Form 3160-3					I-06-15	
		D-HOBBS	SUBMIT IN TRIPLIC	ATE *	FORM APPROVED	
(July 1992)	· · · · · · · · · · · · · · · · · · ·	,	(Other Instructions		OMB NO. 1004-0136	
····	UNITED STAT	ES	reverse side)		Expires: February 28, 1995	
(13D	DEPARTMENT OF THE	INTERIOR	······································		5. LEASE DESIGNATION AND SERIAL NO.	
Nam	BUREAU OF LAND MAN					
			O DEEDEN		NMNM-90161 6if indian, allottee or tribe name	
the second s	LICATION FOR PERMIT	TO DRILL O	K ULEPEN			11.000 (1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
1a TYPE OF WORK				-	7. UNIT AGREEMENT NAME	
1		EPEN				
b. TYPE OF WELL					8. FARM OR LEASE NAME, WELL NO - LI	42
	GAS OTHER	SINGLE	E MULTIPLE ZONE	X	Hawk B-1 #43	••
2. NAME OF OPERATO					9. API WELL NO.	
	Apache Corporation (CO14	63 Bond).(0873	OGRIDI		30-025- 39173	
•	EPHONE NO. Agent: 705 W Mescalero Rd	4Dolphy De Laurente		nes)	10. FIELD AND POOL OR WILDCAT Hare; San Andres, East (96601)	/
Anache: 6120 S. Yale	Ave. #1500. Tulsa, OK 74136 918-491	I-4801 (Terry Gilbert)	Send Approval to	Agent:		
4. LOCATION OF WEL	L (Report location clearly and in accordan	nce with any State requ	705 W. Mescaler		SEC., T., R., M., OR BLK. AND SURVEY OR AREA	
At Surface [3] At proposed prod.	30' FNL, 1495' FWL, Comparent SE		Roswell, NM 8820)1-5226		
	^{20ne} 1330' FNL, 1495' FWL, Un	III F (SE74INW74)		Ŀ	-sec. 9, T21S-R37E, NMPM	
14. DISTANCE IN MIL	ES AND DIRECTION FROM NEAREST TOWN	OR POST OFFICE*		[12. COUNTY FOR PARISH18 19 20	_
	orth of Eunice, NM				Lea 151617 18 192021	<u> </u>
15. DISTANCE FROM	and the second	1.16 M	O. OF ACRES IN LEASE	17. NO	OF ACRES ASSIGNED	2
15. DISTANCE FROM LOCATION TO NE		10.14				5
PROPERTY OR LE		(958.25		E 40:00 S	B
	drlg. unit line, if any)		All and a second second	20 000		N
	PROPOSED LOCATION * LL, DRILLING, COMPLETED 806'		ROPOSED DEPTH		ARY OR CABLE TOOLS	8
	ON THIS A PAST PT	4	,350'	1	otary V	<u>v/</u>
21. ELEVATIONS (SI	ow whether DF, RT, GR, etc.)	CONTROLLED	WATER BASIN	22. /	APPROX. DATE WORK WILL START *	/
3,499' (KB)	CAPITAN		<u>.</u>	<u></u>	ASARCa	
				14 A.		
23.	PROPOS	ED CASING AND CE	MENTING PROGRAM		en de la composition de la composition La composition de la c	
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	н	QUANTITY OF CEMENT	
		See Exhib	it A			
		See Exhib	it A			
		See Exhib	it A		N/S1-549	 ZR
Anticipated I			it A		NSL-548	38
Anticipated I	Duration of Program: Drill	ing – 16 days			NSL-548	38
	Duration of Program: Drill Com	ing – 16 days pletion - 28 day			NSL-548	38
	Duration of Program: Drill	ing – 16 days pletion - 28 day ling Program	γs		NSL-548	38
See attached	Duration of Program: Drill Com Exhibit Afor complete Dril	ing – 16 days pletion - 28 day ling Program <u>EXHI</u>	ys <u>BITS</u>			38
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EXHIBIT "A" Hawk B-1 # 43

