Form 3160-3
(August 1999)

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: **NM-2512**

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA Agreement, Name and No.: **Northeast Drinkard Unit**

1a. Type of Work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☑ Multiple Zone

8. Lease Name and Well No.: **#417**

2. Name of Operator: **Apache Corporation**

9. API Well No.: **30-025- 35545**

3a. Address: **c/o Bonnie Jones, P.O. Box 8309, Roswell, NM 88202**

3b. Phone No. *(include area code)*: **505-624-9799**

10. Field and Pool, or Exploratory: **Eunice; Bli-Tu-Dr, North**

4. Location of Well *(Report location clearly and in accordance with any State requirements. *)*

SUBJECT TO LIKE APPROVAL BY STATE

At surface **1470' FNL, 1350' FEL, Unit G**

At proposed prod. zone **1470' FNL, 1350' FEL, Unit G**

11. Sec., T., R., M., or Blk. and Survey or Area: **Sec. 10, T21S-R37E, NMPM**

14. Distance in miles and direction from nearest town or post office*: **Approximately 4 miles north of Eunice, NM**

12. County or Parish: **Lea**

13. State: **NM**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
1350'	**708.67**	**40**

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file
561'	**6,880'**	**CO-1047**

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3,412'	**ASAP**	**8 days drilling**

24. Attachments

Capitan Controlled Water Basin

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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature: Bonita L. L. Jones — Name *(Printed Typed)*: **Bonita L. L. Jones** — Date: **3-2-01**

Title: **Agent for Apache Corporation**

Approved by *(Signature)*: /s/ Joe G. Lara — Name *(Printed Typed)*: /s/ JOE G. LARA — Date: 5-4-2001

Title: Acting FIELD MANAGER — Office: CARLSBAD

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 5-9-01
API NO. 30-025-35545

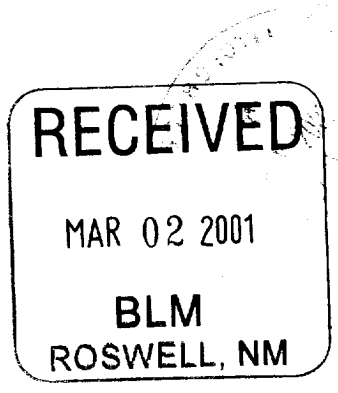

RECEIVED
MAR 02 2001
BLM
ROSWELL, NM

EXHIBIT "D-1"

State of New Mexico

Energy, Minerals and Natural Resources Department

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

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

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

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

OIL CONSERVATION DIVISION

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-35545	22900	Eunice; Bil-Tu-Dr, North

Property Code	Property Name	Well Number
22503	N.E.D.U.	417

OGRID No.	Operator Name	Elevation
00873	APACHE CORPORATION	3412'

Surface Location

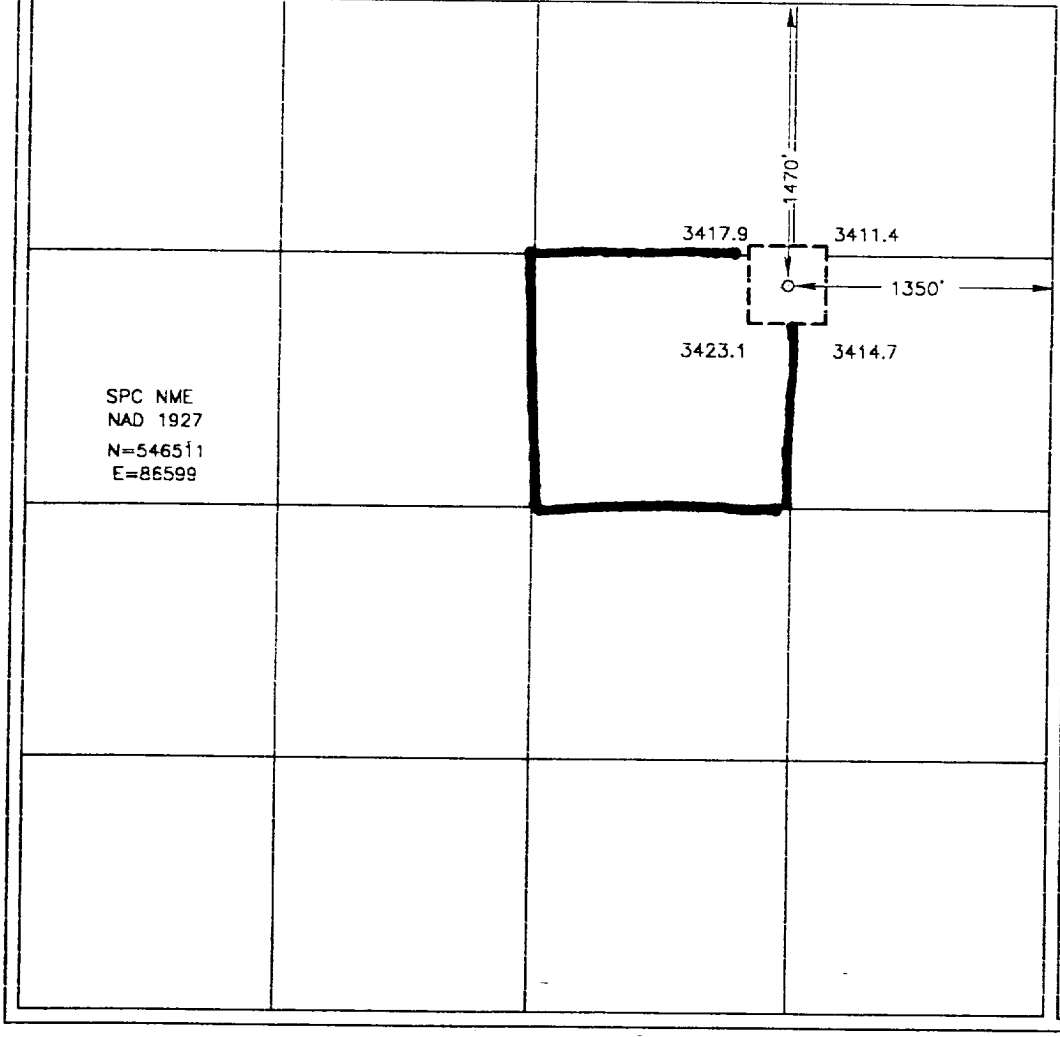
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	10	21-S	37-E		1470	NORTH	1350	EAST	LEA

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	Joint or Infill	Consolidation Code	Order No.
40			

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.

Signature: Everett Curtis

Printed Name: Everett Curtis

Title: Engr. Tech

Date: 1/24/01

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 supervison, and that the same is true and correct to the best of my belief.

