Nov. How				LODM	APPROVED	
Form 3160-3 (August 1999)				OMB N	o. 1004-013 vember 30, 2	6
UNITED STATES Department of the in	TERIOR	· · ·	-	5. Lease Serial No.		
BUREAU OF LAND MANAG		S.	24	NM-251	2	
APPLICATION FOR PERMIT TO DR		EENTER		6. If Indian, Allotte	e or Tribe	Name
la. Type of Work: 🕢 DRILL 🚺 REENTER				7. If Unit or CA Age Northeast Driv		
				8. Lease Name and V		
Ib. Type of Well:     Ib. Oil Well     Ib. Gas Well     Other       2. Name of Operator	L I Si	ngle Zone 🗹 Mul	tiple Zone	#137		
Apache Corporation				9. API Well No. <b>30-025-3</b> .	5557	,
3a. Address	3b. Phone No	. (include area code)		10. Field and Pool, or		ry
c/o Bonnie Jones, P.O. Box 83()9, Roswell, NM 88202	505-624-9	1799		Eunice; Bli-Tu-		
4. Location of Well (Report location clearly and in accordance with a	ny State requi	rements. *)		11. Sec., T., R., M., o		•
At surface 1050' FNL, 150' FEL A SUB. F				Lot 1	ИL	A
At proposed prod. zone 1050' FNL, 150' FEL		KE APPROVA	BY STA	TE Sec. 4, T21S-R	37E, NM	PM
14. Distance in miles and direction from nearest town or post office*				12. County or Parish		13. State
Approximately 5.5 miles northwest of Eunice, N	T			Lea	11	NM
15 Distance from proposed* location to nearest property or lease line, fl.	16. No. of A	cres in lease	17. Spacing	Unit dedicated to this	well	
(Also to nearest drig, unit line, if any) 1050'	70	8.67	-48	37,91		
<ol> <li>Distance from proposed location* to nearest well, drilling, completec,</li> </ol>	19. Propose	d Depth	20. BLM/B	IA Bond No. on file		
applied for, on this lease, ft. 561'	6,110'		co	-1047		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		mate date work will	start*	23. Estimated duration	0 <b>n</b>	
3,479'	ASAI	D		8 days drillin	ig	
	24. Attac	chments	Capitan (	<b>Controlled Wate</b>	r Basin	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System I SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	Lands, the	Item 20 above 5. Operator certif	). ication. specific info	unless covered by an rmation and/or plans	-	
25. Signature	Name	(Printed Typed)			Date	
Inia tra	Bonit	a L. L. Jones			3-2-01	
Title						
Agent for Apache Corporation Approved by (Signature) / //	Name	(Printed Typed)			Date	
Approved by (Signature)	Name		6. LA	KA		11-2001
Title	Office	CARL	SBÁD F	FIELD OFF		
Anig FIELD MANAGER						· · ·
Application approval does not warrant or certify that the applicant holds loperations thereon.	egal or equitat	ble title to those rights				
Conditions of approval, if any, are attached.			APP	PROVAL FC		YEAR
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it States any false, fictitious or fraudulen: statements or representations as to			and willfully to	o make to any departm	ent or agen	icy of the United
*(Instructions on reverse)			APPR	OVAL SUBJE	·^* **	
OFER. OGRID NO. 873 PROPERTY NO. 22503 POOL CODE 22400 EFF CATE 5-21-01 AEL CO 30-02 5-35557			GRNE	RAL REQUIR IAL STIPULA CHED	FMFN	TO AND
	z	<u>.</u>		-		S

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#### EXHIBIT "A" NEDU #137

#### DRILLING PROGRAM

- I. The geological surface formation is recent Permian with quaternary alluvium and other surficial deposits.
- II. Estimated Tops of Geological Markers:

FORMATION	<u>DEPTH</u>
Quaternary alluvials	Surface
Rustler	1245'
Yates	2580'
San Andres	3710'
Glorieta	5130'
Blinebry marker	5530'
TD	6110`