DRILLING PROGRAM

I.	The geological surface formation is recent Perm	nian with quaternary alluvium and other surficial deposits.
П.	Estimated Tops of Geological Markers:	
	FORMATION	<u>DEPTH</u>
	Quaternary alluvials	Surface
	Rustler	1298'
	Yates	2656'
	Seven Rivers	2879'
	Queen	3439'
	Penrose	3576'
	Grayburg	3743'
	Grayburg B	3866'
	Grayburg C	3957'
	San Andres	3997'
	Base SADR Porosity	4198'
and the second	TD are a set of the	4400'
III.	Estimated depths at which water, oil, gas, or ot	ther mineral-bearing formations are expected to be encountered:
	SUBSTANCE	DEPTH
	Oil	Grayburg@3743'
		San Andres@3997 ²
		이 가지 않는 것이 같이 사람들을 통하고 있는 것이다.
	Gas	None anticipated
		그는 것이 아니는 것이 가지 않는 것이 많이 있는 것이 않을까? 이 생각이 있었다. 이 가지 않는 것이 같이 많이 나라.

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.

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A. <u>Proposed Casing Program:</u>

7 7/8" 5 ½" J55 LTC 17# 4,400' 850 TOC – Surface 4.892" 4.892" Float Collar set @ 4355"/ 10.10 ppg Brine Mud; 123 ° F Est. Static Temp;							the second s
SIZE OD / ID GRADE FOOT DEPTH CEMENT 12 ¼" 8 5/8" J55 STC 24# 400' 400 TOC - Surface 8.097" 8.097" 85% 35% 8.9 pg Water-based Mud; 89 ° F Est. Static Temp 83° F Est. Circ. Temp 83° F Est. Circ. Temp 83° F Est. Circ. Temp 7 7/8" 5 ½" J55 LTC 17# 4,400' 850 TOC - Surface 4.892" 4.892" J55 LTC 17# 4,400' 850 TOC - Surface Float Collar set @ 4355"/ 10.10 ppg Brine Mud; 123 ° F Est. Static Temp;		CASING		WEIGHT			ESTIMATED TOC -
12 0.12 0	HOLE	<u>SIZE</u>		PER		<u>SACKS</u>	<u>REMARKS</u>
8.097" 8.9 ppg Water-based Mud; 80 ° F Est. Static Temp 77/8" 5 ½" 4.892" J55 LTC 17# 4,400' 850 TOC – Surface Float Collar set @ 4355"/ 10.10 ppg Brine Mud; 123 ° F Est. Static Temp;	SIZE	OD / ID	GRADE	<u>FOOT</u>	<u>DEPTH</u>	<u>CEMENT</u>	and a second
Mud; 89 ° F Est. Static Temp 83 ° F Est. Circ. Temp 83 ° F Est. Circ. Temp 7 7/8" 5 ½" J55 LTC 17# 4,400' 850 TOC – Surface 4.892" Float Collar set @ 4355''/ 10.10 ppg Brine Mud; 123 ° F Est. Static Temp;	12 1/4"	8 5/8"	J55 STC	24#	400'	400	TOC - Surface
89 ° F Est. Static Temp 7 7/8" 5 ½" 4.892" J55 LTC 17# 4,400' 850 TOC – Surface Float Collar set @ 4355"/ 10.10 ppg Brine Mud; 123 ° F Est. Static Temp;		8.097"					
7 7/8" 5 1/2" J55 LTC 17# 4,400' 850 TOC - Surface 4.892" J55 LTC 17# 4,400' 850 TOC - Surface Float Collar set @ 4355''/ 10.10 ppg Brine Mud; 123 ° F Est. Static Temp;	ana dia 1940 Angla Angla Ang Angla Angla Ang						89 ° F Est. Static Temp;
4.892" Float Collar set @ 4355"/ 10.10 ppg Brine Mud; 123 ° F Est. Static Temp;	n an	a gangala ang sa nang sa nang sa sa nang sa	مى يەرىپىدىنى بەر بىرىيىنى بى يېرىيى بىرىيىنى بىرىيى		n - a an an fernar an an an an an an ar an a	en en particular en en en anternet en	83 ° F Est. Circ. Temp.
4355"/ 10.10 ppg Brine Mud; 123 ° F Est. Static Temp;	7 7/8"	5 1/2"	J55 LTC	17#	4,400'	850	
Brine Mud; 123 ° F Est. Static Temp;		4.892"				н на селото на селот На селото на	
123 ° F Est. Static Temp;		: •					
Temp;							
						- A	
104 ° F Est. Circ. Tem							
							104 ° F Est. Circ. Temp