JANUARY 18, 2001

Date Surveyed AWB

Signature & Seal of Professional Surveyor

Ronald J. Eidson 01/22/01

00-11-1406

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

EXHIBIT "D-2"

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name

Property Code	Property Name	Well Number
	N.E.D.U.	417
OGRID No.	Operator Name	Elevation
	APACHE CORPORATION	3412'

Surface Location

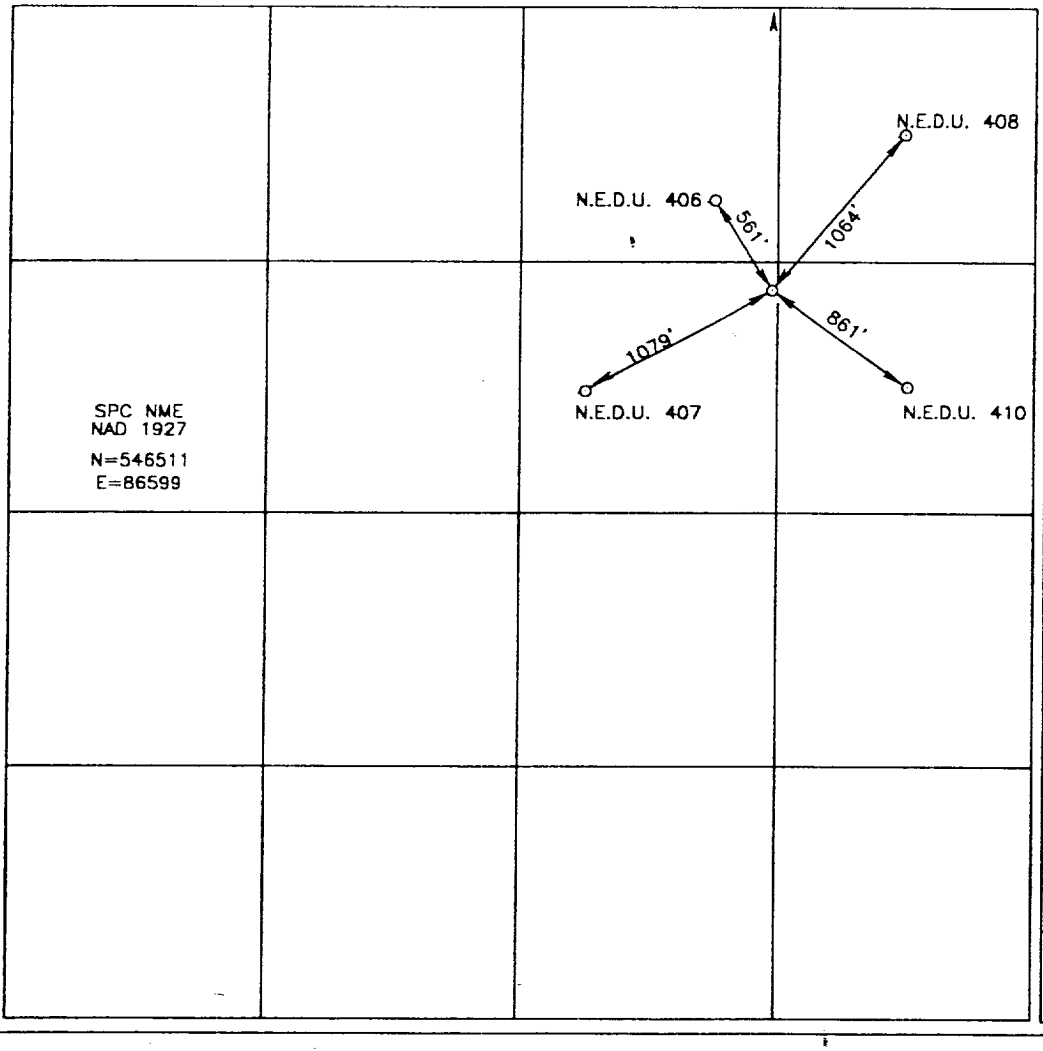
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	10	21-S	37-E		1470	NORTH	1350	EAST	LEA

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	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



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 supervison, and that the same is true and correct to the best of my belief.

JANUARY 18, 2001

Date Surveyed AWB

Signature & Seal of Professional Surveyor

00-11-1406

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

EXHIBIT "A"
NEDU #417
DRILLING PROGRAM

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

II. Estimated Tops of Geological Markers:

FORMATION	DEPTH
Quaternary alluvials	Surface
Rustler	1245'
Yates	2580'
San Andres	3710'
Glorieta	5130'
Blinebry marker	5690'
Tubb marker	6150'
Drinkard 1	6500'
TD	6880'

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

SUBSTANCE	DEPTH
Oil	Blinebry/ Tubb/ Drinkard at 5759'
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:

HOLE SIZE	CASING SIZE	GRADE	WEIGHT PER FOOT		DEPTH
12 ¼"	8 5/8"	J55 STC	24#	WITNESS	~~1,300'~~ 1329'
7 7/8"	5 ½"	J55 STC	17#		6,880'

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_2S detector or production hole
TIW type safety valve 4" choke line from BOP to manifold
2" adjustable chokes – 1.4 blowdonw 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.

JOB AT A GLANCE

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

Operator Name: Apache Corporation
Well Name: Nedu Package 20C
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~~ 1325	~~1,300~~ 1325

SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
8.625	8.097	24	~~1,300~~ 1325	~~1,300~~ 1325

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)
				TOTAL SLURRY VOLUME	=	1071.0 cf
					=	191 bbls

Operator Name: Apache Corporation
Well Name: Nedu Package 20
Job Description: 8 5/8" Surface Casing
Date: November 1, 2000

Proposal No: 128868448A

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT		VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
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

	SLURRY NO. 1	SLURRY NO. 2
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
COMPRESSIVE STRENGTH		
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.

JOB AT A GLANCE

Depth (TVD)	6,800 ft
Depth (MD)	6,800 ft
Hole Size	7.875 in
Casing Size/Weight :	5 1/2in, 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

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
8.097 CASING	~~1,210~~ 1325'	~~1,210~~ 1325'
7.875 HOLE	6,800	6,800

SUSPENDED PIPES

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

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 2C
Job Description: 5 1/2" Production Casing
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.

Newpark Drilling Fluids, Inc.

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.
	@	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.

Newpark Drilling Fluids, Inc.

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	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. 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. 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.

EXHIBIT "B"
NEDU #417

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

No H_2S is anticipated.

EXHIBIT "C"

SURFACE USE AND OPERATIONS PLAN
CULTURAL RESOURCES SURVEY
APPROXIMATE REHABILITATION SCHEDULE

LOCALITY: **NEDU #417**
OPERATOR: **APACHE CORPORATION**

LOCATION: SW¼NE¼ OF SECTION 10, 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 2ND 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:
SW¼NE¼ of Section 10, Township 21 South, Range 37 East, N.M.P.M.
Lea County, New Mexico
1470' FNL, 1350' FEL, Unit G
See attached Exhibits "D" and "E"

2) Bottom Hole Location:
SW¼NE¼ of Section 10, Township 21 South, Range 37 East, N.M.P.M.
Lea County, New Mexico
1470' FNL, 1350' FEL, Unit G
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:

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 Unit G, SW¼NE¼, of Section 10, Township 21 South, Range 37 East, 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. The well is ±4 miles north of Eunice, New Mexico. From Eunice, go north approximately 5 miles on State Highway Loop 18. Turn east on existing lease roads to location. Access is highlighted on Exhibit "E-2".

2) Planned Access:

A. Length and Width: A 116' 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.

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 the McNeill Ranch, c/o Page McNeill, P. O. Box 1092, Hobbs, New Mexico 88240, 505-393-3386. A surface damage agreement is being negotiated 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 #417 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

