K-00-TA

Form 3160-3 (July 1992)

OCD-HOBBS SUBMIT IN TRIPLICATE +

(Other Instructions on reverse side)

FORM APPROVED OMB NO. 1004-0136

**UNITED STATES** 5 DEPARTMENT OF THE INTERIOR Expires: February 28, 1995

5LEASE	DESIGNATION	AND	SERIAL	NO.
NN	/NM_901	61		

1300	PUDEALLOCIAL					5LEASE DESIGNATION AND	SERIAL NO.
	BUREAU OF LAN					NMNM-90161	
	CATION FOR P	ERMIT TO DR	ILL OR	DEEPEN		6IF INDIAN, ALLOTTEE OR	TRIBE NAME
1a TYPE OF WORK							
DR		DEEPEN				7. UNIT AGREEMENT NAME	177
b. TYPE OF WELL		_				8. FARM OR LEASE NAME, W	
OIL X GAS			SINGLE	MULTIPLE	$\mathbf{X}$	1	*** × × × × × × × × × × × × × × × × × ×
WELL WELL  2. NAME OF OPERATOR	OTHER		ZONE	ZONE		Hawk B-1 #64	
	1 0	(001462 B 1)	(00/200			30-025- 39	2100
Apa	che Corporation	(CO1463 Bond)	MARINE	Orcas)*		10. FIELD AND POOL OR WILI	CAT.
	ONE NO. Agent: 705 W Me			5-624-9799 (Bonnie .	Jones)	Eunice; Blinebry-Tubb-Drink	
ADRONE: 0120 S. Y SIC AVE 4. LOCATION OF WELL (Re	#1500. Tulsa OK 74136 eport location clearly and i	n accordance with any S	State requiren	ents.*)		11. SEC., T., R., M., OR BLK.	
At Surface 2605' I	SL, 1210' FEL, Unit		•	•		AND SURVEY OR AREA	
At proposed prod. Zone	<sup>c</sup> 2605' FSL, 1210' F	EL, Unit I (NE¼SE	E¼)			Sec. 9, T21S-R37E, N	NMPM
		·				12. COUNTY FOR PARISH	13.STATE
	ND DIRECTION FROM NEAR	EST TOWN OR POST OFFI	CE*			_	NM
±3 miles North o	t Eunice, NM					Lea	1 111/1
15. DISTANCE FROM PROP			16. NO. O	F ACRES IN LEASE		O. OF ACRES ASSIGNED	
LOCATION TO NEARES PROPERTY OR LEASE I			059	3.25	1 "	O THIS WELL 40.00	
(Also to nearest drlg.	•		),,			40.00	·
18. DISTANCE FROM PROF		<b>.</b> .	19. PROPO	DSED DEPTH	20. R	OTARY OR CABLE TOOLS	
TO NEAREST WELL, DI OR APPLIED FOR, ON I		9"	6,87	5'	- [	Rotary	
21. ELEVATIONS (Show w	whether DF, RT, GR, etc.)				2	2. APPROX. DATE WORK WILL ST	ART *
3,475' (KB)						ASAP	
23.		PROPOSED CASING	AND CEME	NTING PROGRAM			
SIZE OF HOLE	GRADE, SIZE OF CAS	ING WEIGHT P	PER FOOT	SETTING DEPT	Ħ	QUANTITY OF CEM	ENT
		See Ex	<u>khibit</u>	Α	1		
Anticipated Dura	ation of Program:	Drilling - 14	davs				
		Completion - 2				£	
See attached Exh	nibit Afor complet					₹.	
	•		Ехнівіт	s		*	,
Exhibit A: Drilli	ng Program	Exhibit D: Sur		-	Exhibit	t G: Rig Layout	
Exhibit B: H <sub>2</sub> s P		Exhibit E: Loc	-			H: BOP Layout	
Exhibit C: Surface		Exhibit F: Exis				•	
			_		and prop	osed new productive zone. If p	roposal is to drill
	e pertinent data on subsurf	ace locations and measu	red and true	vertical depths. Give	blowout	preventer program, if any.	
24.	NO						
SIGNED	Las I for	TITLE PO	ermit Age	ent for Apa	iche C	orporation DATE 8	3-25-06
Bonita L.	L. Jones, RPL (B	onnie)					
This spage for Federal or	State office use)						
FEXMIT NO.			ΑĬ	PPROVAL DATE		APPROVAL FO	R 1 YEAR
			al or equitable	e title to those rights	in the sub	ject lease which would entitle the	he applicant to
CONDITIONS OF APPROVA	<b>e/ Don Peterso</b> L, IF ANY:	n Fir	ELD M	ANAGER		SEP 1 5 2	006
APPROVED BY		TITLE	1417	MADOK	ם	ATE	

\*See Instructions On Reverse 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.