B. Proposed Cement Program:

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	LUAD	SLURRY	14 - L	IAIL	SLURRY		DISPLAC	EMENT
CASING		<u>n al a</u>				<u> </u>	Od hhle Freed	Weter (2)
	100 sacks 35:65			NE			24 bbls Fres	~
	Cement + 2% by						8.33	ppg
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	00.0111 N/				. —		34.8 bbls	
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CASING 5 ½"	LEAD 450 sacks (50:5 Class C Cement Sodium Chlorid Cello Flake + 0 10% bwoc Bent	<u>SLURRY</u> 0) Poz (Fly 4 t + 5% bwov le + 0.125 lb .003 gps FP- tonite	Ash): 400 v Ash s/sack Sod	sacks (50:50):Class C Ce um Chlorid 540 V)) Poz (Fly ement + 5% b e +0.003 gps ol. Cu Ft	wow	DISPLAC	Ccl Water
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<u>CASING</u> 5 1⁄2" 400	LEAD 450 sacks (50:5 Class C Cement Sodium Chlorid Cello Flake + 0 10% bwoc Bent 1,143 V 2.66 V Slurry Weight (Slurry Yield (ct Amount of Mix 14.72; Amount of Mix <u>Estimated Pum</u> <u>BC (HH:M</u>	<u>SLURRY</u> 0) Poz (Fly 4 t + 5% bwov le + 0.125 lb .003 gps FP- tonite Vol. Cu Ft ol. Factor ppg) 11.8 f/sack) 2.54 Water (gps) ping Time – <u>M)-4:00;</u>	Ash): 400 v Ash s/sack Sod 6L + 6L Slur Slur Am) Am Esti 14.72 <u>70</u>	sacks (50:50):Class C Ce um Chlorid 540 V 1.84 V ry Weight (ry Yield (cf ount of Mix ount of Mix ount of Mix mated Pump (HH:MM)-2 ng: Volume with)) Poz (Fly ement + 5% b e +0.003 gps ol. Cu Ft ol. Factor ppg) 14.2 /sack) 1.35 Water (gps) 6 Fluid(gps) 6. bing Time – 7 3:00; Calculations:	wow 7P- 9.34; 94;) BC	<u>DISPLAC</u> 100 bbls 2% k @ 8.43 pp	Ccl Water
CASING 5 1/2" 400 265	LEAD 450 sacks (50:5 Class C Cement Sodium Chlorid Cello Flake + 0 10% bwoc Bent 1,143 V 2.66 V Slurry Weight (Slurry Yield (ct Amount of Mix 14.72; Amount of Mix <u>14.72;</u> Amount of Mix <u>14.72;</u> Amount of Mix <u>14.72;</u> Amount of Mix <u>14.72;</u> Amount of Mix <u>14.72;</u> Amount of Mix <u>14.72;</u> Amount of Mix	SLURRY 0) Poz (Fly 4 t + 5% bwov le + 0.125 lb .003 gps FP- tonite Vol. Cu Ft ol. Factor ppg) 11.8 f/sack) 2.54 Water (gps) ping Time - <u>M)-4:00;</u>	Ash): 400 v Ash s/sack Sodi 6L + 6L Slur Slur Slur Amo) Amo Esti 14.72 <u>70</u> 5 <u>1/2" Casir</u> 0.1926 cf/ft	sacks (50:50):Class