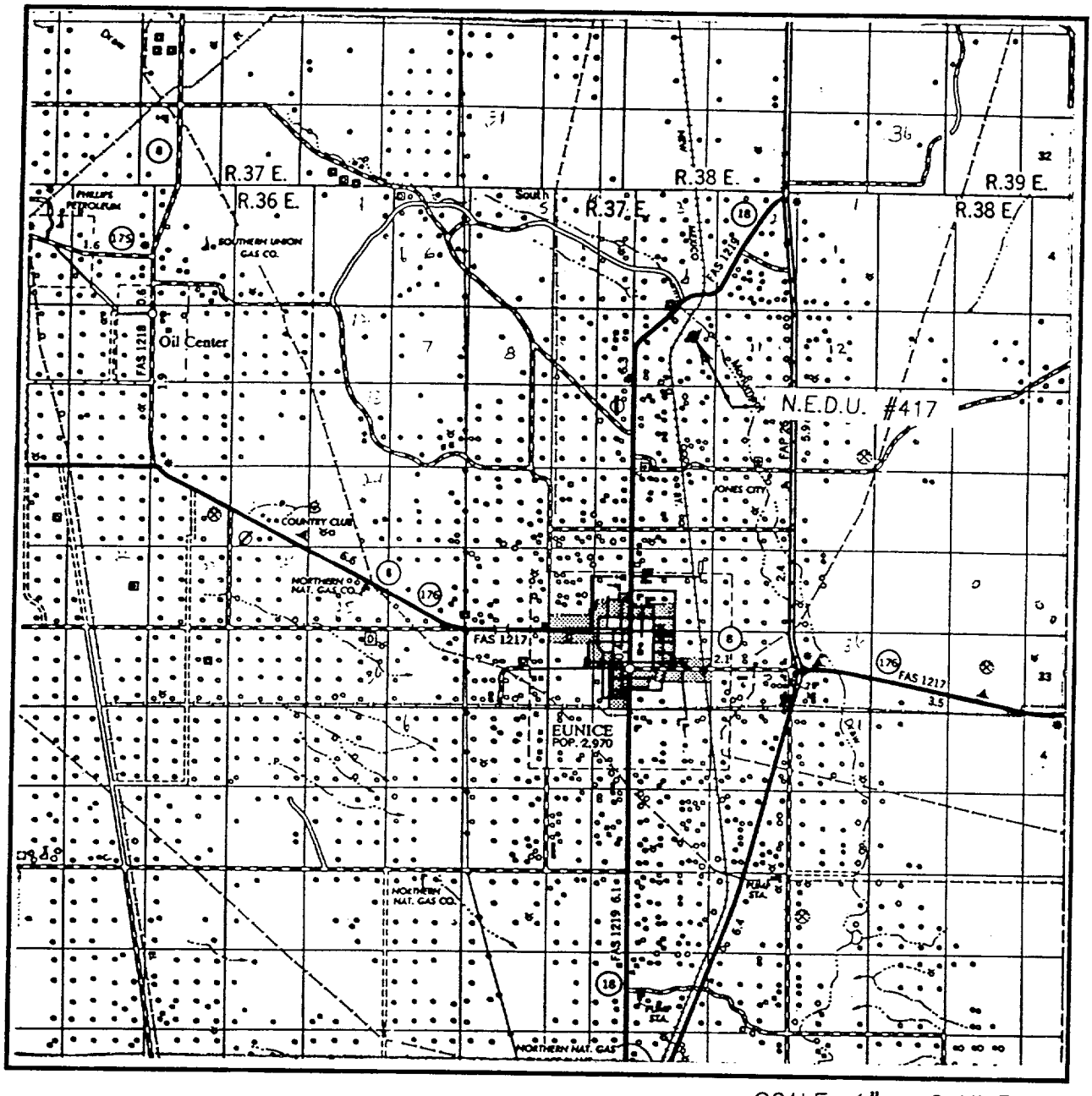
I hereby certify that Apache Corporation has inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed 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: 3-2-01

EXHIBIT "E-1"

VICINITY MAP



SCALE: 1" = 2 MILES

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

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1470'FNL & 1350'FEL

ELEVATION 3412'

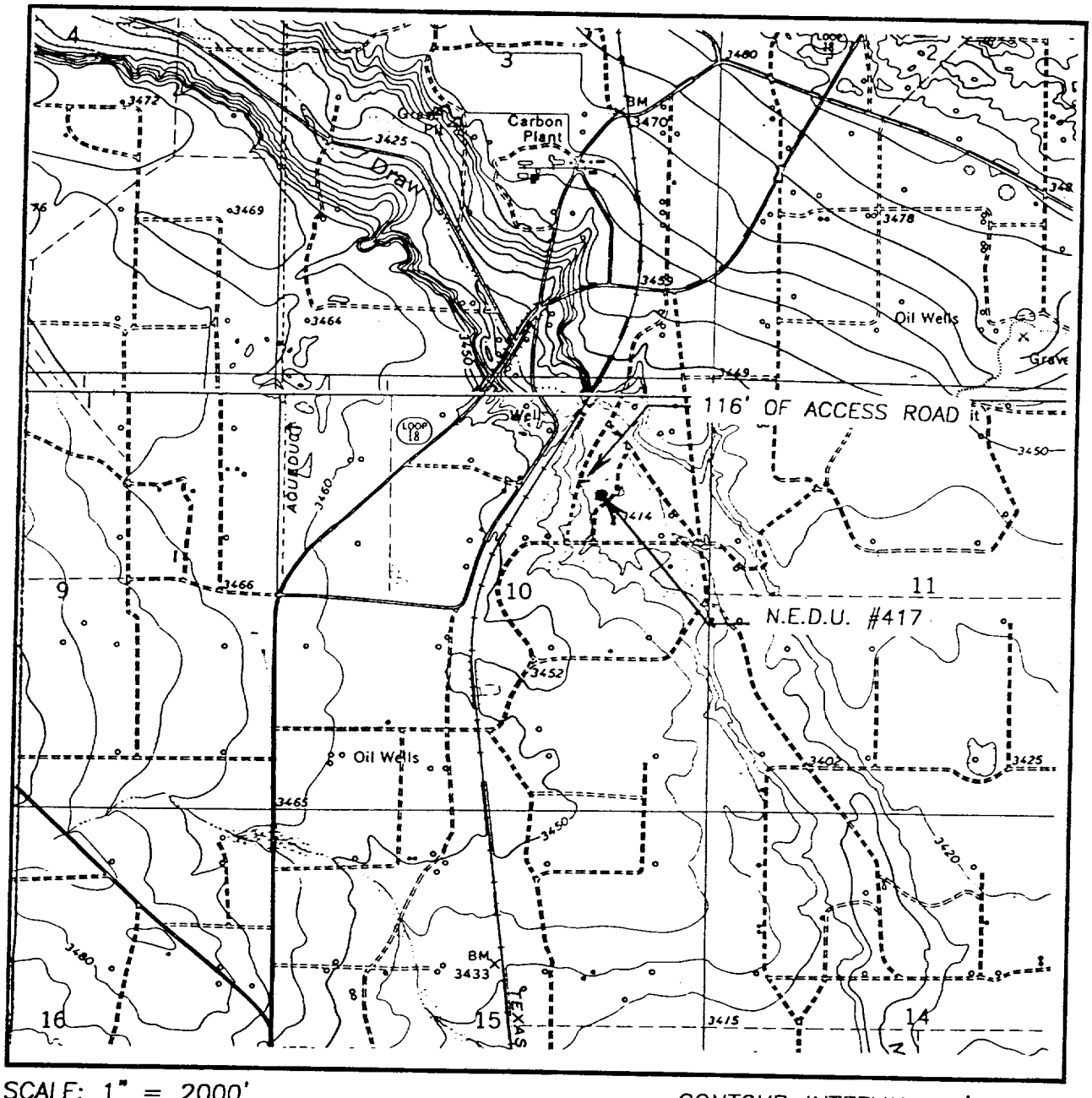
OPERATOR APACHE CORPORATION

LEASE N.E.D.U.

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

EXHIBIT E-2

LOCATION VERFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
EUNICE N.M.