CAPITAN CONTROLLED WATER BASIN

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS **ATTACHED** 

# **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>
Quaternary alluvials	Surface
Rustler	1282'
Yates	2652'
Queen	3439'
Grayburg	3751'
San Andres	4005'
Glorieta	5193'
Blinebry	5656'
Tubb	6133'
Drinkard	6464'
Abo	6719'
TD	6875'

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

<u>SUBS</u>	TANCE	<u>DEPTH</u>
Oil		Blinebry@5656'
		Tubb@6133'
		Drinkard@6464'
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:

	CASING		WEIGHT			<b>ESTIMATED TOC -</b>
<b>HOLE</b>	SIZE		<u>PER</u>		<b>SACKS</b>	<u>REMARKS</u>
SIZE	OD / ID	<u>GRADE</u>	<b>FOOT</b>	<u>DEPTH</u>	<u>CEMENT</u>	
12 1/4"	8 5/8"	J55 STC	24#	1300'	600	TOC - Surface
	8.097"					8.9 ppg Water-based
		*_	· · · · · · · · · · · · · · · · · · ·			Mud;
		V	Vitness S	urface Ca	asing	89 ° F Est. Static Temp;
					9	83 ° F Est. Circ. Temp.
7 7/8"	5 1/2"	J55 LTC	17#	6,875° )	1,400	TOC - Surface
	4.892"					Float Collar set @
						6830 <sup>3</sup> / 10.10 ppg
						Brine Mud;
						141 ° F Est. Static
						Temp;
						117 ° F Est. Circ. Temp.

# B. Proposed Cement Program:

	LEAD	SLURRY		TA	IL SLURRY		DISPLACEMENT
<u>CASING</u>		<u></u>					
8 5/8"	400 sacks 35:65	Poz:Class C	200	0 sacks Cl	ass C Cement	+ 2%	80 bbls Fresh Water @
	Cement + 2% by		bw	oc Calciu	m Chloride + (	0.125	8.33 ppg
	Chloride + 0.25				o Flake + 56.3	%	
	Flake + 0.003 gp		Fre	sh Water			
	bwoc Bentonite	gel			0 Vol. Cu Ft		
	752 Vol. Cu Ft				4 Vol. Factor		
		ol. Factor			nt (ppg) 14.8		
	Slurry Weight (p			•	(cf/sack) 1.35		
	Slurry Yield (cf/				lix Water (gps	-	
	Amount of Mix				ımping Time –	· 70 BC	
		ed Pumping Tin	•	H:MM)-3	:00;		
	<u>70 BC (</u> )	<u>HH:MM)-4:00;</u>					
					e Calculations:		
126		0.4127 cf/ft		100% e			1040.0 cf
40 f		x 0.8214 cf/		0% exce			32.8 cf
40 f	t x	0.3576 cf/ft	with	0% exc	ess =		14.3 cf (inside pipe)
		TOTAL SLU	U <b>RRY V</b> C	LUME	=		1087.1 cf
					=		193.6 bbls
Spacer		ter @ 8.33 ppg					
CASING	LEAD S	SLURRY	·		SLURRY	·	DISPLACEMENT
5 ½"	950 sacks (50:50		•	•	50) Poz (Fły		160 bbls 2% Kcl Water
	Class C Cement		,		Cement + 5% b		@ 8.43 ppg
	Sodium Chloride			um Chlori	de +0.003 gps	FP-	
	Cello Flake + 0.0		+ 6L				
	10% bwoc Bento				Vol. Cu Ft		
		ol. Cu Ft	_		Vol. Factor		
		ol. Factor			(ppg) 14.2		
	Slurry Weight (p			-	f/sack) 1.29		
	Slurry Yield (cf/	-			w Water (gps)		
	Amount of Mix	Water (gps)			x Fluid(gps) 5.		
	14.07;				ping Time – 7	0 BC	
	Amount of Mix	,	07 (	HH:MM)	-3:00;		
	Estimated Pump						
	BC (HH:MN	<u>/1)-4:00;</u>					
					Calculations:		
	00 ft		26 cf/ft	with	0% excess	=	250.4 cf
	75 ft		33 cf/ft	with	159% excess	=	1650 cf
	00 ft		33 cf/ft		85% excess	=	609.0 cf
			A = 0/A		^^/		E 0 (01 - 111)
	40 ft		05 cf/ft	with	0% excess	=	5.2 cf(inside pipe)
	40 ft	x 0.13 TOTAL SLU			0% excess =	=	2514.6 cf 447.8 bbls

