SIAICT'ORY

**UNITED STATES** reverse side ) **DEPARTMENT OF THE INTERIOR** 

SUBMIT IN TRIPLICATE \* (Other Instructions on

FORM APPROVED

OMB NO. 1004-0136 Expires: February 28, 1995

	BUREAU OF LAND M	· · · · · · · · · · · · · · ·				5LEASE DESIGNATION AND	SERIAL NO.		
4.001 I						NM-251	NM-2512		
	CATION FOR PERM	III IO DR	ILL OR	DEEPEN		6IF INDIAN, ALLOTTEE OR	TRIBE NAME		
la TYPE OF WORK			_			N/A			
DRI	LL D	EEPEN				7. UNIT AGREEMENT NAME	1 1 7 1.		
P TYPE OF WELL		,				Northeast Drink			
OIL GAS WELL WELL	OTHER		SINGLE ZONE	MULTIPLE ZONE		8. FARM OR LEASE NAME, W #131	ELL NO.		
2. NAME OF OPERATOR						9. API WELL NO.			
	oration, 2000 Post Oak,	Suite 100,	Housto	n, TX 77056		3 <del>0-25</del> -30-0	5-3460		
3. ADDRESS AND TELEPHO	= : :					10. FIELD AND POOL OR WIL			
	nc., P. O. Box 2691, Ro				8807	Eunice-Blinebry-Tubb-D	rinkard North		
	eport location clearly and in accord	•	ate requirem	ents.*)		11. SEC., T., R., M., OR BLK.			
At Surface 1253' FNL & 1244' FEL, Lot 8 At proposed prod. Zone 1253' FNL & 1244' FEL, Lot 8						AND SURVEY OR AREA			
At proposed prod. Zone	1233 FNL & 1244	FEL, LOT 8				3, 21S-37E, N.I	M.P.M.		
14. DISTANCE IN MILES AN	D DIRECTION FROM NEAREST TO					12. COUNTY FOR PARISH	13.STATE		
	±6 miles North	of Eunice,	NM			Lea	NM		
15. DISTANCE FROM PROP			16. NO. O	F ACRES IN LEASE	17. NO	. OF ACRES ASSIGNED			
LOCATION TO NEARES					то	THIS WELL			
PROPERTY OR LEASE LINE, FT. 1244				708.67		40.00			
(Also to nearest drlg. unit line, if any)  18. DISTANCE FROM PROPOSED LOCATION *			19. PROPO	OSED DEPTH	20 RO	TARY OR CABLE TOOLS			
TO NEAREST WELL, DRILLING, COMPLETED 817			6,800'			Rotary			
OR APPLIED FOR, ON T	HIS LEASE, FT.		<u> </u>	7	<u> </u>				
21. ELEVATIONS (Show wi	· · · · · · · · · · · · · · · · · · ·				22.	APPROX. DATE WORK WILL ST	ART *		
	3491	·				ASAP			
23.	PROPC	SED CASING A	ND CEME	NTING PROGRAM					
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PE	R FOOT	SETTING DEPTH		QUANTITY OF CEME	NT		
11"	8 5/8"	24#	24#		3	80 sx Circulated to s	urface		
7 7/8"	51/2"	17#	ŧ	6800'		325 sx			
					3.50	es some un O	712		
				•		TER OGRID NO. &			
<b>Anticipated Durat</b>	tion of Program: Drill	ing - Sixtee	en (16) e	days	1 1 T	CELETY NO. 22.	503		
	Com	pletion - Ty	wenty (2	20) days		N _ CODE <u>22.900</u>			
See attached for c	omplete Drilling Progr	ram	• ,	•		E DATE 4./6-99			
		_	XHIBITS	5	AF	INO.30-025-3	4609		
Exhibit "A": Drill	ing Program Ex	hibit "D": L	and Sur	rvey Plat	Exhil	bit "G": Rig Layout			
Exhibit "B": H <sub>2</sub> S l	-	hibit "E": V		•	Exhibit "H": BOP Layout				
Exhibit "C": Surfa		hibit "F": E	•						
ABOVE SPACE DESCRIBE P	ROPOSED PROGRAM: If proposal i	s to deepen, give	data on pre	sent productive zone as	nd propos	sed new productive zone. If pro	posal is to drill		
deepen directionally, give j	pertinent data on subsurface location	ons and measured	and true ve	rtical depths. Give blo	wout pre	venter program, if any.			
	100								
SIGNED ON	Variant for		mit Age	nt for Apache Co	огрога	ion Date 4-1	4-99		
	L. Jones, RLP, Consultin	g Landman							
(This space for Federal or S	tate office use)								
PERMIT NO.			AP	PROVAL DATE					
Application approval does not conduct operations thereon.	not warrant or certify that the application	cant noids legal o	r equitable t	rue to those rights in the	ne subject	lease which would entitle the a	pplicant to		
CONDITIONS OF PRINCIPAL	PROMETLY DA CHESIZ MIFT					151 4			
APPROVED BY Di	<u>STAICT SYMOR</u>				DAT	TE			
		*See Instruct	tions On R	leverse Side					