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

<b>SUBSTANCE</b>	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 I	FOOT	DEPTH
	12 1/4"	8 5/8"	J55 STC	24#	WITNES	\$ 1,300° 13/5
	7 7/8"	5 1/2"	J55 STC	17#		6,110'
D	Description			n		

- 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 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) Depth (MD)	1 <del>,300</del> ft <b>WITNESS</b> 1 <del>,300</del> ft
Hole Size	12.25 in
Casing Size/Weight :	8 5/8in, 24 Ibs/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

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# WELL DATA

#### ANNULAR GEOMETRY

ANNULAR I.D.	DEPTH(ft)		
(in)	MEASURED	TRUE VERTICAL	
15.376 CASING	40	40	
12.250 HOLE	<del>1,300</del> / <i>3</i> /5	1,300/575	

#### SUSPENDED PIPES

DIAMET	ER (in)	WEIGHT	DEPT	ſH(ft)
O.D.	I.D.	(lbs/ft)	MEASURED	TRUE VERTICAL
8.625	8.097	24	1,300 /3/5	1 <del>,30</del> 0/3/5

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	х	0.4127 cf/ft	with	95 % excess	=	786.9 cf
284 ft	х	0.4127 cf/ft	with	100 % excess	=	234.5 cf
40 ft	х	0.3576 cf/ft	with	0 % excess	=	14.3 cf (inside pipe)
			TOTAL	SLURRY VOLUME	=	1071.0 cf
					=	191 bbls

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#### FLUID SPECIFICATIONS

VOLUME CU-FT			~	MOUNT AND TYPE OF CEMENT	_
822	1	2.06	Chl gps	loride + 0.25 lbs/sack Cello Flake + 0.005 s FP-6L + 6% bwoc Bentonite + 101.1%	m
249	1	1.34	Chl	loride + 0.005 gps FP-6L + 56.3% Fresh	n
			80.2	.2 bbis Fresh Water @ 8.34 ppg	
S					
			SLURRY NO. 1	SLURRY NO. 2	
			12.80	14.80	
			2.06	1.34	
os)			11.39	6.35	
,			11.39	6.35	
∋ - 70 BC (H	IH:	MM)	3:30	2:20	
°F@45°a	ing	le	1.0	0.0	
, Ł			750.0	850.0	
NGTH					
,				1092	
,				1789	
,			200	3000	
			500		
	CU-FT 822 249 SS SS SS) SS) SS) SS) SS) SS) SS) SS)	CU-FT 822 / 249 / 249 / SS SS SS SS SS SS SS SS SS S	CU-FT FACTO 822 / 2.06 249 / 1.34 35 30 30 30 30 31 32 32 34 34 35 36 37 37 38 39 30 30 30 30 31 32 34 34 34 35 36 37 37 37 37 37 37 37 37 37 37	CU-FT         FACTOR         Al $822$ / $2.06$ = $40$ $gp$ Free $249$ / $1.34$ = $18$ $249$ / $1.34$ = $18$ $Ch$ $249$ / $1.34$ = $18$ $Ch$ $80.$ $1.34$ $80.$ $80.$ $80.$ $1.39$ $11.39$ $11.39$ $11.39$ $80.$ $70$ $8C$ $11.0$ $10.$ $80.$ $750.0$ $80.$ $10.$ $10.$ $80.$ $80.$ $10.$ $10.$ $10.$ $80.$ $10.$ $10.$ $10.$ $10.$	CU-FT         FACTOR         AMOUNT AND TYPE OF CEMENT           822         /         2.06         = 400 sacks Class C Cement + 2% bwow Calciu Chloride + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 6% bwoc Bentonite + 101.1% Fresh Water           249         /         1.34         = 185 sacks Class C Cement + 2% bwoc Calciur Chloride + 0.005 gps FP-6L + 56.3% Fresh Water           80.2 bbls Fresh Water         0.2 bbls Fresh Water @ 8.34 ppg           SS         SLURRY SLURRY NO. 1 NO. 2           12.80         14.80           2.06         1.34           95)         11.39           6.35           9-70 BC (HH:MM)         3:30           2:20           °F         750.0           850.0           NGTH           10         1092           1789         3000           350         350

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.