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.

# V. A. Proposed Mud Program

**DEPTH MUD PROPERTIES REMARKS** 0 - 1,300'Weight: 8.6 - 9.6 ppg Spud with a Conventional New Gel/Lime Viscosity:  $34 - 36 \sec/qt$ "Spud mud". Use NewGel and native solids to maintain a sufficient viscosity to keep the hole clean. Mix Paper one-two sacks every pH: NC Filtrate: NC 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. 1300' - 5600' Weight: 9.9 - 10.1 ppgDrill out from under the surface casing with Viscosity:  $28 - 29 \sec/qt$ Brine Water. Paper should be added at 2 bags after every 100' drilled to control seepage losses. Use Lime to maintain pH at pH: 9-10 9-10. Mix one gallon of New-55 at flowline Filtrate: NC every 250 feet drilled to promote solids settling. Sweep hole with 5-ppb of Super Sweep every 500 feet. 5600' - TD Weight: 9.9 - 10.1 ppgFrom 5600' to Total Depth, it is recommended the system be restricted to the Viscosity: 30 – 40 sec/qt working pits. Adjust and maintain pH with

> pH: 9-10 Filtrate: 8

Filtrate: 8-15 cm/30 min

recommended the system be restricted to the working pits. Adjust and maintain pH with Caustic Soda. Treat system with Newcide to prevent bacterial degradation of organic materials. Mix Starch (yellow) to control

API filtrate at <15cc.

# VI. Proposed Control Equipment:

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

 $9" \times 3000$  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 2400 psi.

EXHIBIT "B" Hawk B-1 #64

# 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-1 #64**OPERATOR: **APACHE CORPORATION** 

LOCATION: NE¼SE¼ 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.

# **PART #1**:

1) Surface Location:

NE1/4SE1/4 of Section 9, Township 21 South, Range 37 East, N.M.P.M.

Lea County, New Mexico

2605' FSL, 1210' FEL, Unit I

See attached Exhibits "D" and "E"

2) Bottom Hole Location:

NE¼SE¼ of Section 9, Township 21 South, Range 37 East, N.M.P.M.

Lea County, New Mexico

2605' FSL, 1210' FEL, Unit I

See attached Exhibits "D" and "E"

3) <u>Leases Issued:</u>

NM-90161

4) Record Lessee:

Apache Corporation 50% BP America 25% Chevron USA 25% 5) 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) Acres Dedicated to Well:

There are 40.00 acres dedicated to this well, which takes in the NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> of Section 9, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

# **PART #2:**

1) Existing Roads:

Exhibits "E-1" & "E-2" comprise maps showing the proposed well site in relation to existing roads. From intersection of Highway 8 and Loop road 207 in Eunice, New Mexico, go 3.4 miles north on Loop 207. Turn left (west) on Deck Road and go 0.2 of a mile to location on left hand side as illustrated on Exhibit "E-2".

2) Planned Access:

- A. <u>Length and Width:</u> Existing lease/access roads will be used into the well site. 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. Turnouts: None required.
- D. Culverts: None required.
- E. Cuts and Fills: As needed.
- F. Gates and Cattleguards: None required.
- 3) Location of Existing Wells:

Exhibit "F" shows existing wells within a 1-mile radius of the proposed well.