Title 18 U.S.C. Section 1001, makes 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.

# EXHIBIT "A" NEDU #131

# 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'
Blinebry	5600'	-2124'
Tubb	6130'	-2654'
Drinkard	6470'	-2994'
TD	6800'	-3324'

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

SUBSTANCE	<u>DEPTH</u>
Oil	Blinebry at 5600'
	Tubb at 6130'
	Drinkard at 6470'

Gas None anticipated

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	<u>WEIGHT PER</u> <u>FOOT</u>	DEP TH
11"	8 5/8"	K-55 ST&C	24#	1365'
7 7/8"	5 1/2"	K-55 LT&C	17#	6800'

- 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

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

#### SUSPENDED PIPES

DIAMETE	R (in)	WEIGHT	DEF	TH(ft)
O.D.	I.D.	(lbs/ft)	MEASURED	TRUE VERTICAL
8.625	8.097	24	1,365	1,365

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

83 ° F Est. Circ. Temp.

**VOLUME CALCULATIONS** 

35.3 cf 0.8837 cf/ft with 0 % excess 40 ft X 500.9 cf with 188 % excess 685 ft X 0.2542 cf/ft 0 % excess 162,7 cf 640 ft 0.2542 cf/ft with = Х 14.3 cf (inside pipe) 0.3576 cf/ft with 0 % excess 40 ft

713.2 cf

TOTAL SLURRY VOLUME = 127 bbls 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	1	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	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) 6,800 ft

Depth (MD) 6,800 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" .1.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.	DEPTH(ft)		
(in)	MEASURED	TRUE VERTICAL	
8.097 CASING	1,365	1,365	
7.875 HOLE	6,800	6,800	

#### SUSPENDED PIPES

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

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	×	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	×	0.1733 cf/ft	with	86 % excess	=	579.0 cf
80 ft	х	0.1305 cf/ft	with	0 % excess	=	10.4 cf (inside pipe)

TOTAL SLURRY VOLUME = 2795.5 cf

= 498 bbls

**Operator Name:** Apache Corporation Well Name:

NEDU Package

Job Description: 5 1/2" Production Casing

Date:

March 11, 1999



Proposal No: 128850946F

# **FLUID SPECIFICATIONS**

VOLUME CU-FT	•			MOUNT AND	TYPE OF CEMENT
2206	1	2.54	Cer lbs/	nent + 5% bwo sack Cello Fla	Poz (Fly Ash):Class C ow Sodium Chloride + 0.25 ke + 0.005 gps FP-6L + 8% 141.8% Fresh Water
589	1	1.3	Cer lbs/	nent + 5% bwo sack Cello Fla	Poz (Fly Ash):Class C ow Sodium Chloride + 0.25 ke + 0.005 gps FP-6L + 2% 58.5% Fresh Water
			156	.2 bbls Fresh	Water @ 8.34 ppg
ES					
			SLURRY NO. 1	SLURRY NO. 2	
			11.80	14.20	
			2.54	1.30	
ps)			14.80	5.90	•
s)			14.80	5.90	
e - 70 BC (ł	H	:MM)	3:30	3:30	
4 ° F @ 45	° a	ngle	1.0	8.0	
4 ° F			750.0	850.0	
NGTH					
osi)			200	800	
osi) osi)			350 500	1500 2000	
	2206 589 589 ES ps) e - 70 BC (14 ° F @ 45 4 ° F NGTH psi) psi)	2206 / 2206 / 589 / 589 / ES  ps) e - 70 BC (HH 4 ° F @ 45 ° a 4 ° F NGTH psi) psi)	CU-FT FACTO  2206 / 2.54  589 / 1.3  ES  ps) e - 70 BC (HH:MM) 4 ° F @ 45 ° angle 4 ° F  NGTH  psi) psi)	CU-FT FACTOR A  2206 / 2.54 = 870 Cer lbs/ bwc  589 / 1.3 = 455 Cer lbs/ bwc  156  ES  SLURRY NO. 1  11.80 2.54 ps) 14.80 9.5) 14.80 e - 70 BC (HH:MM) 3:30 4 ° F @ 45 ° angle 1.0  4 ° F 750.0  NGTH Osi) 200 osi) 200 osi) 350	CU-FT         FACTOR         AMOUNT AND           2206         / 2.54         = 870 sacks (35:65) Cement + 5% bwo lbs/sack Cello Flat bwoc Bentonite +           589         / 1.3         = 455 sacks (50:50) Cement + 5% bwo lbs/sack Cello Flat bwoc Bentonite +           156.2         bbls Fresh           ES         SLURRY SLURRY NO. 1 NO. 2           11.80         14.20           2.54         1.30           ps)         14.80         5.90           s)         14.80         5.90           e - 70 BC (HH:MM)         3:30         3:30           4 ° F @ 45 ° angle         1.0         0.8           4 ° F         750.0         850.0           NGTH         200         800           0si)         350         1500

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 sluries 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 an accelerator for cement slurries. At high concentrations, it is used for formation compatiablity.

#### Static Free

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

# EXHIBIT "B" NEDU #131

# 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<sub>2</sub>S).
- 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<sub>2</sub>S 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<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S 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<sub>2</sub>S Safety Equipment and Systems

Note: All H<sub>2</sub>S 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<sub>2</sub>S.

- 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.  $H_2S$  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 S02 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 #131

LOCATION: LOT 8 OF SECTION 3, 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:

Lot 8 of Section 3, Township 21 South, Range 37 East, N.M.P.M. Lea County, New Mexico 1253' FNL & 1244' FEL See attached Exhibits "D" and "E"

# 2) Bottom Hole Location:

Lot 8 of Section 3, Township 21 South, Range 37 East, N.M.P.M. Lea County, New Mexico 1253' FNL & 1244' FEL 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<sup>1</sup>/<sub>2</sub>SE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>
Section 4: Lot 1

Section 10: E½NW¼, NW¼NE¼, S½NE¼

Total Acres: 708.67

#### 6) Acres Dedicated to Well:

There are 40.0000 acres dedicated to this well which takes in Lot 8 of Section 3, 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 ±6 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 approximately 1½ miles to location. Access is highlighted on Exhibit "E-2".

#### 2) Planned Access:

A. <u>Length and Width:</u> A 250' 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. <u>Construction</u>: 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) <u>Location of Existing Wells:</u>

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) <u>Method of Handling Waste Material:</u>

- 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. <u>Topography:</u> The wellsite and access road are located in the Querecho Plains and are relatively flat.
- B. <u>Soil</u>: The proposed location, access road and production facilites consist of sandy soil. Slope in the proposed area ranges from zer (0) to five (5) degrees.
- C. <u>Flora and Fauna:</u> 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. <u>Ponds and Streams</u>: There are no ponds, lakes, streams or feeder creeks in the immediate area.
- E. <u>Residences and Other Structures</u>: 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. <u>Surface Ownership</u>: The surface is owned by Robert McCasland, P. O. Box 206, Eunice, New Mexico 88231, 505-394-2553. <u>A surface damage agreement is being negotiated for this tract.</u>

# H. Archaeological, Historical, and Other Cultural Sites:

Desert West Archaeological Services will be conducting an archaeological survey of the proposed NEDU #131 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: 4-14-99

DISTRICT I

#### State of New Mexico

Spercy, 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. Brawer RR, Artonia, NN 86211-6719

### OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

DISTRICT IV

DISTRICT III

P.O. Box 2088, Santa Fe, NK 87504-2066

1000 Rio Brazos Rd., Astec, NM 87410

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-25-025-3	Pool Code 22900				
Property Code 22503	-	erty Name EDU	Well Number 131		
OGRID No.	•	Operator Name			
873	APACHE	APACHE CORPORATION 3491			

