		T New Mexico				-1	1		
Form 3160-3 (August 1999)	- ,2.7	× .	an a	• .			FORM 4 OMB No		
		UNITED STATES	And see the	• • • • •			Expires Nov		
	DEPA	ARTMENT OF THE IN					5. Lease Serial No.		
	BUR	EAU OF LAND MANA	GEMENT				NM-2512	)	
	APPLICATION	FOR PERMIT TO D	RILL OR F	REENTER	' ')q	9	6. If Indian, Allottee	or Trit	be Name
la. Type of Work:	DRILL	REENTE	R				7. If Unit or CA Agre	æment,	Name and No.
1b Type of Well:	Oil Well 🔲 o	Gas Well 🔲 Other		Single Zone	🔲 Multi	ple Zone	8. Lease Name and W Hawk B-10		
2. Name of Opera	tor						9. API Well No.		
Apache Corp	oration (873)		<b></b>				30-025-3.	56	37
3a. Address		o. (include ai	rea code)		10. Field and Pool, or		•		
c/o Bonnie Jones	505-624				Penrose Skelly;Gra				
	·	arly and in accordance with a	any State requ	(irements, *)			11. Sec., T., R., M., or	Blk. an	d Survey or Area
	4' FNL, 2208' FEL,								
	od. zone 704' FNL, 2						Sec. 10, T21S-R	137E, I	MPM
14. Distance in mile	s and direction from ne	earest town or post office*					12. County or Parish		13. State
		north of Eunice, NM	·····				Lea		NM
15 Distance from pr location to neare property or lease	st	70.41		Acres in lease	2		g Unit dedicated to this v	vell	
18. Distance from pr		704'	19. Propos	08.67		40	J BIA Bond No. on file		
to nearest well, d	rilling, completed.		19. 110003	.u ixpui		20. BLW/E	SIA Bond No. on me		
applied for, on th	is lease, tt.	211'	445	50'		co	-1047		
21. Elevations (Sho	w whether DF, KDB,	RT, GL, etc.)		cimate date w	vork will st	art*	23. Estimated duration	n	
	3431' (KB)		ASA	<u>р</u>			9 days drillir	Ig	
			24. Atta	chments					
The following, compl	eted in accordance wit	h the requirements of Onshor	re Oil and Gas	Order No.1,	shall be att	ached to this	form:		·····
1. Well plat certified 2. A Drilling Plan.	by a registered survey	or.		ltem 2	20 above).		unless covered by an e	existing	; bond on file (see
		on National Forest System e Forest Service Office).	Lands, the	6. Such o	or certification of the site spectrum of the site spectrum of the site spectrum of the site of the site spectrum o	pecific info	rmation and/or plans a	s may b	e required by the
25. Signature	· / &	$\overline{\mathcal{O}}$	Name	: (Printed Typ	ped)			Date	
Sonika pres			Boni	Bonita L. L. Jones 5-10-01			1		
Title	Ú								
Agent for Apache			······	(D : 17					<u></u>
Approved by (Signati	, , , , , , , , , , , , , , , , , , ,	رسر بسرو وموس	Name	: (Printed Typ				Date	JUL 1 6 200
Title		E A. THEISS	Offic				THEISS FIELD OFF		
A		MANAGER	agal as south		·				
Application approval ( operations thereon.	uces not warrant or cer	tify that the applicant holds l	egai or equita	Die title to tho	-	-		the app	sucant to conduct
Conditions of approva	l, if any, are attached.					APPR	OVAL FOR	1)	EAR
		J.S.C. Section 1212, make it ments or representations as to				d willfully to	o make to any department	nt or age	ency of the United

\*(Instructions on reverse)

## Capitan Controllari Water Reale

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OFER. OGRID NO. 873
PROPERTY NO. 2.4435
POOL CODE <u>50350</u>
EFF. DATE 7-18-01
APINO. 30-025-35637

## APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

D ~ P

## RECEIVED

TO : 2 MA I I YAM 1002

BOSMELT OFFICE

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Form 3160-5 (August 1999)	I	DEPART BUREAU	UNITE JTATE MENT OF THE I J OF LAND MANA	NTI Age	EMENT IOZ	:5 I	N. French	Drassa Sa	OM	RM APPROVED B No. 1004-0135 s November 30, 2000
	SUNDR		CES AND REPO	RT	S ON WELI <b>LS</b> OI	hs	NM 892			NM-2512
	Do not use th abandoned we	is form ell. Use F	for proposals to Form 3160-3 (APE	dri )) fo	ll or to re-enter a or such proposals	n s.	, 14141 002	6. If Indian,		ttee or Tribe Name
	SUBMIT IN TR	IPLICA	TE = Other instri	ucti	ons on reverse	side	nie ale nated das 14 de nated das 14 de alester das	7. lf Unit or	CA/	Agreement, Name and/or No.
1. Type of Wel		Other						8. Well Na	me a	nd No.
2. Name of Op	erator							Hav	wk B	-10 #11
	Apache Co	orporation			······································			9. API Wel		
3a. Address				3	b. Phone No. (include	area	code)			5637
<u>c/o Bonita L. L</u>	. Jones, P. O. Box	<u>8309, Ro</u>	oswell, NM 88202		505-624-9799	)				ol, or Exploratory Area
4. Location of V	ell (Footage, Sec.,	T, R., M.,	or Survey Description	リ						; Grayburg(50350)
	704' FNL, 22	208' FEL,	Unit B, Sec. 10, T21	S-R	37E, NMPM			11. County	or Pa	rish, State
								Lea, 1	New	Mexico
	12. CHECK AP	PROPRI	ATE BOX(ES) TO	) IN	DICATE NATUR	RE O	F NOTICE, RE	EPORT, OF	101	THER DATA
TYPE OF S	UBMISSION				TY	PE O	FACTION			
		🗋 A.	cidize		Deepen		Production (Start/	Resume)		Water Shut-Off
Notice of	Intent		Iter Casing		Fracture Treat		Reclamation			Well Integrity
Subsequer	it Report	🔲 Ca	asing Repair		New Construction		Recomplete		$\checkmark$	Other Revise BOP
		Ci Ci	nange Plans		Plug and Abandon		Temporarily Aba	ndon		
🔲 Final Abar	ndonment Notice	🗋 Co	onvert to Injection		Plug Back		Water Disposal			
If the proposed of the propose	sal is to deepen dire sond under which the ompletion of the inv oeen completed. Fir that the site is ready ation hereby requ	ctionally of the work wi rolved oper nal Abando for final in ests your	r recomplete horizonta ill be performed or pro- ations. If the operatior nment Notices shall b spection.)	ily, g vide i rest e file mer	ive subsurface location the Bond No. on file v alts in a multiple comp d only after all require at that a remote contr	ns and with E letion ement	measured and true SLM/BIA. Require or recompletion in s, it cluding reclar	vertical depti d subsequent a new interv nation, have b	hs of repor al, a l been of the 3	nd approximate duration thereof all pertinent markers and zones. rts shall be filed within 30 days Form 3160-4 shall be filed once completed, and the operator has 000 psi BOP provided for in APD was in error.
					Minimum	wor	king pressure (	of the blow	out	Dreventer

Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi with a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve. A 2000 psi BOPE does not require a remote control for the accumulator

<ul><li>14. 1 hereby certify that the foregoing is true and correct Name (PrintedlTyped)</li></ul>	
Bonita L. L. Jones	Title Agent for Apache Corporation
Signature Sonika Corres	Date 6-27-01
THIS SPACE FOR FEDI	ERAL OR STATE OFFICE USE 2000 And and a state of the stat
Approved by (Signature) /s/ LESLIE A. THEISS	/s/ NESLIE A. THEISS FIELD MANAGER
Conditions of approval, if any, are attached. Approval of this notice does not certify that the applicant holds legal or equitable title to those rights in the su which would entitle the applicant to conduct operations thereon.	warrant of AFELSBAD FIELD OFFICE JUL 1 6 2001
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime a States any false, fictitious or fraudulent statements or representations as to any ma	or any person knowingly and willfully to make to any department or agency of the United tter within its jurisdiction.