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Proposal No: 128868448A

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# JOB AT A GLANCE

6,800 ft
6,800 ft
7.875 in
5 1/2in, 17 lbs/ft
Casing 5 1/2" O.D. (4.892" .I.D) 17 #
9,165 gals
20 bbls
8.3 ppg
477 sacks
11.8 ppg
2.54 cf/sack
360 sacks
14.2 ppg
1.30 cf/sack
156 bbls
8.3 ppg

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# WELL DATA

#### ANNULAR GEOMETRY

ANNULAR I.D.	DEPTH(ft)			
(in)	MEASURED	TRUE VERTICAL		
8.097 CASING	1 <del>,210</del> / 3.25	1,210 1315		
7.875 HOLE	6,800	6,800		

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#### SUSPENDED PIPES

DIAMET	ER (in)	WEIGHT	DE	PTH(ft)
0.D.	I.D.	(lbs/ft)	MEASURED	
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	х	0.1926 cf/ft	with	0 % excess	=	233.0 cf
3,790 ft	х	0.1733 cf/ft	with	49 % excess	=	976.5 cf
1,800 ft	х	0.1733 cf/ft	with	47 % excess	=	457.5 cf
80 ft	х	0.1305 cf/ft	with	0 % excess	=	10.4 cf (inside pipe)
			TOTAL	SLURRY VOLUME	=	1677.4 cf
					=	299 bbls

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# FLUID SPECIFICATIONS

Spacer				20.	0 bbls Mud	Clean @ 8.34 ppg
FLUID	VOLUME CU-FT		VOLUM FACTO	-		D TYPE OF CEMENT
Lead Slurry	1210	1	2.54	Ce Ibs	ment + 5% b /sack Cello F	65) Poz (Fly Ash):Class C owow Sodium Chloride + 0.25 Flake + 0.005 gps FP-6L + 8% e + 141.8% Fresh Water
Tail Slurry	468	1	1.3	Ce Ibs.	ment + 5% b /sack Cello F s FP-6L + 2%	50) Poz (Fly Ash):Class H wow Sodium Chloride + 0.25 Flake + 1% bwoc FL-25 + 0.005 6 bwoc Bentonite + 58.1% Fresh
Displacement				156	3.2 bbls Fres	h Water @ 8.34 ppg
CEMENT PROPERTIE	S					
				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 (gp	,			14.80	5.85	
Amount of Mix Fluid (gps	,			14.80	5.86	
Estimated Pumping Time	•			3:30	4:00	
Free Water (mls) @ 114	°F@45°	an	gle	1.0	0.0	
Fluid Loss (cc/30min) at 1000 psi and 114	°F			750.0	208.0	
COMPRESSIVE STREN	IGTH					
12 hrs @ 114 ° F (ps				200	800	
24 hrs @ 114 ° F (ps 72 hrs @ 114 ° F (ps				350 500	1500 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.

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Newpark Drilling Fluids, Inc.

# **Drilling Fluids Recommendations**

OPERATOR .

Apache Corporation

LEGAL\_\_\_\_\_\_

WELL NAME N.E.D.U. Wells

COUNTY\_Lea, New Mexico

# ANTICIPATED FORMATION TOPS

ത	1,280' <sub>ft</sub>
	1,400 ft
0	2,620' ft.
	3,670 ft
	3,720 ft.
-	
a.	5,160' ft.

Blinebry		5,560' <sub>ft</sub>
Tubb	@ @	6,020 <sub>ft</sub>
Drinkard	@ @	6,460 <sup>-</sup> ft
Abo	@	6,750' 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

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# 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.
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Newpark Drilling Fluids, Inc.