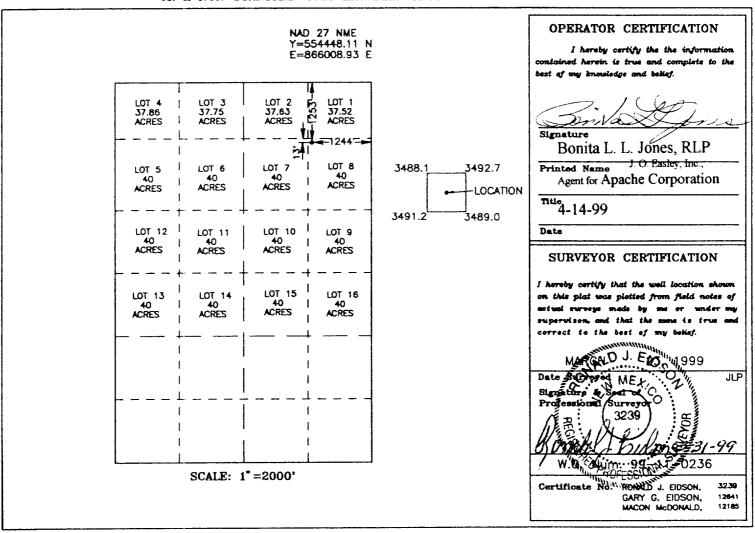
#### Surface Location

1	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
ļ	8	3	21 S	37 E		1253	NORTH	1244	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 o	r Infill C	onsolidation	Code Or	der 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



DISTRICT I P.A. Best 1980, Bobbs, NM 96841-1980

#### State of New Mexico

Energy, Minerale and Natural Resources Department

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office

State Lease - 4 Copies

DISTRICT II P.O. Brewer ND, Artonia, RM 80211-0710

OIL CONSERVATION DIVISION

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DISTRICT III 1000 Bio Brasos Rd., Astec, NM 67410

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

☐ AMENDED REPORT

DISTRICT IV P.O. Beg 2006, Santa Fe, NN 87504-2066

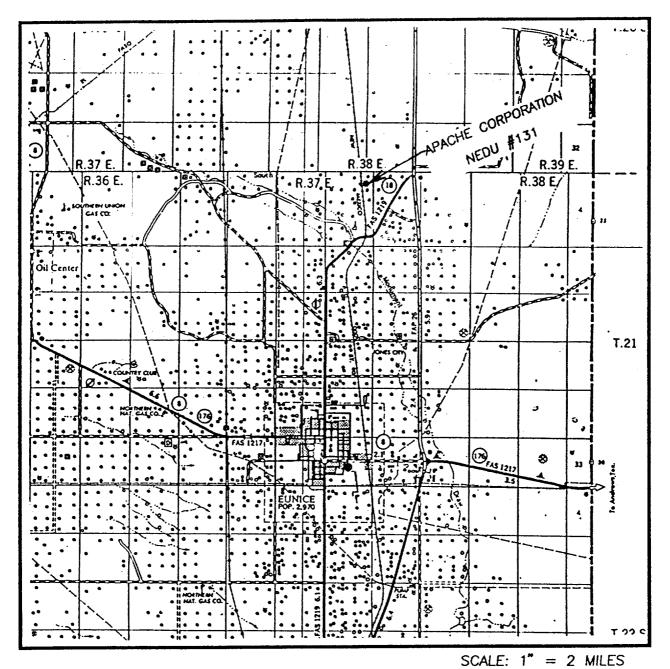
#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number				Pool Code Pool Name						
30-025		609	22	22900 Eunice Blinebry-Tubb. Drinkard N					Dorth	
Property	Code				Property Nam	erty Name Well Number				
2250	3				NEDU			13	1	
ogred n 87			Elevation 3491							
		<del>-1</del>			ACHE CORPO Surface Loc					
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
8	3	21 S	37 E		1253	NORTH	1244	EAST	LEA	
			Bottom	Hole Lo	cation If Diffe	erent From Sur	face	<u> </u>		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
Dedicated Acre	Joint of	or Infill Co	nsolidation (	Code Or	der No.		- WP-VIIII-			