C Ce lum Chlorid 540 V 1.84 V ry Weight (ry Yield (cf ount of Mix ount of Mix mated Pump (HH:MM)-: ng: Volume with with	0) Poz (Fly ement + 5% b e +0.003 gps ol. Cu Ft ol. Factor ppg) 14.2 /sack) 1.35 Water (gps) 6 Fluid(gps) 6. bing Time – 7 3:00; <u>Calculations:</u> 0% excess	wow 7P- 5.34; 54;) BC	<u>DISPLAC</u> 100 bbls 2% k @ 8.43 pp 77.04 cf	Ccl Water
CASING 5 1/2" 400 265 135	LEAD 450 sacks (50:5 Class C Cement Sodium Chlorid Cello Flake + 0 10% bwoc Bent 1,143 V 2.66 V Slurry Weight (Slurry Yield (cl Amount of Mix 14.72; Amount of Mix <u>14.72;</u> Amount of Mix <u>15.75;</u> Amount of Mix <u>14.72;</u> Amount of Mix <u>15.75;</u> Amount of	SLURRY 0) Poz (Fly 4 t + 5% bwow le + 0.125 lb .003 gps FP- tonite Vol. Cu Ft ol. Factor ppg) 11.8 f/sack) 2.54 Water (gps) Fluid (gps) ping Time – M)-4:00;	Ash): 400 v Ash s/sack Sodi 6L + 6L Slur Slur Amo) Amo Esti 14.72 <u>70</u> 5 ½" Casir 0.1926 cf/ft 0.1733 cf/ft	sacks (50:50):Class C Ce lum Chlorid 540 V 1.84 V ry Weight (ry Yield (cf ount of Mix ount of Mix mated Pump (HH:MM)-: ng: Volume with with	 D) Poz (Fly ement + 5% b e +0.003 gps ol. Cu Ft ol. Factor ppg) 14.2 /sack) 1.35 Water (gps) 6 Fluid(gps) 6. Ding Time - 76 B:00; 	wow 7P- 5.34; 54;) BC	DISPLAC 100 bbls 2% k @ 8.43 pp 77.04 cf 1189 cf	Ccl Water
CASING 5 1/2" 400 265 135	LEAD 450 sacks (50:5 Class C Cement Sodium Chlorid Cello Flake + 0 10% bwoc Bent 1,143 V 2.66 V Slurry Weight (Slurry Yield (ct Amount of Mix 14.72; Amount of Mix <u>14.72;</u> Amount of Mix <u>150 ft</u> 50 ft	SLURRY 0) Poz (Fly 4 t + 5% bwow le + 0.125 lb .003 gps FP- tonite Vol. Cu Ft ol. Factor ppg) 11.8 f/sack) 2.54 t Water (gps) ping Time - <u>M)-4:00;</u> x x x x	Ash): 400 v Ash s/sack Sodi 6L + 6L Slur Slur Ame) Ame 5 ½" Casir 0.1926 cf/ft 0.1733 cf/ft	sacks (50:50):Class C Ce um Chlorid 540 V 1.84 V ry Weight (ry Yield (cf ount of Mix ount of Mix ount of Mix mated Pump (HH:MM)-1 ng: Volume with with with with	 D) Poz (Fly ement + 5% by e +0.003 gps ol. Cu Ft ol. Factor ppg) 14.2 /sack) 1.35 Water (gps) 6 Fluid(gps) 6. bing Time - 7 3:00; Calculations: 0% excess 159% excess 35% excess 	wow FP- 5.34; 54; 0 BC	DISPLAC 100 bbls 2% k @ 8.43 pp 77.04 cf 1189 cf 433.0 cf	Ccl Water

