
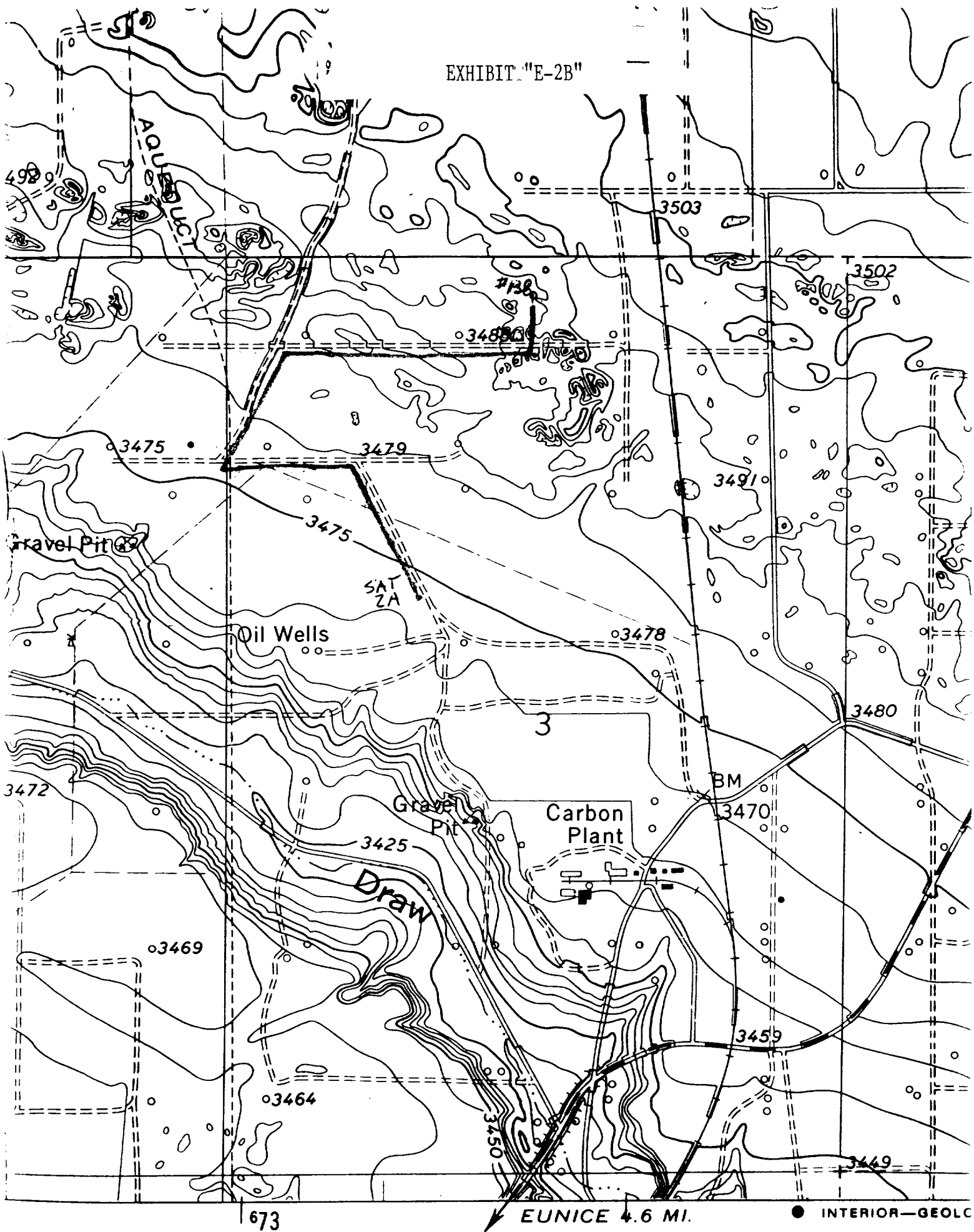
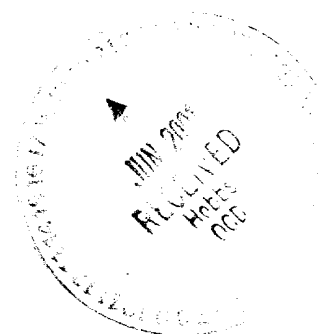