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

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1470'FNL & 1350'FEL

ELEVATION 3412'

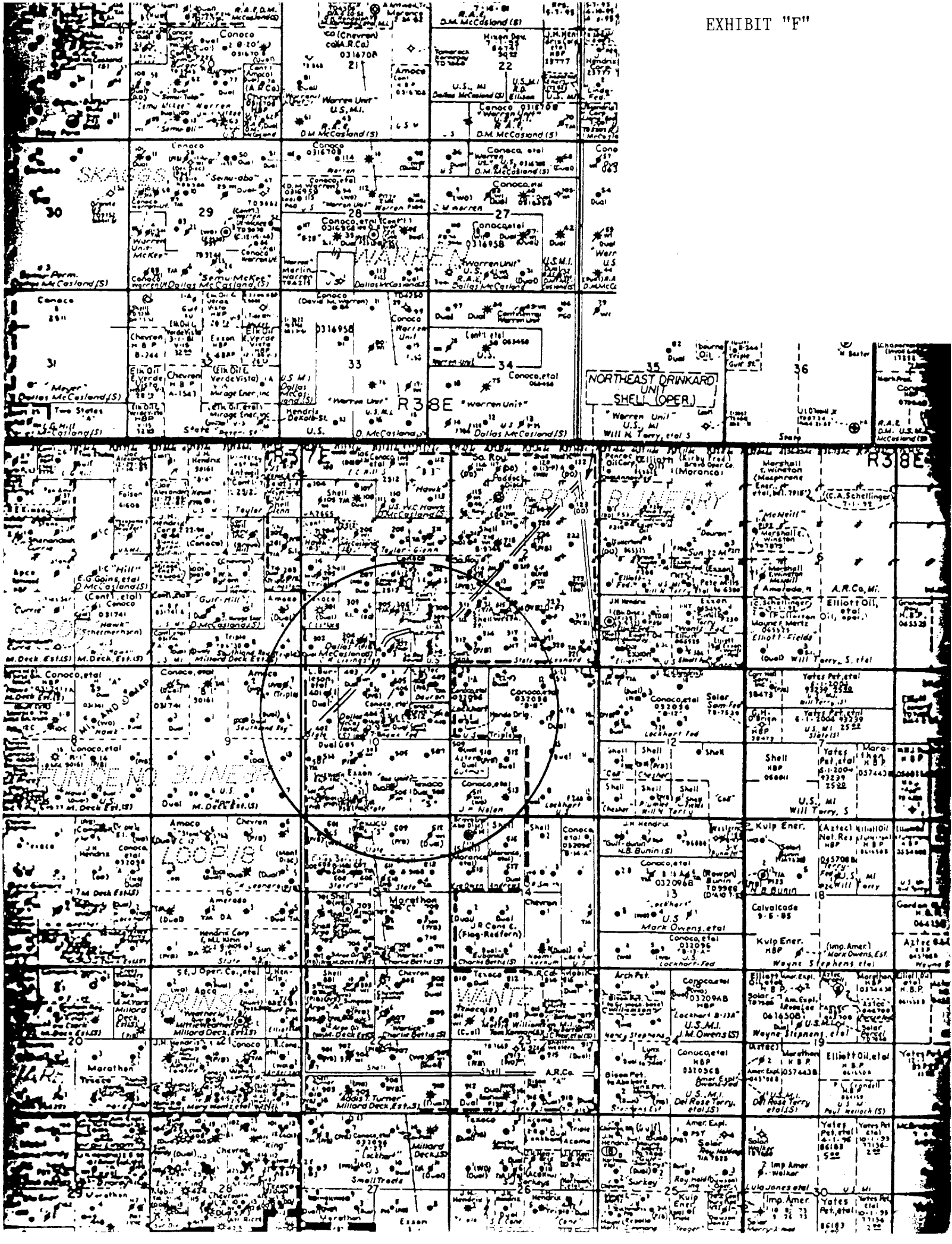
OPERATOR APACHE CORPORATION

LEASE N.E.D.U.

U.S.G.S. TOPOGRAPHIC MAP
EUNICE N.M.

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

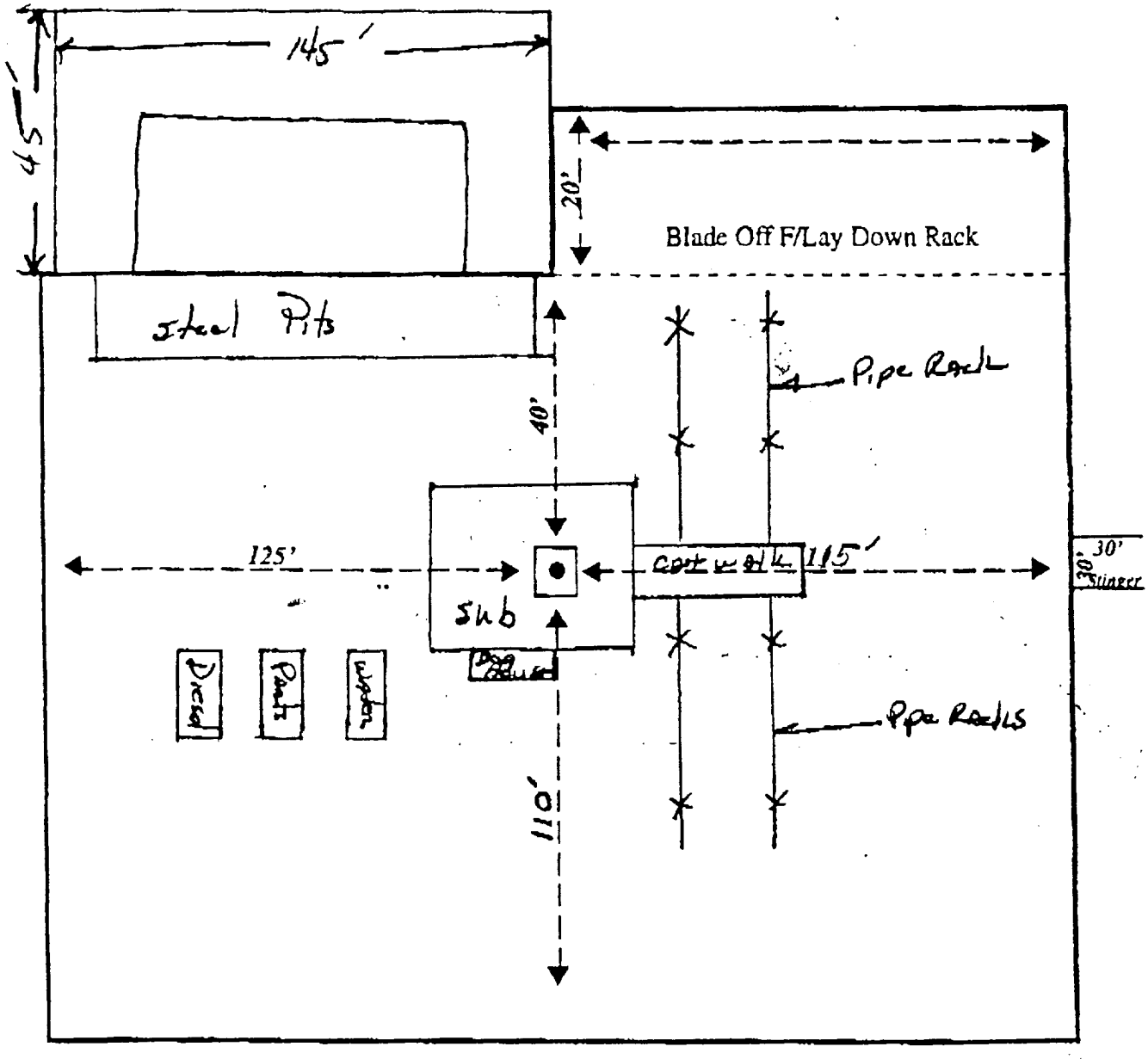
EXHIBIT "F"