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.

A. Proposed Mud Program

DEPTH $0 - 400^{\circ}$ 1290

MUD PROPERTIES Weight: 8.6 – 9.2 ppg Viscosity: 34 – 36 sec/qt

pH: NC Filtrate: NC



Weight: 9.0 - 10.4 ppg Viscosity: 32 - 34 sec/qt

pH: NC Filtrate: NC

3900' - TD

Weight: 10.0 - 10.4 ppgViscosity: 34 - 36 sec/qt

pH: 9-10 Filtrate: 15-20 cm/30 min

VI.

Proposed Control Equipment:

REMARKS

Spud with a Conventional New Gel/Lime "Spud mud". Use NewGel and native solids to maintain a sufficient viscosity to keep the hole clean. Mix Paper one-two sacks every 100 feet drilled to minimize wall cake build up on water sands and to control seepage loss. At TD of interval, mix in pre-mix pit, 100 barrels of system fluid, NewGel viscosity of 60 sec/100cc, add 0.25 ppb of Super Sweep.

Drill out from under the surface casing with Brine Water. Paper should be added at 2 bags after every 100' drilled to control seepage losses. Mix one gallon of New-55 at flowline every 250 feet drilled to promote solids settling. Sweep hole with 3-ppb of Super Sweep every 500 feet.

> From 3,900' to Total Depth, it is recommended the system be restricted to the working pits. Adjust and maintain pH with Caustic Soda. Treat system with Newcide to prevent dacterial degradation of organic materials. Mix Starch (yellow) to control API filtrate at <15cc-20cc.

Will install on the 8 5/8" surface casing a 9" x 3000 psi WP Double Ram BOP and will test before drilling out of surface casing. As expected pressures will not exceed 2000 psi, we request a waiver of the remote control requirement on the accumulator of the 3M BOP and a variance to run a 2M BOP, if available. See Exhibit "H" for BOP layout.

VII. Auxiliary Equipment:

9" x 3000 psi double BOP/blind & pipe ram (2M BOP if available)

41/2" x 3000 psi Kelly valve

9" x 3000 psi mud cross – H_2S detector on production hole

Gate-type safety valve 3" choke line from BOP to manifold

2" adjustable chokes - 3" blowdown line

VIII A. Testing Program: None planned

B. Logging Program: The following logs may be run:

CNL, LDT, GR, CAL, DLL, MSFL, NGT, Sonic from TD-1300'

CNL, GR from TD-Surface

C. Coring Program: None planned

D. Mudlogging 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 1500 psi.

EXHIBIT "B" Hawk B-1 # 43

*

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

No H₂S is anticipated.

EXHIBIT "C"

SURFACE USE AND OPERATIONS PLAN CULTURAL RESOURCES SURVEY APPROXIMATE REHABILITATION SCHEDULE

LOCALITY: HAWK B-1 # 43 OPERATOR: APACHE CORPORATION

LOCATION: SE¼NW¼ OF SECTION 9, T21S-R37E, N.M.P.M. LEA COUNTY, NEW MEXICO

SUBMITTED TO:

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE 620 E. GREENE ST CARLSBAD, NM 88220 TELEPHONE (505) 234-5972

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>:

ŝ

1)	Surface Location:	1				
-	SE ¹ / ₄ NW ¹ / ₄ of Sect	ion 9, Township	21 South, Ra	ange 37 Ea	st, N.M.)	P.M.
	Lea County, New	Mexico			1 A.	
	1330' FNL, 1495'	FWL, Unit F				·
	See attached Exhil	oits "D" and "E"				
2)	Bottom Hole Location	• •			ter a terrar	
	SE ¹ /4NW ¹ /4 of Sect	ion 9, Township	21 South, R	ange 37 Ea	st, N.M.	P.M.
	Lea County, New	Mexico				
•	1330' FNL, 1495'	FWL, Unit F	an a		•	
	See attached Exhil	bits "D" and "E"				
3)	Leases Issued:	NM-90161				
4)	Record Lessee:			the state		
	Apache Corporat	tion 50%				
1.1	BP America	25%				
	Chevron USA	25%				

Acres in Lease:

Township 21 South, Range 37 East, NMPM Section 4: Lots 3, 6 Section 6: E½SE¼, SW¼SE¼ Section 8: E½SW¼, SE¼ Section 9: E½NW¼, S½

Township 20 South, Range 37 East, NMPM Section 13: SW1/4NE1/4, NW1/4SW1/4

Township 20 South, Range 38 East, NMPM Section 30: Lot 1

Total Acres: 958.25

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

There are 40.00 acres dedicated to this well, which takes in the SE¹/₄NW¹/₄ of Section 9, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

PART #2:

4)

5)

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

Exhibits "E-1" & "E-2" comprise maps showing the proposed well site in relation to existing roads. From the intersection of State Highway #207 and County Road E34 (Hill Road) go North on State Highway #207 approximately 1.0 mile. Turn left (West) and go approximately 0.4 mile. Turn right (North) and go approximately 0.2 mile. Turn left (NW) and go approximately 0.4 mile. Turn left (South) and go approximately 0.15 mile. This location is approx. 150' East, as illustrated on Exhibit "E-2".