4) Location of Existing and/or Proposed Facilities:

- A. There are production facilities within the area of the 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) Location and Type of Water Supply:

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) Source of Construction Materials:

Caliche for surfacing access roads and the wellsite pad will be obtained from the location itself or from BLM pits in the area.

7) Method of Handling Waste Material:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system.
- E. Oil produced during operation will be stored in tanks until sold.
- F. Apache Corporation will comply with current laws and regulations pertaining to the disposal of human
- 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: 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) Plans for Restoration of the Surface:

- A. After completion of drilling and/or completion operations, all equipment and other material, not needed for operations, will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the proposed well is non-productive, Apache Corporation will comply with all rehabilitation and/or vegetation requirements of the Bureau of Land Management, and such rehabilitation will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.

# 11) Other Information:

- A. Topography: The wellsite and access road are located in the Querecho Plains and are relatively flat.
- B. <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. <u>Land Use:</u> The land is used for grazing cattle.
- G. <u>Surface Ownership:</u> The surface is owned by the Millard Deck Estate, c/o Bank of America NA, attention Tim Wolters. P. O. Box 270, Midland, TX 79701, 432-685-2064. A surface damage agreement between Apache Corporation and the Millard Deck Estate was executed by both parties on August 11, 2006.
- H. Archaeological, Historical, and Other Cultural Sites:

Don Clifton, Archaeological Consultant, of Pep, New Mexico, will be conducting 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 will be filed under separate cover.

I. Senior Representative (Manager, Engineering & Production):

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

# **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.

Bonita L. L. Jones, KPL, Consulting Landman

Agent for Apache Corporation

LIMPUSJONES, LLC

705 West Mescalero Road

Roswell, New Mexico 88201-5226

(505) 624-9799 FAX (505) 624-9799

E-Mail: blljones@plateautel.net

Date:	8-25-06

K-06-72 06 Exhibit D-1

# State of New Mexico

DISTRICT I 1626 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

DISTRICT II 1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C-102 Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies Pee Lease - 3 Copies

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

DISTRICT IV

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

1220 S. ST. FRANCIS DR., SANTA FR,	NM 87505	WELL LOCATION AND	ACKEAGE D	EDICATION P	LAI	☐ AMENDE:	D REPORT
30-D25-35	1983	Pool Code	.0.		ol Name	- 17 1	2
30-025-36	>1-1-1	22900	CUNICE	; Blinebra	-10pp 271	inkard,	1/02/1
Property Code		Pro	perty Name '	<i>a</i>		Well Numb	ber
24427		HA	WK B1			64	
OGRID No.		-	rator Name			Elevation	1
0873		APACHE	CORPORATIO	ON		3475	•

#### 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	9	21-S	37-E		2605	SOUTH	1210	EAST	LEA

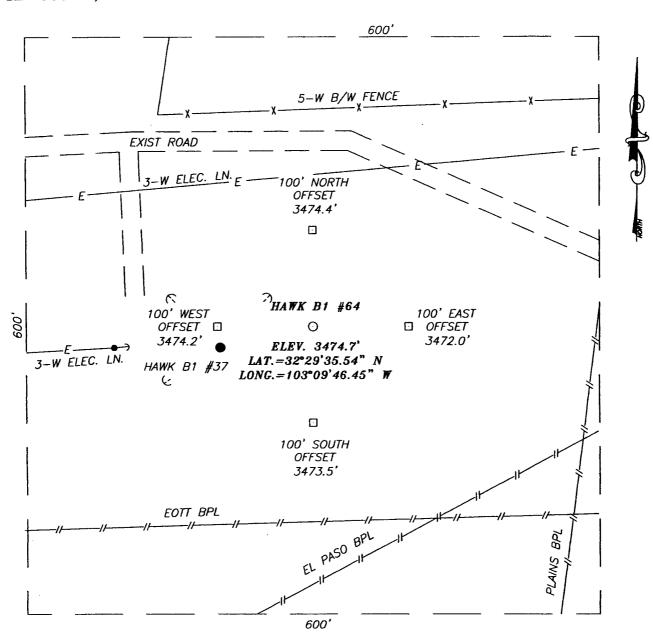
#### Bottom Hole Location If Different From Surface

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	or Infill Co	nsolidation	Code Or	der No.	L-5503			