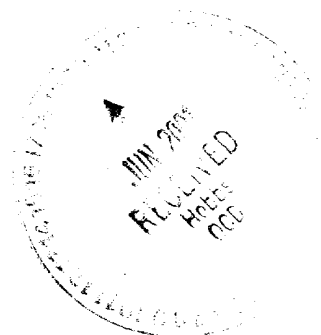
EXHIBIT "E-2B"



ROAD



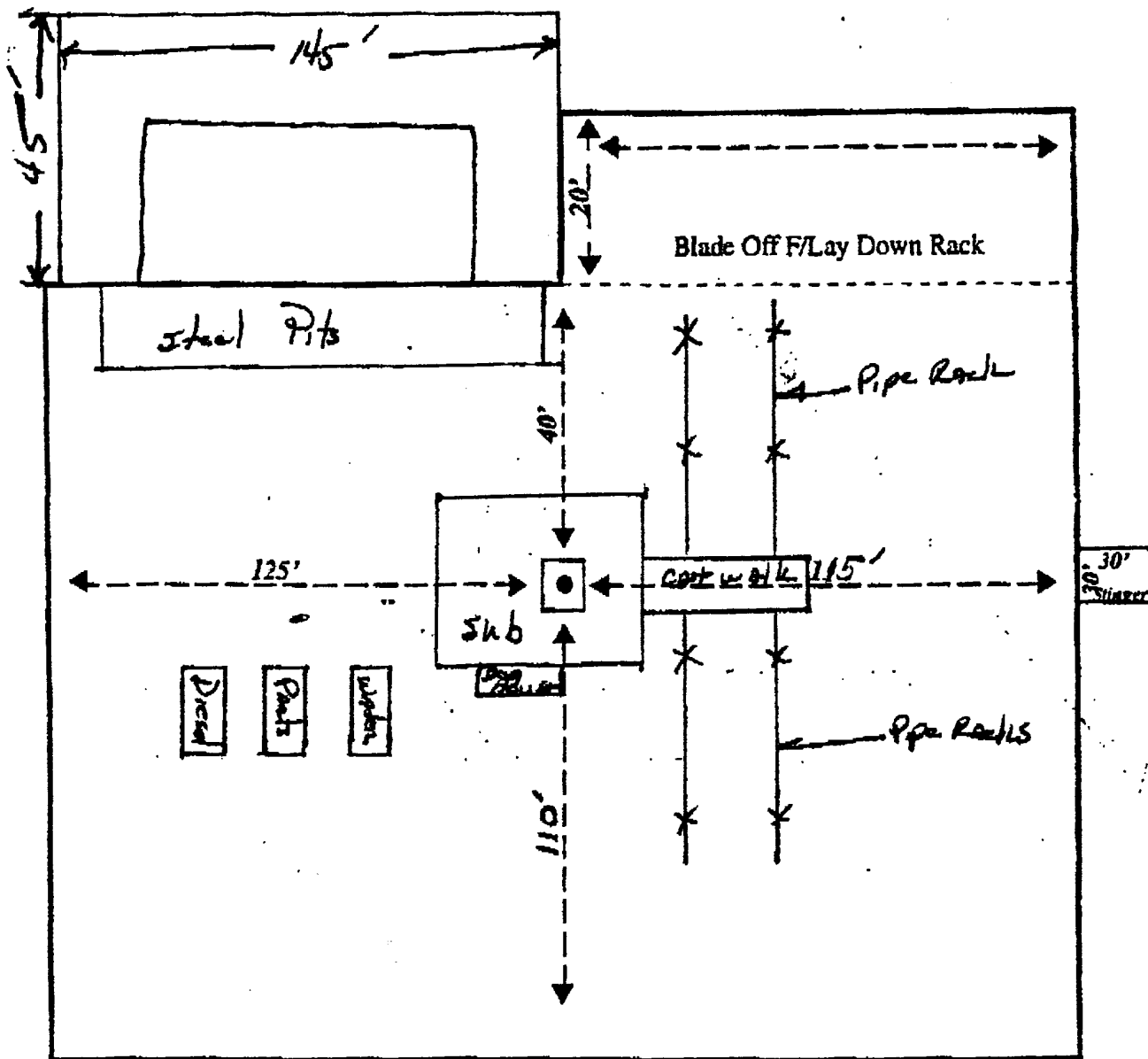
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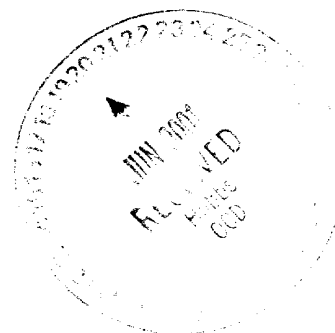