NORTHEAST DRINKARD UNIT
SHELL (OPER.)
R38E
R37E
T21S
T22S
Warren Unit
U.S. Mi
Dallas McCasland (S)
D.M. McCasland (S)
Conoco
Amoco
Shell
Chevron
Texaco
Marathon
Exxon
Mobil
Gulf
Hendrix
Elk Oil
Mirage Ener. Inc
Elliott Oil, etal
Kulp Ener.
Yates Pet. etal
Conoco, etal 032096
Conoco, etal 032098
Conoco, etal 032098B
Conoco, etal 032098A
Conoco, etal 032098C
Conoco, etal 032098D
Conoco, etal 032098E
Conoco, etal 032098F
Conoco, etal 032098G
Conoco, etal 032098H
Conoco, etal 032098I
Conoco, etal 032098J
Conoco, etal 032098K
Conoco, etal 032098L
Conoco, etal 032098M
Conoco, etal 032098N
Conoco, etal 032098O
Conoco, etal 032098P
Conoco, etal 032098Q
Conoco, etal 032098R
Conoco, etal 032098S
Conoco, etal 032098T
Conoco, etal 032098U
Conoco, etal 032098V
Conoco, etal 032098W
Conoco, etal 032098X
Conoco, etal 032098Y
Conoco, etal 032098Z
Conoco, etal 032098AA
Conoco, etal 032098AB
Conoco, etal 032098AC
Conoco, etal 032098AD
Conoco, etal 032098AE
Conoco, etal 032098AF
Conoco, etal 032098AG
Conoco, etal 032098AH
Conoco, etal 032098AI
Conoco, etal 032098AJ
Conoco, etal 032098AK
Conoco, etal 032098AL
Conoco, etal 032098AM
Conoco, etal 032098AN
Conoco, etal 032098AO
Conoco, etal 032098AP
Conoco, etal 032098AQ
Conoco, etal 032098AR
Conoco, etal 032098AS
Conoco, etal 032098AT
Conoco, etal 032098AU
Conoco, etal 032098AV
Conoco, etal 032098AW
Conoco, etal 032098AX
Conoco, etal 032098AY
Conoco, etal 032098AZ
Conoco, etal 032098BA
Conoco, etal 032098BB
Conoco, etal 032098BC
Conoco, etal 032098BD
Conoco, etal 032098BE
Conoco, etal 032098BF
Conoco, etal 032098BG
Conoco, etal 032098BH
Conoco, etal 032098BI
Conoco, etal 032098BJ
Conoco, etal 032098BK
Conoco, etal 032098BL
Conoco, etal 032098BM
Conoco, etal 032098BN
Conoco, etal 032098BO
Conoco, etal 032098BP
Conoco, etal 032098BQ
Conoco, etal 032098BR
Conoco, etal 032098BS
Conoco, etal 032098BT
Conoco, etal 032098BU
Conoco, etal 032098BV
Conoco, etal 032098BW
Conoco, etal 032098BX
Conoco, etal 032098BY
Conoco, etal 032098BZ
Conoco, etal 032098CA
Conoco, etal 032098CB
Conoco, etal 032098CC
Conoco, etal 032098CD
Conoco, etal 032098CE
Conoco, etal 032098CF
Conoco, etal 032098CG
Conoco, etal 032098CH
Conoco, etal 032098CI
Conoco, etal 032098CJ
Conoco, etal 032098CK
Conoco, etal 032098CL
Conoco, etal 032098CM
Conoco, etal 032098CN
Conoco, etal 032098CO
Conoco, etal 032098CP
Conoco, etal 032098CQ
Conoco, etal 032098CR
Conoco, etal 032098CS
Conoco, etal 032098CT
Conoco, etal 032098CU
Conoco, etal 032098CV
Conoco, etal 032098CW
Conoco, etal 032098CX
Conoco, etal 032098CY
Conoco, etal 032098CZ
Conoco, etal 032098DA
Conoco, etal 032098DB
Conoco, etal 032098DC
Conoco, etal 032098DD
Conoco, etal 032098DE
Conoco, etal 032098DF
Conoco, etal 032098DG
Conoco, etal 032098DH
Conoco, etal 032098DI
Conoco, etal 032098DJ
Conoco, etal 032098DK
Conoco, etal 032098DL
Conoco, etal 032098DM
Conoco, etal 032098DN
Conoco, etal 032098DO
Conoco, etal 032098DP
Conoco, etal 032098DQ
Conoco, etal 032098DR
Conoco, etal 032098DS
Conoco, etal 032098DT
Conoco, etal 032098DU
Conoco, etal 032098DV
Conoco, etal 032098DW
Conoco, etal 032098DX
Conoco, etal 032098DY
Conoco, etal 032098DZ
Conoco, etal 032098EA
Conoco, etal 032098EB
Conoco, etal 032098EC
Conoco, etal 032098ED
Conoco, etal 032098EE
Conoco, etal 032098EF
Conoco, etal 032098EG
Conoco, etal 032098EH
Conoco, etal 032098EI
Conoco, etal 032098EJ
Conoco, etal 032098EK
Conoco, etal 032098EL
Conoco, etal 032098EM
Conoco, etal 032098EN
Conoco, etal 032098EO
Conoco, etal 032098EP
Conoco, etal 032098EQ
Conoco, etal 032098ER
Conoco, etal 032098ES
Conoco, etal 032098ET
Conoco, etal 032098EU
Conoco, etal 032098EV
Conoco, etal 032098EW
Conoco, etal 032098EX
Conoco, etal 032098EY
Conoco, etal 032098EZ
Conoco, etal 032098FA
Conoco, etal 032098FB
Conoco, etal 032098FC
Conoco, etal 032098FD
Conoco, etal 032098FE
Conoco, etal 032098FF
Conoco, etal 032098FG
Conoco, etal 032098FH
Conoco, etal 032098FI
Conoco, etal 032098FJ
Conoco, etal 032098FK
Conoco, etal 032098FL
Conoco, etal 032098FM
Conoco, etal 032098FN
Conoco, etal 032098FO
Conoco, etal 032098FP
Conoco, etal 032098FQ
Conoco, etal 032098FR
Conoco, etal 032098FS
Conoco, etal 032098FT
Conoco, etal 032098FU
Conoco, etal 032098FV
Conoco, etal 032098FW
Conoco, etal 032098FX
Conoco, etal 032098FY
Conoco, etal 032098FZ
Conoco, etal 032098GA
Conoco, etal 032098GB
Conoco, etal 032098GC
Conoco, etal 032098GD
Conoco, etal 032098GE
Conoco, etal 032098GF
Conoco, etal 032098GG
Conoco, etal 032098GH
Conoco, etal 032098GI
Conoco, etal 032098GJ
Conoco, etal 032098GK
Conoco, etal 032098GL
Conoco, etal 032098GM
Conoco, etal 032098GN
Conoco, etal 032098GO
Conoco, etal 032098GP
Conoco, etal 032098GQ
Conoco, etal 032098GR
Conoco, etal 032098GS
Conoco, etal 032098GT
Conoco, etal 032098GU
Conoco, etal 032098GV
Conoco, etal 032098GW
Conoco, etal 032098GX
Conoco, etal 032098GY
Conoco, etal 032098GZ
Conoco, etal 032098HA
Conoco, etal 032098HB
Conoco, etal 032098HC
Conoco, etal 032098HD
Conoco, etal 032098HE
Conoco, etal 032098HF
Conoco, etal 032098HG
Conoco, etal 032098HH
Conoco, etal 032098HI
Conoco, etal 032098HJ
Conoco, etal 032098HK
Conoco, etal 032098HL
Conoco, etal 032098HM
Conoco, etal 032098HN
Conoco, etal 032098HO
Conoco, etal 032098HP
Conoco, etal 032098HQ
Conoco, etal 032098HR