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AII flunges & Volves- 2": 3000-900 Sories Mad Cm . 3 - 3" 3000 × 900 Series





## EXHIBIT "A" HAWK B-10 #11

## 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
Yates	2600
Grayburg	3800
San Andres	4000
TD	4450`

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

<u>SUBSTANCE</u>	DEPTH
Oil	Grayburg 3800-4000'
Gas	None anticipated
Fresh Water	None anticipated

All fresh water and prospectively valuable minerals (as descr bed 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 FOC		PTH
	12 ¼"	8 5/8"	J55 STC	24#	WITNESS	1,150,1325
	7 7/8"	5 1/2"	J55 STC	17#		4,450'
		<b>D</b> 0				,

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 Hydraulic BOP and will test before drilling out of surface casing. See Exhibit "H" for BOP layout.

## VII. Auxiliary Equipment:

11" x 3000 psi double BOP/blind & pipe ram

11" x 3000 psi Kelly Lock

11" x 3000 psi mud cross - H<sub>2</sub>S detector or production hole

TIW type safety valve 4" choke line from BOP to manifold

2" adjustable chokes - 1.4 blowdown line

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

B. Logging Program:

CNL, LDT, GR. CAL, DLL, MSFL & NGT from J'D-2400'

- 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)	1150 <sup>′</sup> - <del>1,200</del> ft
Depth (MD)	1150' - <del>1,200</del> ft
Hole Size	12.25 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	5,521 gais
Lead Slurry	
35:65:6 Class C + Additives	425 sacks
Density	12.5 ppg
Yield	1.97 cf/sack
Tail Slurry	
Class C + CaCl2	150 sacks
Density	14.8 ррз
Yield	1.34 cf/sack
Displacement	
Fresh Water	74 bbls
Density	8.3 ppg

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Gr4109

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## WELL DATA

#### ANNULAR GEOMETRY

ANNULAR I.D.	DEPTH(ft)			
(in)	MEASURED	TRUE VERTICAL		
12.250 HOLE	1,200	<del>1,200 ·</del>		
	1150'	1150'		

#### SUSPENDED PIPES

DIAN	ETER (in) WEIGHT		DEPTH(ft)			
O.D.	I.D.	(lbs/ft)	MEASURED	TRUE VERTICA		
8.625	8.097	24	<del>-1,200</del>	-1,200		
			1150'	1150'		
	Float Collar set @		1,160 ft			
	Mud Density		9.00 ppg			
	Mud Type		Water Based			
	Est. Static Temp.		88 ° F			
	Est. Circ. Temp.		82 ° F			

#### VOLUME CALCULATIONS

1,018 ft	x	0.4127 cf/ft	with	99 % excess	=	835.7 cf
182 ft	х	0.4127 cf/ft	with	150 % excess	=	187.4 cf
40 ft	х	0.3576 cf/ft	with	0 % excess	=	14.3 cf (inside pipe)
			TOTAL	SLURRY VOLUME	=	1037.4 cf
					z	185 bbls

This proposal is the single well pricing for the proposed well package for the Livingston wells noted below. Taget formation for this package is the San Andres formation