# **Drilling Fluids Recommendations**

OPERATOR Apache Corporation

WELL NAME N.E.D.U. Wells

DEPTH	ML	ID PROPERTIES	REMARKS
1,280' - 5,000'	Weight: Viscosity: Filtrate: pH:	10.0 - 10.1 ppg 28 - 29 sec/1000cc N/C 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: Viscosity: Filtrate: pH:	10.0 - 10.2 ppg 31 - 38 sec/1000cc 10 - 15 cc/30min 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.
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**Recommended Drilling Fluid Properties (cont'd)** 



# 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 #137 OPERATOR: APACHE CORPORATION

# LOCATION: LOT 1 OF SECTION 4. 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.

#### <u>PART #1</u>:

1)	Surface Location:
	Lot 1 of Section 4, Township 21 South, Range 37 East, N.M.P.M.
	Lea County, New Mexico
	1050° FNL, 150° FEL, Lot 1
	See attached Exhibits "D" and "E"
2)	Bottom Hole Location:
	Lot 1 of Section 4, Township 21 South, Range 37 East, N.M.P.M.
	Lea County, New Mexico
	1050' FNL, 150' FEL, Lot 1
	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	5, 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>	, 4
	Section 4: Lot 1	
	Section 10: W <sup>1</sup> / <sub>2</sub> NE <sup>1</sup> / <sub>4</sub> , SE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> , E <sup>1</sup> / <sub>2</sub> ]	NW <sup>1</sup> /4
	1	Total Acres: 708.67

#### 6) <u>Acres Dedicated to Well:</u>

There are 40.00 acres dedicated to this well, which takes in Lot 1 of Section 4, Township 21 South, Range 37 East, Lea County, New Mexico.

### <u>PART #2:</u>

#### 1) <u>Existing Roads:</u>

Exhibit "E" comprises 2 maps showing the proposed well site in relation to existing roads and State Highway 18. The well is  $\pm 5\frac{1}{2}$  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-2".

# 2) <u>Planned Access:</u>

- A. <u>Length and Width:</u> A 130' 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. <u>Turnouts:</u> None required.
- D. <u>Culverts:</u> None required.
- E. <u>Cuts and Fills:</u> 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) <u>Location of Existing and/or Proposed Facilities:</u>
  - 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) <u>Source of Construction Materials:</u>

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.

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- 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) <u>Ancillary Facilities:</u> None planned.
- 9) <u>Well Site Layout:</u>
  - 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) <u>Plans for Restoration of the Surface:</u>
  - 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 facilities consist of sandy soil. Slope in the proposed area ranges from zero (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, 505-394-3022. <u>A surface damage agreement is being negotiated for this tract.</u>
- H. Archaeological, Historical, and Other Cultural Sites:

Archaeological Survey Consultants, of Roswell. New Mexico, will be conducting an archaeological survey of the proposed NEDU #137 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. <u>Operator's Representative:</u>

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

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#### 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

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						EEN APPROVED		· · · · · · · · · · · · · · · · · · ·	DR CERTIFICA	
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#### DISTRICT I P.O. Bez 1980, Hobbs, NK 86241-1960

EXHIBIT "D-2"

State of New Mexico

OIL CONSERVATION DIVISION

P.O. Box 2088

Energy, Minerals and Natural Resources Department.

#### DISTRICT II

P.O. Drawer DD, Artesis, NM 86211-0719

# DISTRICT III

1000 Rio Brazos Rd., Astec, NM 87410 DISTRICT IV

P.O. BOX 2056, SANTA FK, N.M. 87504-2086

# Santa Fe, New Mexico 87504-2088

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

□ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name N.E.D.U.	Well Number 137
OGRID No.	Operator Name APACHE CORPORATI	ON <u>Elevation</u> 3479

#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	4	21-S	37-Е		1050	NORTH	105	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 Co	onsolidation (	Code Or	der No.	<u> </u>	L	I	<u> </u>

#### 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



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EXHIBIT "E-1"

VICINITY MAP



SEC. 4\_\_\_\_TWP. 21-S\_RGE. 37-E



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SCALE: 1" = 2 MILES

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

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# EXHIBIT "E-2" LOCATION VERFICATION MAP



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EXHIBIT "G"









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EXHIBIT "H-2"

kig - + Rig # 9



3000# choke manifold

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EXHIBIT "H-3"

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# **BIG DOG DRHLLING**

110 NORTH MARIENPELD 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

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CHOKE MANIFOLD: (3000# CHOKES)

2-HAND ADJUSTABLE CHOKES 2-2" VALVES 2-4" VALVES