Conoco, etal 032098HS
Conoco, etal 032098HT
Conoco, etal 032098HU
Conoco, etal 032098HV
Conoco, etal 032098HW
Conoco, etal 032098HX
Conoco, etal 032098HY
Conoco, etal 032098HZ
Conoco, etal 032098IA
Conoco, etal 032098IB
Conoco, etal 032098IC
Conoco, etal 032098ID
Conoco, etal 032098IE
Conoco, etal 032098IF
Conoco, etal 032098IG
Conoco, etal 032098IH
Conoco, etal 032098II
Conoco, etal 032098IJ
Conoco, etal 032098IK
Conoco, etal 032098IL
Conoco, etal 032098IM
Conoco, etal 032098IN
Conoco, etal 032098IO
Conoco, etal 032098IP
Conoco, etal 032098IQ
Conoco, etal 032098IR
Conoco, etal 032098IS
Conoco, etal 032098IT
Conoco, etal 032098IU
Conoco, etal 032098IV
Conoco, etal 032098IW
Conoco, etal 032098IX
Conoco, etal 032098IY
Conoco, etal 032098IZ
Conoco, etal 032098JA
Conoco, etal 032098JB
Conoco, etal 032098JC
Conoco, etal 032098JD
Conoco, etal 032098JE
Conoco, etal 032098JF
Conoco, etal 032098JG
Conoco, etal 032098JH
Conoco, etal 032098JI
Conoco, etal 032098JJ
Conoco, etal 032098JK
Conoco, etal 032098JL
Conoco, etal 032098JM
Conoco, etal 032098JN
Conoco, etal 032098JO
Conoco, etal 032098JP
Conoco, etal 032098JQ
Conoco, etal 032098JR
Conoco, etal 032098JS
Conoco, etal 032098JT
Conoco, etal 032098JU
Conoco, etal 032098JV
Conoco, etal 032098JW
Conoco, etal 032098JX
Conoco, etal 032098JY
Conoco, etal 032098JZ
Conoco, etal 032098KA
Conoco, etal 032098KB
Conoco, etal 032098KC
Conoco, etal 032098KD
Conoco, etal 032098KE
Conoco, etal 032098KF
Conoco, etal 032098KG
Conoco, etal 032098KH
Conoco, etal 032098KI
Conoco, etal 032098KJ
Conoco, etal 032098KK
Conoco, etal 032098KL
Conoco, etal 032098KM
Conoco, etal 032098KN
Conoco, etal 032098KO
Conoco, etal 032098KP
Conoco, etal 032098KQ
Conoco, etal 032098KR
Conoco, etal 032098KS
Conoco, etal 032098KT
Conoco, etal 032098KU
Conoco, etal 032098KV
Conoco, etal 032098KW
Conoco, etal 032098KX
Conoco, etal 032098KY
Conoco, etal 032098KZ
Conoco, etal 032098LA
Conoco, etal 032098LB
Conoco, etal 032098LC
Conoco, etal 032098LD
Conoco, etal 032098LE
Conoco, etal 032098LF
Conoco, etal 032098LG
Conoco, etal 032098LH
Conoco, etal 032098LI
Conoco, etal 032098LJ
Conoco, etal 032098LK
Conoco, etal 032098LL
Conoco, etal 032098LM
Conoco, etal 032098LN
Conoco, etal 032098LO
Conoco, etal 032098LP
Conoco, etal 032098LQ
Conoco, etal 032098LR
Conoco, etal 032098LS
Conoco, etal 032098LT
Conoco, etal 032098LU
Conoco, etal 032098LV
Conoco, etal 032098LW
Conoco, etal 032098LX
Conoco, etal 032098LY
Conoco, etal 032098LZ
Conoco, etal 032098MA
Conoco, etal 032098MB
Conoco, etal 032098MC
Conoco, etal 032098MD
Conoco, etal 032098ME
Conoco, etal 032098MF
Conoco, etal 032098MG
Conoco, etal 032098MH
Conoco, etal 032098MI
Conoco, etal 032098MJ
Conoco, etal 032098MK
Conoco, etal 032098ML
Conoco, etal 032098MM
Conoco, etal 032098MN
Conoco, etal 032098MO
Conoco, etal 032098MP
Conoco, etal 032098MQ
Conoco, etal 032098MR
Conoco, etal 032098MS
Conoco, etal 032098MT
Conoco, etal 032098MU
Conoco, etal 032098MV
Conoco, etal 032098MW
Conoco, etal 032098MX
Conoco, etal 032098MY
Conoco, etal 032098MZ
Conoco, etal 032098NA
Conoco, etal 032098NB
Conoco, etal 032098NC
Conoco, etal 032098ND
Conoco, etal 032098NE
Conoco, etal 032098NF
Conoco, etal 032098NG
Conoco, etal 032098NH
Conoco, etal 032098NI
Conoco, etal 032098NJ
Conoco, etal 032098NK
Conoco, etal 032098NL
Conoco, etal 032098NM
Conoco, etal 032098NN
Conoco, etal 032098NO
Conoco, etal 032098NP
Conoco, etal 032098NQ
Conoco, etal 032098NR
Conoco, etal 032098NS
Conoco, etal 032098NT
Conoco, etal 032098NU
Conoco, etal 032098NV
Conoco, etal 032098NW
Conoco, etal 032098NX
Conoco, etal 032098NY
Conoco, etal 032098NZ
Conoco, etal 032098OA
Conoco, etal 032098OB
Conoco, etal 032098OC
Conoco, etal 032098OD
Conoco, etal 032098OE
Conoco, etal 032098OF
Conoco, etal 032098OG
Conoco, etal 032098OH
Conoco, etal 032098OI
Conoco, etal 032098OJ
Conoco, etal 032098OK
Conoco, etal 032098OL
Conoco, etal 032098OM
Conoco, etal 032098ON
Conoco, etal 032098OO
Conoco, etal 032098OP
Conoco, etal 032098OQ
Conoco, etal 032098OR
Conoco, etal 032098OS
Conoco, etal 032098OT
Conoco, etal 032098OU
Conoco, etal 032098OV
Conoco, etal 032098OW
Conoco, etal 032098OX
Conoco, etal 032098OY
Conoco, etal 032098OZ
Conoco, etal 032098PA
Conoco, etal 032098PB
Conoco, etal 032098PC
Conoco, etal 032098PD
Conoco, etal 032098PE
Conoco, etal 032098PF
Conoco, etal 032098PG
Conoco, etal 032098PH
Conoco, etal 032098PI
Conoco, etal 032098PJ
Conoco, etal 032098PK
Conoco, etal 032098PL
Conoco, etal 032098PM
Conoco, etal 032098PN
Conoco, etal 032098PO
Conoco, etal 032098PP
Conoco, etal 032098PQ
Conoco, etal 032098PR
Conoco, etal 032098PS
Conoco, etal 032098PT
Conoco, etal 032098PU
Conoco, etal 032098PV
Conoco, etal 032098PW
Conoco, etal 032098PX
Conoco, etal 032098PY
Conoco, etal 032098PZ
Conoco, etal 032098QA
Conoco, etal 032098QB
Conoco, etal 032098QC
Conoco, etal 032098QD
Conoco, etal 032098QE
Conoco, etal 032098QF
Conoco, etal 032098QG
Conoco, etal 032098QH
Conoco, etal 032098QI
Conoco, etal 032098QJ
Conoco, etal 032098QK
Conoco, etal 032098QL
Conoco, etal 032098QM
Conoco, etal 032098QN
Conoco, etal 032098QO
Conoco, etal 032098QP
Conoco, etal 032098QQ
Conoco, etal 032098QR
Conoco, etal 032098QS
Conoco, etal 032098QT
Conoco, etal 032098QU
Conoco, etal 032098QV