Gr4129

#### FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT		VOLUME FACTOR		MOUNT AND TYPE OF CEMENT
Lead Slurry	836	1	1.97	Cer Ibs/	5 sacks (35:65) Poz (Fiy Ash):Class C ement + 2% bwoc Calcium Chloride + 0.25 s/sack Cello Flake + 0.003 gps FP-6L + 6% roc Bentonite + 103% Fresh Water
Tail Slurry	202	ł	1.34		0 sacks Class C Cement + 2% bwoc Calcium loride + 56.4% Fresh Water
Displacement				73.9	9 bbls Fresh Water @ 8.33 ppg
CEMENT PROPERTIE	S				
			-	LURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)				12.50	14.80
Slurry Yield (cf/sack)				1.97	1.34
Amount of Mix Water (gp	s)			10.75	6.36
Amount of Mix Fluid (gps	;)			10.75	6.36
Estimated Pumping Time	e - 70 BC (H	H:	MM)	4:30	2:20
Free Water (mis) @ 80 °	'F@90°a	ang	le		0.0
Free Water (mls) @ 80 ° Fluid Loss (cc/30min)	'F@45°a	ang	le	1.2	
at 1000 psi and 80 °	F			710.0	850.0
COMPRESSIVE STREM	IGTH				
12 hrs @ 80 ° F (psi	)			150	1600
24 hrs @ 80 ° F (psi				400	2350
72 hrs @ 80 ° F (psi	)		•	700	3000

All slurries will be tested prior to loading to confirm thickening times and a lab report furnished to Apache. Fluid loss will be tested and reported on slurries with fluid loss additives. Lab test report will be furnished prior to pumping cement.

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## JOB AT A GLANCE

Depth (TVD)	4,450 ft
Depth (MD)	4,450 ft
Hole Size	7.875 in
Casing Size/Weight :	5 1/2 in, 15.5 lbs/ft
Pump Via	Casing 5 1/2" O.D. (4.950" .I.D) 15.5 #
Total Mix Water Required	6,192 gals
Lead Slurry	
35:65:6 Class C	476 sacks
Density	12.7 ppg
Yield	1.93 cf/s.ack
Tail Slurry	
Class C + Fluid Loss	200 sacks
Density	14.8 ppçi
Yield	1.35 cf/sack
Displacement	
Fresh Water	105 bbls
Density	8.3 ppg

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Gel115

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## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D.	DEPTH(ft)		
(in)	MEASURED	TRUE VERTICAL	
8.097 CASING	-1,200 1150'	<del>1,200</del> 1150'	
7.875 HOLE	4,450	4,450	

#### SUSPENDED PIPES

DIAMETER (in)		WEIGHT	DEI	PTH(ft)
O.D.	I.D.	(lbs/ft)	MEASURED	TRUE VERTICAL
5.500	4.950	15.5	4,450	4,450

Float Collar set @	4,410 ft
Mud Density	9.00 ppg
Mud Type	Water Based
Est. Static Temp.	109 ° F
Est. Circ. Temp.	100 ° F

## VOLUME CALCULATIONS

300 ft	х	0.1926 cf/ft	with	0 % excess	=	57.8 cf
2,485 ft	х	0.1733 cf/ft	with	100 % excess	=	861.0 cf
765 ft	х	0.1733 cf/ft	with	100 % excess	=	265.2 cf
40 ft	x	0.1336 cf/ft	with	0 % excess	=	5.3 cf (inside pipe)
			TOTAL	SĻURRY VOLUME	=	1189.3 cf
					=	212 bbls



## FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT		VOLUME FACTOR	-		
Lead Slurry	919	1	1.93	Cer	nent + 5 bs/ FP-6L + 6%	5) Poz (Fly Ash):Class C sack Sodium Chloride + 0.003 bwoc Bentonite + 99% Fresh
Tail Slurry	271	1	1.35	Pot	assium Chlo	s C Cement + 3% bwow ride + 0.2% bwoc CD-32 + 0.6% .2% bwoc Sodium Metasilicate + ater
Displacement				105	.0 bbls Frest	n Water @ 8.33 ppg
CEMENT PROPERTIE	S					
			S	SLURRY NO. 1	SLURRY NO. 2	
Slurry Weight (ppg)				12.70	14.80	
Slurry Yield (cf/sack)				1.93	1.35	
Amount of Mix Water (gr	os)			10.33	6.38	
Amount of Mix Fluid (gps	s)			10.33	6.38	
Estimated Pumping Time	•		•	3:00	2:30	
Free Water (mls) @ 98	°F@90°a	ang	le	1.8	0.0	
Fluid Loss (cc/30min) at 1000 psi and 98	°F			950.0	300.0	
COMPRESSIVE STRE	NGTH					
12 hrs @ 106 ° F (p				280	1200	
24 hrs @ 106 ° F (p			·.	375	1800	
72 hrs @ 106 ° F (p	SI)			900	2300	