2) Planned Access:

- A. <u>Length and Width:</u> A new, 62-foot access road, 14' wide, will be constructed from the existing lease/access road to the well site. 30' will be provided in the turns. Application for a buried pipeline will be made if it becomes necessary.
- B. Construction: 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. 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:

- A. There are production facilities within the area of the Hawk B-1 lease.
- 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-3" for flow-line route.

5) <u>Location and Type of Water Supply:</u>

Apache Corporation plans to drill the proposed well with fresh and brine water which 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) 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.

Ancillary Facilities: None planned.

9) <u>Well Site Layout:</u>

8)

- 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: 150' x 210' plus 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 12 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:

I.

- A. Topography: 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. Ponds and Streams: 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 the Miller Deck Estate, c/o Bank of America NA, attention Tim Wolters. P. O. Box 270, Midland, Texas 79701, 432-685-2064. <u>A surface damage release agreement</u> was executed by the Miller Deck Estate and Apache Corporation on December 1, 2005.
- H. <u>Archaeological, Historical, and Other Cultural Sites</u>: Don Clifton, Archaeological Consultant, of Pep, New Mexico, conducted an archaeological survey of the proposed well which covers the drilling location, production facilities, and access road, including a corridor along said access road for power and flow lines. His report was filed under separate cover.
 - Senior Representative (Manager, Engineering & Production):

Ross Murphy Apache Corporation Suite 1500 – Two Warren Place 6120 South Yale Avenue Tulsa, Oklahoma 74136 (918) 491-4834

3.

Project (Operations Engineer):

Kevin Mayes Apache Corporation Suite 1500 – Two Warren Place 6120 South Yale Avenue Tulsa, Oklahoma 74136 (918) 491-4972 Drilling Operations (Operations Engineer): Terry Gilbert Apache Corporation Suite 1500 – Two Warren Place 6120 South Yale Avenue

Tulsa, Oklahoma 74136

(918) 491-4801

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.

5 On Va

Bonita L. L. Jones, RPL, Consulting Landman Agent for Apache Corporation 705 West Mescalero Road Roswell, New Mexico 88201-5226 (505) 624-9799 FAX (505) 624-9799 E-Mail: blljones@plateautel.net

Date:

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VICINITY MAP



SEC. 9 TWP. 21-S RGE. 37-E SURVEY_____N.M.P.M. COUNTY___ LEA DESCRIPTION 1330' FNL & 1495' FWL ELEVATION____ 3499' APACHE OPERATOR CORPORATION LEASE HAWK B-1



EXHIBIT E-1

EXHIBIT E-2

LOCATION VERIFICATION MAP



MAY-22-2006 14:10 From: APACHE CORPORATION 15053942425



EXHIBIT E-3

To: 5056249799

Exhibit F Hawk B-1 #43 Township 21 South, Range 37 East, NMPM Section 9: SENW 1330' FNL, 1495' FWL Lea County, New Mexico

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Exhibit G CapStar Drilling, Inc. LOCATION SPECIFICATIONS AND RIG LAYOUT FOR EARTH PITS

J.



Cellar can be 4X4X4 if using a screw-on wellhead Working Pits dug 5' below ground level

Location Specs

Exhibit H



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CONDITIONS OF APPROVAL - DRILLING

Well Name & No. Operator's Name: Location: Lease: 43 – HAWK B-1 APACHE CORPORATION 1330' FNL & 1495' FWL – SEC 9 – T21S – R37E – LEA COUNTY NM-90161

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 8-5/8 inch 5-1/2 inch

C. BOP tests

2. There is no reported occurrence of Hydrogen Sulfide (H2S) gas in Sec 9 - T21S - R37E.

3 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

1. The <u>8-5/8</u> inch surface casing shall be set at <u>400 feet</u> and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string. <u>Note: The operator shall use the Alternative Conditions of Approval – Drilling</u> (attached). Fresh water or fresh water mud shall be used to drill to the top of the Rustler <u>Anhydrite at 1290 feet</u>.

2. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>cement shall extend</u> <u>upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.</u>

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the <u>8-5/8</u> inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) is 2000 psi.

The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
 The tests shall be done by an independent service company.

- The results of the test shall be reported to the appropriate BLM office.

- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

ALTERNATIVE CONDITIONS OF APPROVAL - DRILLING

Drilling Fluids, Casing and Cementing Requirements for Most of Lea County:

Casing and Cementing

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Surface casing is to be set at a sufficient depth to protect useable water zones and cement circulated to surface. In areas where the salt section (Salado) is present, surface casing should be set at least 25 feet into the top of the Rustler Anhydrite and cement circulated to the surface.

As an alternative, surface casing may be set through the Santa Rosa Formation or other potable water bearing zones and circulate cement to surface. For wells requiring an intermediate casing string, such string shall be cemented to the ground surface. In the case where intermediate casing is not required the operator shall case and cement the production hole to the ground surface.

While drilling from the surface casing to the Rustler formation it is recommended that operators periodically sweep the hole with viscous low water loss pills to help build a filter cake across useable water zones in the redbeds.

Drilling Fluid

Fresh water or fresh water spud mud shall be used to drill to surface casing depth. If surface casing is set at a lesser depth than the top of the Rustler formation., fresh water spud mud may be used to drill down to the first salt in the Rustler Formation. after which brine or fresh water may be used.

Non-toxic or biodegradable water based polymers, drilling paper, starch and gels may be used in the mud system in order to retard seepage into the redbeds.

Two to five percent diesel or crude oil may be used in the redbed section in order to control heaving shales and mudstones.

Caustics and Lime shall not be used in the red beds but may be added when the Rustler formation is reached. However, sodium carbonate maybe used for alkalinity or ph control while drilling the redbeds above the Rustler formation.

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1.2-39790 (PRAP)-

Additionally, questions of whether an additive may be used should be referred to the Roswell Field office.

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources**

Form C-144 June 1, 2004

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes \square No \square Type of action: Registration of a pit or below-grade tank \square Closure of a pit or below-grade tank \square

Operator: _Apache Corporation (0873)Telephon	e: (918)-491-4801 e-mail address: terry.gil	bert@apachecorp.com
Address: 6120 S. Yale Ave., #1500. Tuisa, OK 74136		
Facility or well name: <u>Hawk B-1 #43</u>	: <u>30-025-38173</u> U/L or Qtr/Qtr_F_	Sec9T21SR37E
County: Lea Latitu	de <u>32° 29' 48.90" N</u> Longitude <u>103° 10'</u>	16.54" W NAD: 1927 🛛 1983 🗖
Surface Owner: Federal 🔲 State 🗂 Private 🛛 Indian 🗌		
Pit	Below-grade tank	
Type: Drilling 🖾 Production 🗌 Disposal 🗌	Volume:bbl Type of fluid:	
Workover 🔲 Emergency 🗍	Construction material:	
Lined 🔲 Unlined 🗌	Double-walled, with leak detection? Yes 🔲 If no	t, explain why not.
Liner type: Synthetic 🗋 Thicknessmil Clay 🛄		
Pit Volumebbl		
Depth to ground water (vertical distance from bottom of pit to seasona	Less than 50 feet	(20 points)
	50 feet or more, but less than 100 feet	(10 points)
high water elevation of ground water.)	100 feet or more	(0 points)
Wetthend metation areas (Lass than 200 feat from a private dometic	Yes	(20 points)
Wellhead protection area: (Less than 200 feet from a private domestic	No	(0 points)
water source, or less than 1000 feet from all other water sources.)		
Distance to surface water: (horizontal distance to all wetlands, playas,	Less than 200 feet	(20 points)
irrigation canals, ditches, and perennial and ephemeral watercourses.)	200 feet or more, but less than 1000 feet	(10 points)
	1000 feet or more	(0 points)
	Ranking Score (Total Points)	10 points

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite D offsite D If offsite, name of facility_ . (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No 🗌 Yes 🔲 If yes, show depth below ground surface_ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: UTILIZING CLOSED LOOP SYSTEM CONSISTING OF STEEL PITS AND COMPLETE HAUL OFF OF ALL LIQUIDS AND SOLIDS.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines 🛛, a general permit 🗔, or an (attached) alternative OCD-approved plan 🗍.

Date: 6-14-06 Printed Name/Title

env

Chris William Dist Signature

Signature

CARIS VILLIAM

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or lank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations. N

Approval: Printed Name/Title