# Big Dog Drilling

EXHIBIT "G"

Rig #5  
Rig #9





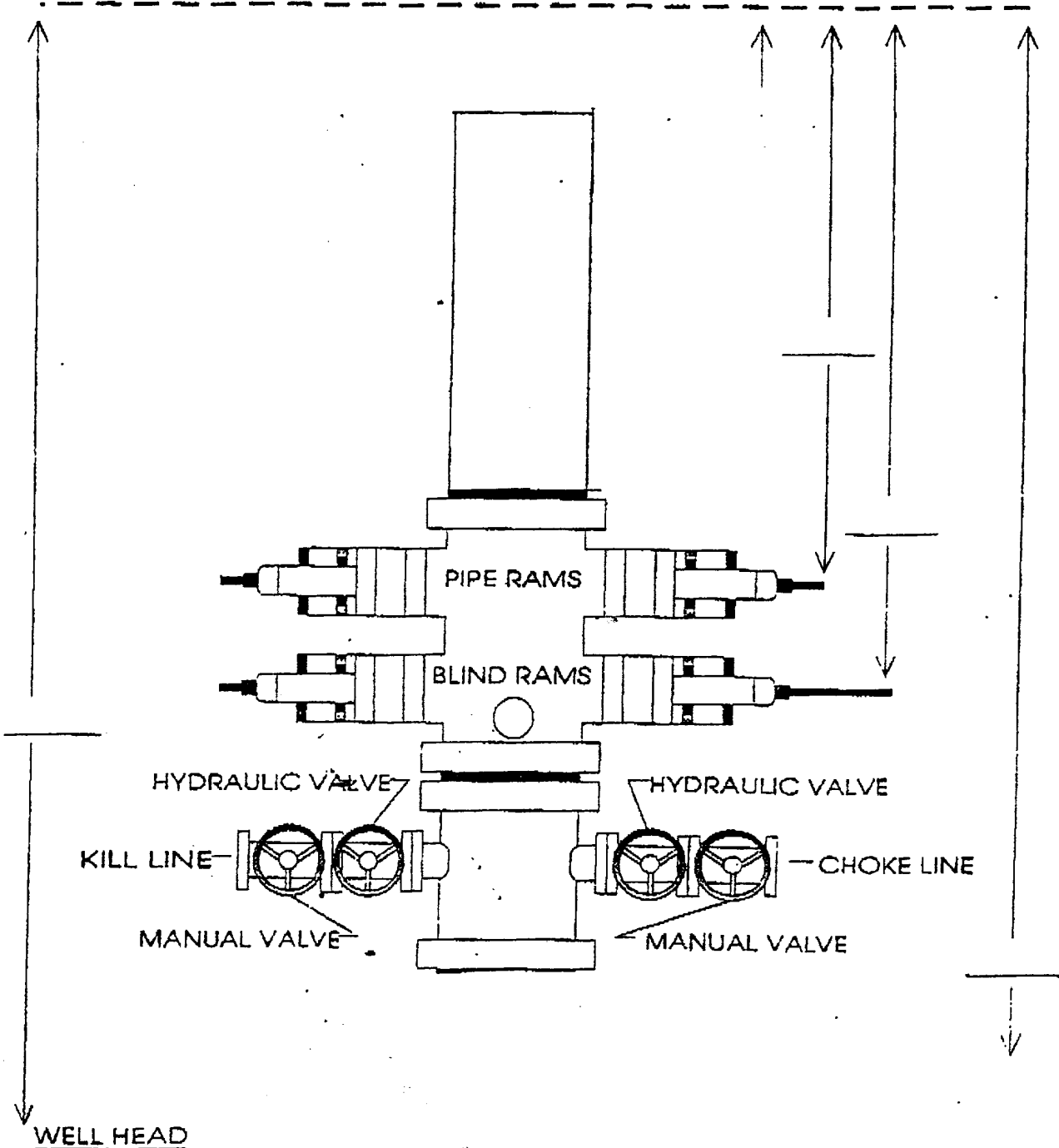
B. .P. STACK SPACING

SIZE: 11" 3000

AHEP-3187

*Rig 5*

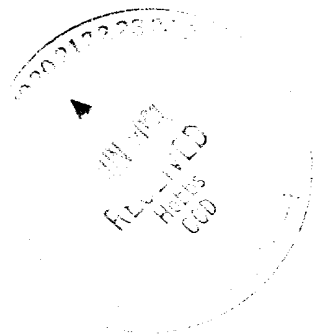
TOP OF ROTARY



WELL HEAD

WELL \_\_\_\_\_

CONTRACTOR \_\_\_\_\_





# **BIG DOG DRELLING**

110 NORTH MARIENFELD MIDLAND TEXAS 575-200-79701

**RIG # 5**

**CLOSING UNIT:**

**MELCO 4 STATION W/ 80 GAL. SPHERICAL ACCUMALATOR 1-AIR AND 1-ELECTRIC PUMPS.**

**CHOKE MANIFOLD: (3000# CHOKES)**

**2-HAND ADJUSTABLE CHOKES**

**2-2" VALVES**

**2-4" VALVES**

**RIG# 9**

**CLOSING UNIT:**

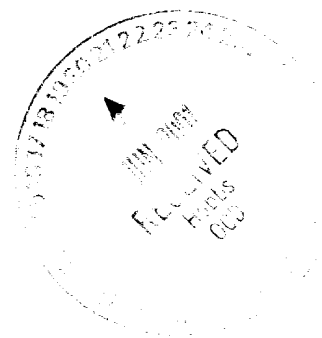