All slurries will be tested prior to loading to confirm thickening times and a lab report furnished to Apache. Fluid loss will be tested and reported on slurries with fluid loss additives. Lab test report will be furnished prior to pumping cement. Newpark Drilling Fluids, LLC

# **Drilling Fluids Recommendations**

OPERATOR \_\_\_\_\_ Apache Corporation

WELL NAME Grayburg Prospects

LEGAL\_\_\_\_Sections 3, 4, & 19, T-21-S, T-37-E

COUNTY Lea, New Mexico

	AUTIORAL
Rustler	1,260' ft.
Yates	
Grayburg	
San Andres	3,920' ft
@	
@	·
@	ft.

## ANTICIPATED FORMATION TOPS

<b>@</b>	ft
@	ft
@	<b>f</b> t
	ft
@	ft.
@	ft.
@	ft.

## ANTICIPATED DRILLING PROGRAM

CASING		BIT		
SIZE	DEPTH	SIZE	NUMBER BITS	NUMBER DAYS
8-5/8"	1150 <sup>1</sup> - <del>1,280</del> '	12-1/4"	1	2
5-1/2"	4,450	7-7/8"	1	2

#### Total Days 6

## RECOMMENDED DRILLING FLUID PROPERTIES

DEPTH MUD		REMARKS
Weight: Viscosity: Filtrate; pH:	8.6 - 9.2 ppg 32 - 35 sec/1000cc N/C 9 - 10	Spud with a conventional NewGel/Lime "spud mud". Maintain sufficient viscosity to keep the hole clean. Mix Paper as needed to control seepage loss. Use Lime to control pH.
	Weight: Viscosity: Filtrate:	Weight: 8.6 - 9.2 ppg Viscosity: 32 - 35 sec/1000cc Filtrate: N/C

## **Drilling Fluids Recommendations**

OPERATOR Apache Corporation

WELL NAME Grayburg Prospects

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

DEPTH	MU	D PROPERTIES	REMARKS
<del>1,280</del> ' - 3,600' いろつ	Weight: Viscosity: Filtrate: pH:	10.0 - 10.1 ppg 28 - 29 sec/1000cc N/C 9 - 10	Drill out below Surface Casing with Brine. Circulate through the reserve for maximum gravitational solids removal. Make additions of Lime to maintain pH. Mix Paper as needed to control seepage loss.
3,600' - 4,450'	Weight: Viscosity: Filtrate: pH:	10.0 - 10.2 ppg 30 - 32 sec/1000cc 10 - 15 cc/30min 9 - 10	Confine circulation to the working pits. Discontinue adding Lima. Mix Starch for filtration control; additional viscosity should not be necessary. Continue to use Paper if needed for seepage loss. Small quantities of D-76 (defoamer) may be needed while moring Starch through the hopper. Sweep the hole with Loloss at total depth to insure the hole is clean for logging & casing operations.
		,	
		-	

## EXHIBIT "B" HAWK B-10 #11

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

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

## EXHIBIT "C"

## SURFACE USE AND OPERATIONS PLAN CULTURAL RESOURCES SURVEY APPROXIMATE REHABILITATION SCHEDULE

## LOCALITY: HAWK B-10 #11 OPERATOR: APACHE CORPORATION

## LOCATION: NW¼NE¼ 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 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>:
<u>Surface Location:</u> NW¼NE¼ of Section 10, Township 21 South, Range 37 East, N.M.P.M. Lea County. New Mexico 704' FNL, 2208' FEL, Unit B See attached Exhibits "D" and "E"
<u>Bottom Hole Location:</u> NW¼NE¼ of Section 10, Township 21 South, Range 37 East, N.M.P.M. Lea County. New Mexico 704' FNL, 2208' FEL, Unit B See attached Exhibits "D" and "E" 3) Leases Issued: NM-2512