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

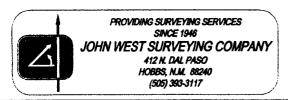
GEODETIC COORDINATES NAD 27 NME  Y=545121.2 N X=860882.1 E	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
LAT. =32°29'35.54" N LONG. =103°09'46.45" W	Lana Williams
	Lana Williams Printed Name Eng. Tech
	7/26/06  Date  SURVEYOR CERTIFICATION
1 7 1210'	I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.
	JANUARY 6, 2006  Date Surveyed JR  Signature & Seal of Professional Surveyor
	Barry & Eulma 1/17/66  06.11.0026  Certificate No. GARY EIDSON 12641
	Manufacture of the second

LEA COUNTY,



#### DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #207 CO. RD. E-35 (DECK RD.) GO WEST/NW ON CO. RD. E-35 APPROX. 0.2 MILES. TURN LEFT (SOUTH) AND GO APPROX. 200' TO THE EXISTING HAWK B1 #37 WELL. THIS LOCATION IS APPROX. 100' EAST.



100 0 100 200 Feet

Scale: 1"=100'

# APACHE CORPORATION

HAWK B1 #64 WELL

LOCATED 2605 FEET FROM THE SOUTH LINE

AND 1210 FEET FROM THE EAST LINE OF SECTION 9,

TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO.

Survey Date: 1,	/06/06		Sheet	1	of	1	Sheets
W.O. Number: 06	.11.0026	Dr	By: J.R.		Re	v 1:	N/A
Date: 1/13/06	Disk: CD#	¥6	0611	002	6	Scal	e:1 "=100"

#### State of New Mexico

DISTRICT I 1625 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III

# OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C-102 Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

1000 Rio Brazos Rd., Axtec, NM 87410

DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT ☐ AMENDED REPORT 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505 Pool Code API Number Property Name Well Number Property Code HAWK B1 64 Operator Name OGRID No. Elevation APACHE CORPORATION 3475

# Surface Location

١	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	1	9	21-S	37-E		2605	SOUTH	1210	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	nsolidation (	Code Ore	ler No.				

# NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

SLR A #1  SLR A #6  HAWK B1 #37  HAWK B1 #13	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Lana Williams  Signature  Lana Williams  Printed Name  Eng Tech  Title  7/26/06  Date  SURVEYOR CERTIFICATION  I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison and that the same is true and correct to the best of my belief.  JANUARY 6, 2006  Date Surveyed  Signature & Seal of Professional Surveyor
	O6.11.0026  Certificate No. GARY EIDSON 12841

# VICINITY MAP

	20	SI		22	23	24		80 19 84		50	21	i	22	53		24 88 B		,	20
MA	29 DDOX	28		27 HILL	26	25		30		29	28		27	26		25	30		S 88 89 B
	32	ST. 8	33	34	35	HILL 36		31		32	33		34	35		36	3	1	32
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ÖΙ	L Ç	EN	TE	ER "	12	2	7		8	9		10	11	1	2	7		8	9
GULF	E3 16 ST. 17	ST. 8	15 EUNI RECE	14 ICE MUNICIPA REATION AREA	L 13	CURPY	18	17	TURNER	16	15	1	14 NES CIT		13 VATE RD	18	P	RIVATE RE	M
20	21	17		23 7	24	R 36 E R 37 E	19		50 A 50 S	a EEU	NI(	CE	E38	2	4 6	R 36 19		50	12 R 38
9	28 28	A CO EL	UNICE 27	AP 26		5 5	30		N. 108	•	E33	NTINE	TAL 26 %	ST. 18	25 PRI	VATE RE	1	29	28
32	33		34	35	36		31	32 T	EXAS	E23	ITY LINI	31	ST. 2:		36	31	2 .12	32 34	33
5	4		3	5	1		6		LEGION S	4 66		3	s	ARD	1	6		5	4
8	9		10	II DELA	12 WARE BA	SIN	7		S, LE	9		10	11 3	DRINKARD	15	7		8	9
	16		15	14	E21		18		17	16	1	5	1.		13 6	2 16 2 16 2 24	,	17	16 sx
20	21		ss	53	24	R 36 E	19		50	21		22	23	20	24	19		20	21 21