Conoco, etal 032098QW
Conoco, etal 032098QX
Conoco, etal 032098QY
Conoco, etal 032098QZ
Conoco, etal 032098RA
Conoco, etal 032098RB
Conoco, etal 032098RC
Conoco, etal 032098RD
Conoco, etal 032098RE
Conoco, etal 032098RF
Conoco, etal 032098RG
Conoco, etal 032098RH
Conoco, etal 032098RI
Conoco, etal 032098RJ
Conoco, etal 032098RK
Conoco, etal 032098RL
Conoco, etal 032098RM
Conoco, etal 032098RN
Conoco, etal 032098RO
Conoco, etal 032098RP
Conoco, etal 032098RQ
Conoco, etal 032098RR
Conoco, etal 032098RS
Conoco, etal 032098RT
Conoco, etal 032098RU
Conoco, etal 032098RV
Conoco, etal 032098RW
Conoco, etal 032098RX
Conoco, etal 032098RY
Conoco, etal 032098RZ
Conoco, etal 032098SA
Conoco, etal 032098SB
Conoco, etal 032098SC
Conoco, etal 032098SD
Conoco, etal 032098SE
Conoco, etal 032098SF
Conoco, etal 032098SG
Conoco, etal 032098SH
Conoco, etal 032098SI
Conoco, etal 032098SJ
Conoco, etal 032098SK
Conoco, etal 032098SL
Conoco, etal 032098SM
Conoco, etal 032098SN
Conoco, etal 032098SO
Conoco, etal 032098SP
Conoco, etal 032098SQ
Conoco, etal 032098SR
Conoco, etal 032098SS
Conoco, etal 032098ST
Conoco, etal 032098SU
Conoco, etal 032098SV
Conoco, etal 032098SW
Conoco, etal 032098SX
Conoco, etal 032098SY
Conoco, etal 032098SZ
Conoco, etal 032098TA
Conoco, etal 032098TB
Conoco, etal 032098TC
Conoco, etal 032098TD
Conoco, etal 032098TE
Conoco, etal 032098TF
Conoco, etal 032098TG
Conoco, etal 032098TH
Conoco, etal 032098TI
Conoco, etal 032098TJ
Conoco, etal 032098TK
Conoco, etal 032098TL
Conoco, etal 032098TM
Conoco, etal 032098TN
Conoco, etal 032098TO
Conoco, etal 032098TP
Conoco, etal 032098TQ
Conoco, etal 032098TR
Conoco, etal 032098TS
Conoco, etal 032098TT
Conoco, etal 032098TU
Conoco, etal 032098TV
Conoco, etal 032098TW
Conoco, etal 032098TX
Conoco, etal 032098TY
Conoco, etal 032098TZ
Conoco, etal 032098UA
Conoco, etal 032098UB
Conoco, etal 032098UC
Conoco, etal 032098UD
Conoco, etal 032098UE
Conoco, etal 032098UF
Conoco, etal 032098UG
Conoco, etal 032098UH
Conoco, etal 032098UI
Conoco, etal 032098UJ
Conoco, etal 032098UK
Conoco, etal 032098UL
Conoco, etal 032098UM
Conoco, etal 032098UN
Conoco, etal 032098UO
Conoco, etal 032098UP
Conoco, etal 032098UQ
Conoco, etal 032098UR
Conoco, etal 032098US
Conoco, etal 032098UT
Conoco, etal 032098UU
Conoco, etal 032098UV
Conoco, etal 032098UW
Conoco, etal 032098UX
Conoco, etal 032098UY
Conoco, etal 032098UZ
Conoco, etal 032098VA
Conoco, etal 032098VB
Conoco, etal 032098VC
Conoco, etal 032098VD
Conoco, etal 032098VE
Conoco, etal 032098VF
Conoco, etal 032098VG
Conoco, etal 032098VH
Conoco, etal 032098VI
Conoco, etal 032098VJ
Conoco, etal 032098VK
Conoco, etal 032098VL
Conoco, etal 032098VM
Conoco, etal 032098VN
Conoco, etal 032098VO
Conoco, etal 032098VP
Conoco, etal 032098VQ
Conoco, etal 032098VR
Conoco, etal 032098VS
Conoco, etal 032098VT
Conoco, etal 032098VU
Conoco, etal 032098VV
Conoco, etal 032098VW
Conoco, etal 032098VX
Conoco, etal 032098VY
Conoco, etal 032098VZ
Conoco, etal 032098WA
Conoco, etal 032098WB
Conoco, etal 032098WC
Conoco, etal 032098WD
Conoco, etal 032098WE
Conoco, etal 032098WF
Conoco, etal 032098WG
Conoco, etal 032098WH
Conoco, etal 032098WI
Conoco, etal 032098WJ
Conoco, etal 032098WK
Conoco, etal 032098WL
Conoco, etal 032098WM
Conoco, etal 032098WN
Conoco, etal 032098WO
Conoco, etal 032098WP
Conoco, etal 032098WQ
Conoco, etal 032098WR
Conoco, etal 032098WS
Conoco, etal 032098WT
Conoco, etal 032098WU
Conoco, etal 032098WV
Conoco, etal 032098WW
Conoco, etal 032098WX
Conoco, etal 032098WY
Conoco, etal 032098WZ
Conoco, etal 032098XA
Conoco, etal 032098XB
Conoco, etal 032098XC
Conoco, etal 032098XD
Conoco, etal 032098XE
Conoco, etal 032098XF
Conoco, etal 032098XG
Conoco, etal 032098XH
Conoco, etal 032098XI
Conoco, etal 032098XJ
Conoco, etal 032098XK
Conoco, etal 032098XL
Conoco, etal 032098XM
Conoco, etal 032098XN
Conoco, etal 032098XO
Conoco, etal 032098XP
Conoco, etal 032098XQ
Conoco, etal 032098XR
Conoco, etal 032098XS
Conoco, etal 032098XT
Conoco, etal 032098XU
Conoco, etal 032098XV
Conoco, etal 032098XW
Conoco, etal 032098XX
Conoco, etal 032098XY
Conoco, etal 032098XZ
Conoco, etal 032098YA
Conoco, etal 032098YB
Conoco, etal 032098YC
Conoco, etal 032098YD
Conoco, etal 032098YE
Conoco, etal 032098YF
Conoco, etal 032098YG
Conoco, etal 032098YH
Conoco, etal 032098YI
Conoco, etal 032098YJ
Conoco, etal 032098YK
Conoco, etal 032098YL
Conoco, etal 032098YM
Conoco, etal 032098YN
Conoco, etal 032098YO
Conoco, etal 032098YP
Conoco, etal 032098YQ
Conoco, etal 032098YR
Conoco, etal 032098YS
Conoco, etal 032098YT
Conoco, etal 032098YU
Conoco, etal 032098YV
Conoco, etal 032098YW
Conoco, etal 032098YX
Conoco, etal 032098YY
Conoco, etal 032098YZ
Conoco, etal 032098ZA
Conoco, etal 032098ZB
Conoco, etal 032098ZC
Conoco, etal 032098ZD
Conoco, etal 032098ZE
Conoco, etal 032098ZF
Conoco, etal 032098ZG
Conoco, etal 032098ZH
Conoco, etal 032098ZI
Conoco, etal 032098ZJ
Conoco, etal 032098ZK
Conoco, etal 032098ZL
Conoco, etal 032098ZM
Conoco, etal 032098ZN
Conoco, etal 032098ZO
Conoco, etal 032098ZP
Conoco, etal 032098ZQ
Conoco, etal 032098ZR
Conoco, etal 032098ZS
Conoco, etal 032098ZT
Conoco, etal 032098ZU
Conoco, etal 032098ZV
Conoco, etal 032098ZW
Conoco, etal 032098ZX
Conoco, etal 032098ZY
Conoco, etal 032098ZZ