4)	Record Lessee:	
	Apache Corporation	50%
	Atlantic Richfield Company	25%
	Chevron USA Inc.	25%
5)	Acres in Lease:	
	Township 21 South, Range 37 East, NM	<u>PM</u>
	Section 3: Lots 1, 2, 3, 4, 7, 8, 12, 15, 1	6.
	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: W <sup>1</sup> /2NE <sup>1</sup> /4, SE <sup>1</sup> /4NE <sup>1</sup> /4, E <sup>1</sup> /2NW	V <sup>1</sup> /4
	Tota	al Acres: 708.67
$\sim$		

6) Acres Dedicated to Well:

There are 40.00 acres dedicated to this well, which takes in the NW1/4NE1/4 of Section 10. Township 21 South, Range 37 East. Lea County, New Mexico.

## **PART #2:**

1) **Existing Roads:** 

Exhibit "E-1" comprises 2 maps showing the proposed well site in relation to existing roads and State Highway 18. The well is ±4 miles north of Eunice, New Mexico. From Eunice, go north approximately 3 miles on State Highway Loop 18. Turn east on lease road and turn north on lease road just west of railroad tracts, following said lease road to location. Access is highlighted on Exhibit "E-1B".

#### 2) Planned Access:

- A. Length and Width: A 50' 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.

- Location of Existing and/or Proposed Facilities: 4)
  - A. There are production facilities within the area of the Northeast Drinkard Unit.
  - B. If the oil well proves to be commercial, any necessary production facilities will be installed on the drilling pad, and flow lines will be installed along the proposed and existing roads to the production facilities and storage tanks. See Exhibit "E-2"
- 5) Location and Type of Water Supply:

Apache Corporation plans to drill the proposed well with fresh and brine water which will be obtained from Chapporal Services and will be transported by truck over proposed and existing access roads.

6) <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.
  - 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. An agreement on surface damages for this tract is currently being negotiated.
- H. Archaeological, Historical, and Other Cultural Sites:

Archaeological Survey Consultants, of Roswell, New Mexico, will be conducting an archaeological survey of the proposed HAWK B-10 #11 well which covers the drilling location, production facilities, and access road, including a corridor along said access road for power and flow lines "E-2". Their report will be filed under separate cover.

I. <u>Operator's Representative:</u>

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.

Ion.

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: <u>5-10-01</u>

DISTRICT I P.O. Box 1980, Hobbs, NM 88241-1880

DISTRICT II P.O. Drawer DD, Artania, NM 68211-0719

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

DISTRICT IV

P.O. BOX 2068, SANTA PE, N.M. 87504-2088

## State of New Mexice

Energy, Minerals and Natural Resources Department

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

□ AMENDED REPORT

## OIL CONSERVATION DIVISION P.O. Box 2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

Santa Fe, New Mexico 87504-2088

API Number Pool Code Pool Name 30-025-35637 50350 Penrose Skelly; Grayburg Property Code Property Name Well Number 24435 HAWK B-10 11 OGRID No. **Operator** Name Elevation 873 APACHE CORPORATION 3431 Surface Location UL or lot No. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County B 10 21-S 37-E 704 NORTH 2208 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. H () 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 3430.7 3418.0 contained herein is true and complete to the best of my knowledge and belief. 3436.3 3431.1 Everett Oughs Signature Everett Ouzts Printed Name GEODETIC COORDINATES Eng. Tech NAD 27 NME Y = 547145.6Title X = 865133.304-06-01 Date SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my LAT= 32'29'55.10"N LONG= 103'08'56.56"W supervison and that the same is true and correct to the best of my belief. MARCH 28, 2001 Date Surveyed AWB Signature & Seal of Professional Surveyor Cultar 03/30/01 mill 01-17-0407 Certificate No. ROMALD J. EIDSON 3239 GARY EIDSON 12641 12641 and a second second second