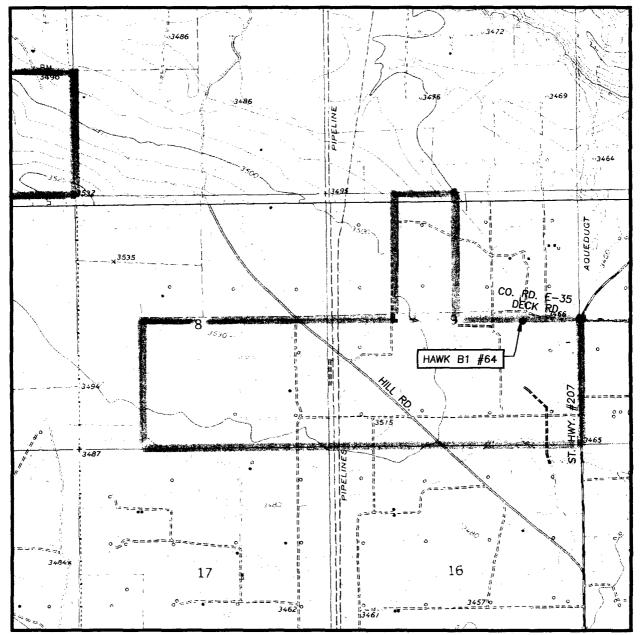
SCALE: 1" = 2 MILES

SEC. <u>9</u> T	VP. <u>21-S</u> RGE. <u>37-E</u>
SURVEY	N.M.P.M.
COUNTY	LEA
	2605' FSL & 1210' FEL
ELEVATION_	
OPERATOR	APACHE
LEASE	HAWK R1
1 - 4 > -	MAWK HI





# LOCATION VERIFICATION WAS A



SCALE: 1" = 2000'

SEC. 9 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY\_\_\_\_LEA

DESCRIPTION 2605' FSL & 1210' FEL

ELEVATION 3475'

APACHE
OPERATOR \_\_\_\_\_CORPORATION

LEASE HAWK B1

U.S.G.S. TOPOGRAPHIC MAP

HOBBS SW, N.M.

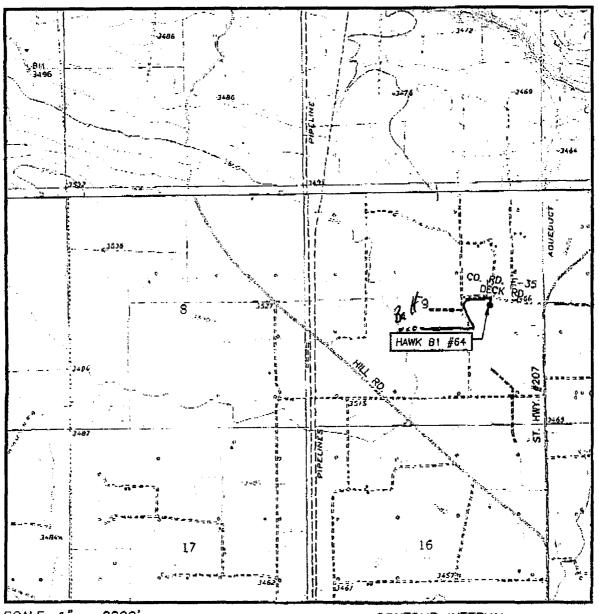
CONTOUR INTERVAL: HOBBS SW, N.M. - 10' EUNICE, N.M. - 10'



PROVIDING SURVEYING SERVICES SINCE 1946 JOHN WEST SURVEYING COMPANY 412 N. DAL PASO HOBBS, N.M. 88240 (505) 383-3117

LEASE BOUNDARY

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. 9 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY\_\_\_\_LEA

DESCRIPTION 2605' FSL & 1210' FEL

\_3475<sup>'</sup> ELEVATION \_\_\_\_

APACHE CORPORATION OPERATOR \_\_\_\_

LEASE\_\_\_\_\_ HAWK B1

U.S.G.S. TOPOGRAPHIC MAP

HOBBS SW, N.M.