# 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

	ON A HON BIAN	DAKD UNIT HAS BEI	EN APPROVED BI	THE DIVISION
LOT 2 NEDU #109 INJ	LOT 1	LOT 4	LOT 3	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and better.
1051	•			Signature  Printed Name  Title
NEDU	NEDU <b>#</b> 113 LOT 8	LOT 5	LOT 6	Date SURVEYOR CERTIFICATION
LOT 10 SEC.	ьот я З	SEC.	2 LOT 11	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.
 		 		MARCH 23, 1999  Date Surveyed JLP  Signature & Seal of Professional Surveyor
LOT 15	LOT 16	LOT 13       	LOT 14	W.O. Num. 99-11-0236  Certificate No. RONALD J. EIDSON, 3239 GARY G. EIDSON, 12641 MACON MEDONALD, 12185

# VICINITY MAP



SEC. <u>3 TWP. 21 – S RGE. 37 – E</u>

SURVEY <u>N.M.P.M.</u>

COUNTY LEA

DESCRIPTION 1253' FNL & 1244' FEL ELEVATION 3491'

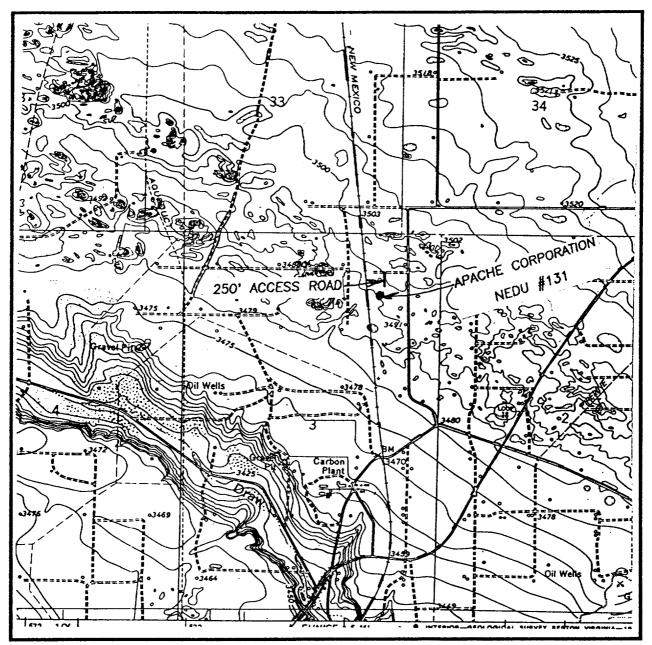
OPERATOR APACHE CORPORATION

LEASE NEDU

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



# LOCATION VERIFICATION MAP

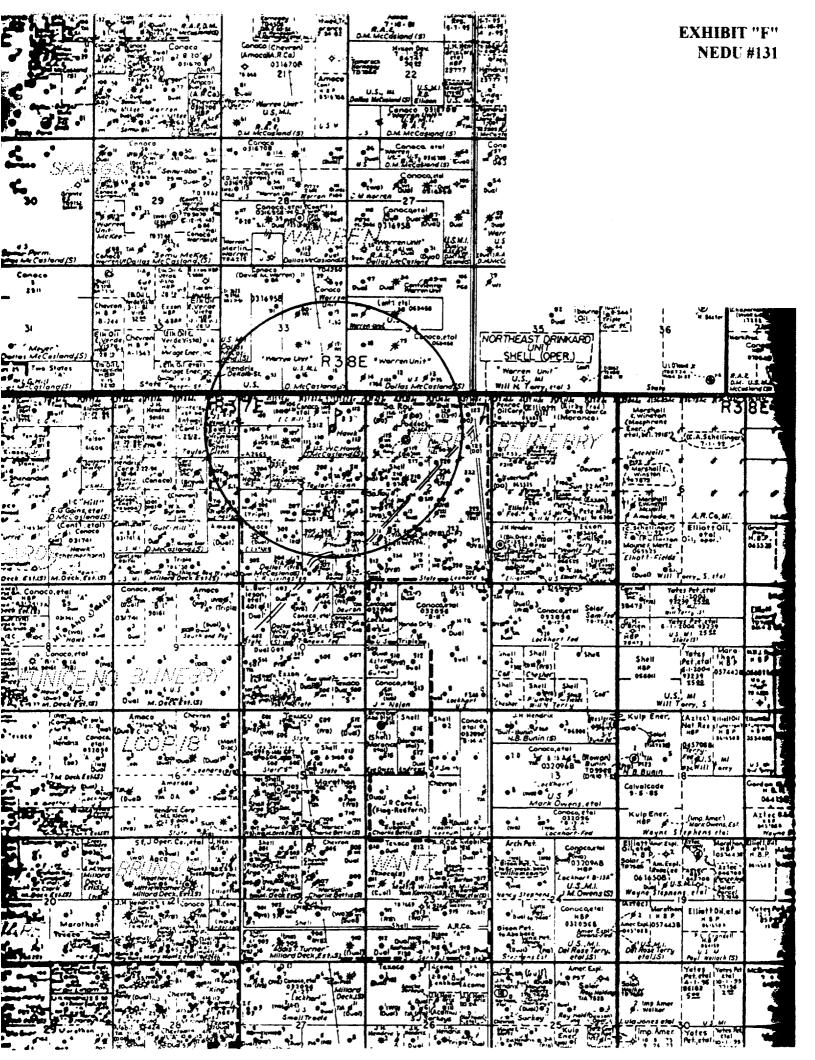


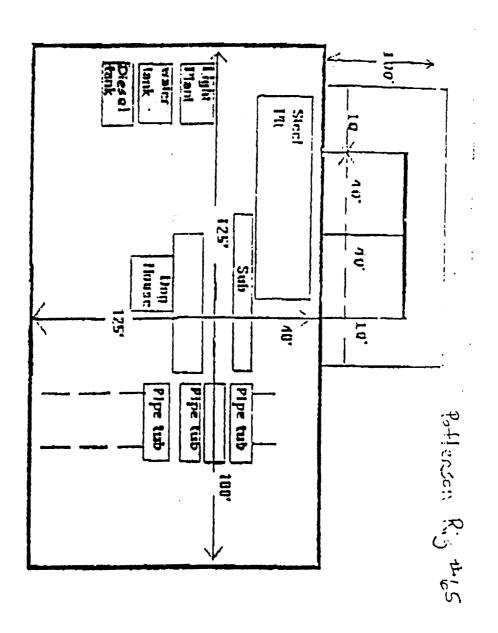
SCALE: 1" = 2000'

CONTOUR INTERVAL - 5'

SEC. 3 TWF	P. <u>21 – S</u> RGE. <u>37 – E</u>
SURVEY	N.M.P.M.
COUNTY	LEA
DESCRIPTION_1	253' FNL & 1244' FEL
ELEVATION	3491'
OPERATORA	PACHE CORPORATION
LEASE	
U.S.G.S. TOPOO HOBBS SW, N.	GRAPHIC MAP

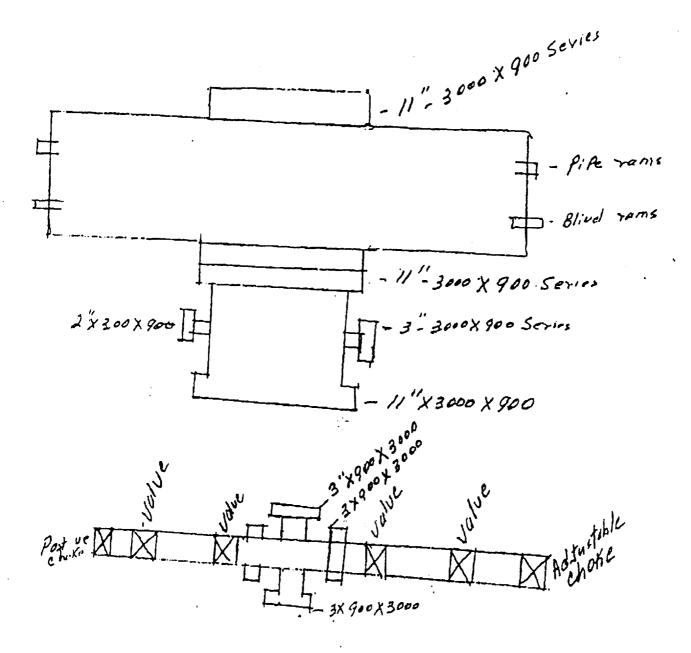
JOHN WEST SURVEYING HOBBS, NEW MEXICO (505) 393-3117







# PATTERSON DRILLING COMPANY



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