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

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

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV P.O. BOX 2065, SANTA FE, N.M. 87504-2086

## Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number Pool Code Pool Name 30-0250 50350 Penrose Skelly; Grayburg Property Code Property Name Well Number HAWK B-10 11 24435 OGRID No. **Operator** Name Elevation APACHE CORPORATION 3431' 873 Surface Location

UL or lot No. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County 37-E В 10 21-S 704 NORTH 2208 EAST \_EA

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				Code Or	der No.	······	1	A	·

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.
APACHE HAVK B-10 #5	<u>Everett Ousts</u> Signature <u>Everett Ouzts</u> Printed Name Eng. Tech Title 04-06-01
APACHE HAWK B-10 #6 APACHE HAWK B-10 APACHE NEDU #412	Date SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field netes of actual surveys made by me or unier my supervison and that the same is true and correct to the best of my belief.
$\frac{\text{GEODETIC COORDINATES}}{\text{NAD 27 NME}}$ $Y = 547145.6$ $X = 865133.3$	MARCH 28, 2001 Date Surveyed AWB Signature & Seal of Professional Surveyor
	01-11-0407 Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641

State of New Mexic=

Energy, Minerals and Natural Resources Dep ......

OIL CONSERVATION DIVISION

P.O. Box 2088

Form C-102 Revised February 15, 1994 Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

□ AMENDED REPORT

EXHIBIT "E-1A" VICINITY MAP



SCALE:  $1^* = 2$  MILES

MONTH

SEC. <u>10</u> TWP.<u>21-S</u> RGE. <u>37-E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>LEA</u> DESCRIPTION <u>704'FNL & 2208'FEL</u> ELEVATION <u>3431'</u> OPERATOR <u>APACHE CORPORATION</u> LEASE HAWK B-10

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

# LOCA YON VERFICATION MAP



## SCALE: 1" = 2000'

SEC. <u>10</u> TWP.<u>21-S</u> RGE. <u>37-E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>LEA</u> DESCRIPTION <u>704'FNL & 2208'FEL</u> ELEVATION <u>3431'</u> OPERATOR <u>APACHE CORPORATION</u> LEASE <u>HAWK B-10</u> U.S.G.S. TOPOGRAPHIC MAP EUNICE, .NM. CONTOUR INTERVAL: 10' EUNICE, N.M. NUNUN

JOHN WEST SURVEYING HOBBS, NEW MEXICO (505) 393-3117 EXHIBIT "E-2A"

LOCATION VERFICATION MAP



P. 2

EXHIBIT "E-2B"

---HAWKO ---N 32 29. 875 W 103 0 8. 953 HAWK B-10 BATT W 103'09.00 W. 103' 08.971 ---N. 72 29 ---W 103° 08. 848 19.14 A. 12 - 19. 164' N 32 29 612 U 103 69.05 09.048 W 703 08.979 ---. . . . . . · -----. \_ . -----. .... ----. ... ..... --------The second se ••• ... - - -- - -----... ...... \_ . . . . . . . . . . . . . . . . . . ... . . . . ... .... ••• ----... - • • -.. ••• • - -... ----. . . . . . ••• \_\_\_\_ . . . . .. . ... ----... • • • .. .... -----... • • • ••• ....

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EXHIBIT "G"

Fig 29

CONTRACTOR OF

# Big Dog Drilling





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EXHIBIT "H-2"

## **BIG DOG DRHLLING**

110 NORTH MARIENFELD MIDLAND TEXAS STIS-200-75701

**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

s.-



-

EXHIBIT "H-3"

Kig >



3000# choke manifold