Big Dog Drilling

EXHIBIT "G"

Rig #5
Rig #9



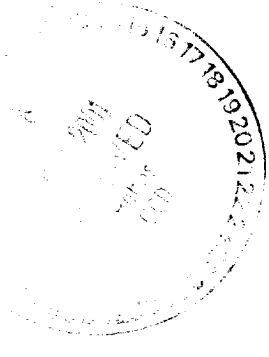


EXHIBIT "H-1"

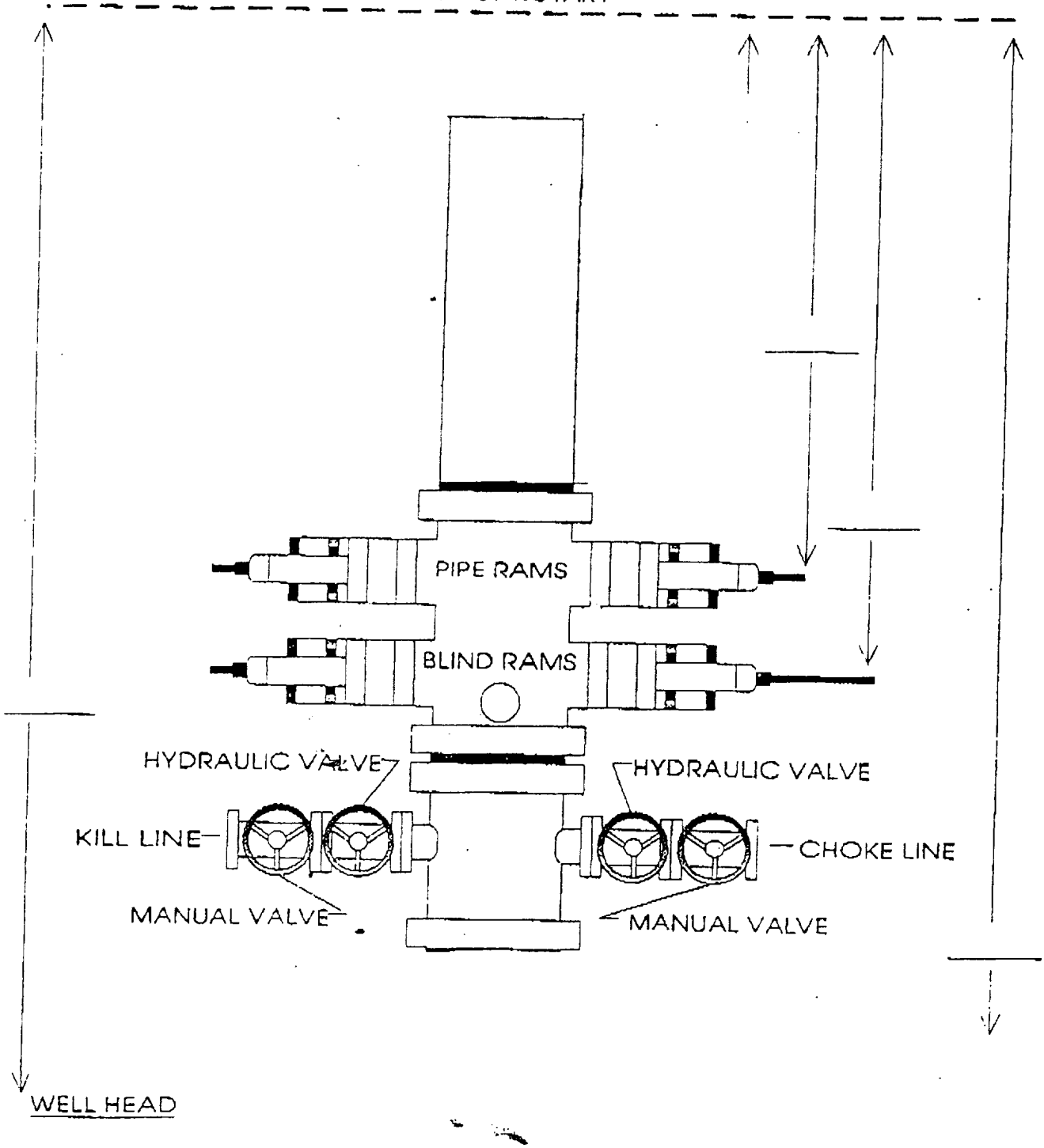
Rig 3

B.O.P. STACK SPACING

AHEP-3187

SIZE: 11" 3000

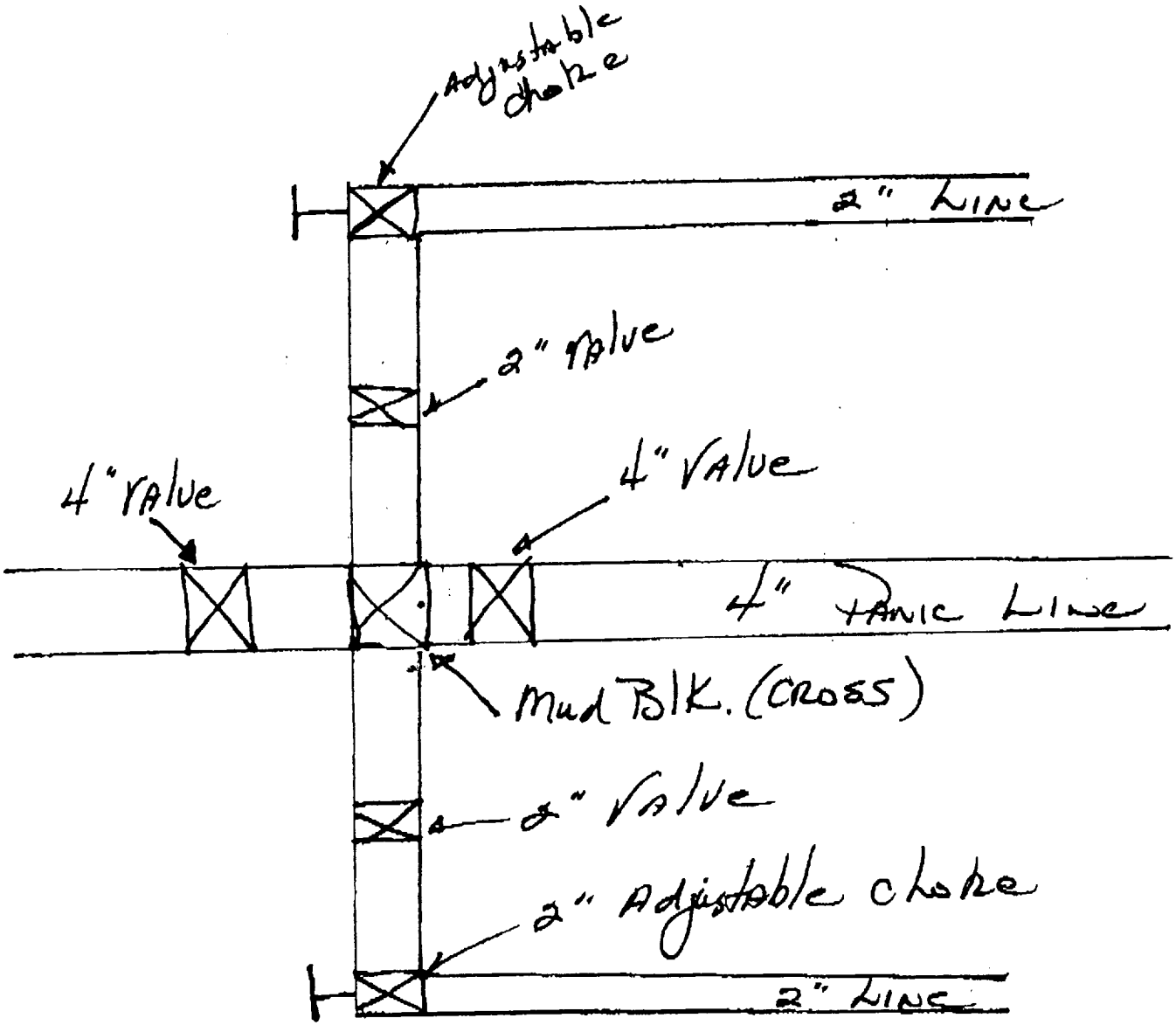
Rigs 5 + 9



WELL _____ CONTRACTOR _____

EXHIBIT "H-2"

Rig # 9



3000# choke MANIFOLD

EXHIBIT "H-3"

BIG DOG DRILLING

110 NORTH MARIENFELD MIDLAND TEXAS STE-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

ELF 9/18/01

ABOVE DATE DOES NOT
INDICATE WHEN
CONFIDENTIAL LOGS
WILL BE RELEASED