**MELCO 4-STATION W/ 80 GAL. SPHERICAL ACCUMALATOR 1-ELECTRIC 2-AIR PUMPS**

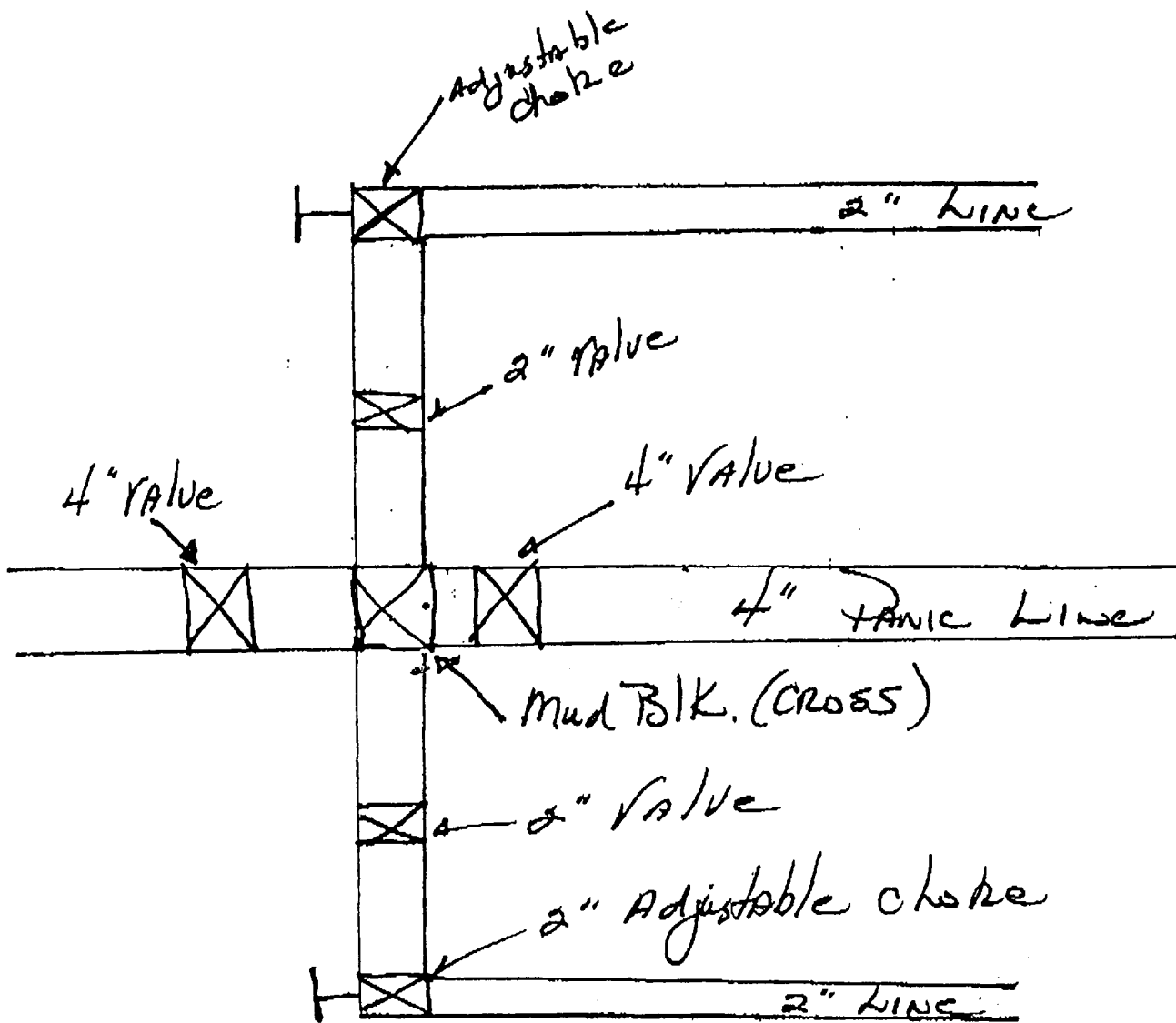
**CHOKE MANIFOLD: (3000# CHOKES).**

**2-HAND ADJUSTABLE CHOKES**

**2-2" VALVES**

**2-4" VALVES**





3000# choke manifold





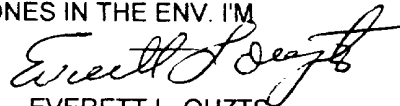
2000 POST OAK BOULEVARD / SUITE 100 / HOUSTON, TEXAS 77056-4400

WWW.APACHECORP.COM  
(713) 296-6000

TO ROBERT MCCASLAND,  
ROBERT APACHE CORP PLAINESTO DRILL NEDU WELLS  
ON YOUR LAND. THESE WELLS ARE ON FEDERAL LEASE. I HAVE TO  
SEND THE B.L.M. A LETTER STATING I HAVE TALKED TO YOU ABOUT THE  
WELLS ON YOUR LAND.

- 1 NEDU # 137  
150 FEL/1050 FNL  
SEC. # 4 T 21 S R 37 E LEA CO. N.M.
- 2 NEDU # 138  
2650 FEL / 330 FNL  
SEC. # 3 T 21 S R 37 E LEA CO. N.M.
- 3 NEDU # 139  
1300 FEL / 330 FNL  
SEC. # 3 T 21 S R 37 E LEA CO. N.M.

FORWARD THIS LETTER TO BONNIE JONES IN THE ENV. I'M  
SENDING TO YOU.

  
EVERETT L. OUZTS  
3/7/01

Robert McCasland 3-19-01  
516n by Robert McCasland  
Date

---

ELF  
9/18/01  
ABOVE DATE DOES NOT  
INDICATE WHEN  
CONFIDENTIAL LOGS  
WILL BE RELEASED