CONTOUR INTERVAL: HOBBS SW, N.M. - 10' EUNICE, N.M. - 10'



PROVIDING SURVEYING SERVICES SINCE 1948 JOHN WEST SURVEYING COMPANY 412 NL CIAL PASO HORBS N.M. 58240 (506) 393-3117

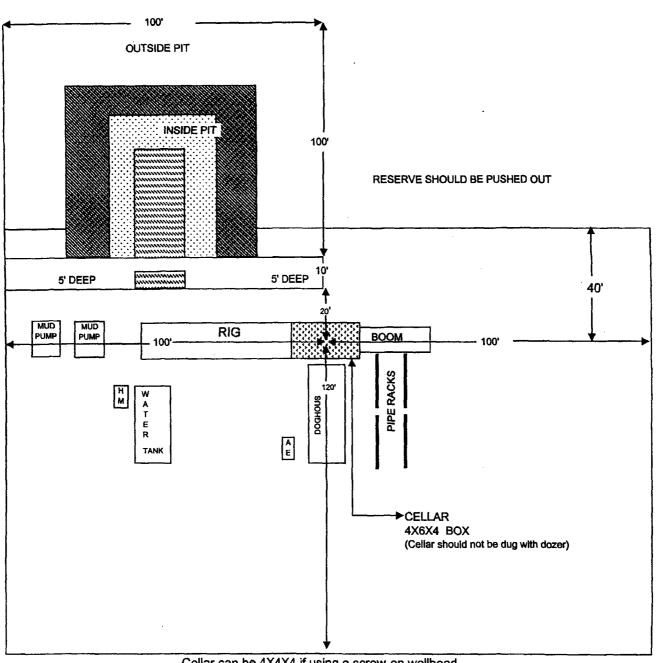
Flow Lines

# Exhibit F Hawk B-1 #64 Township 21 South, Range 37 East, NMPM Section 9: NESE 2605' FSL, 1,210' FEL (Unit I) Lea County, New Mexico



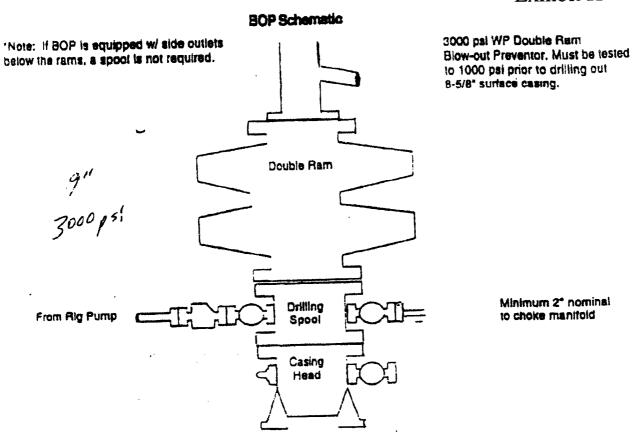
# Exhibit G CapStar Drilling, Inc. LOCATION SPECIFICATIONS AND RIG LAYOUT FOR EARTH PITS

Rig #8

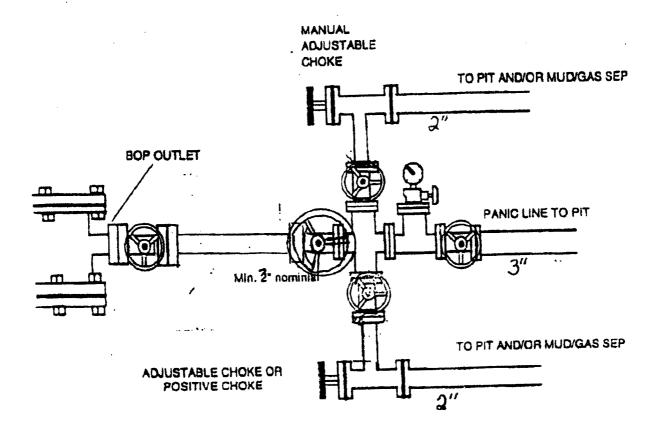


Cellar can be 4X4X4 if using a screw-on wellhead Working Pits dug 5' below ground level

# Exhibit H



# Choke Manifold Schematic



#### CONDITIONS OF APPROVAL - DRILLING

Well Name & No.

Hawk B-1 #64

Operator's Name:

**Apache Corporation** 

Location:

2605 FSL, 1210 FEL, Section 9, T-21-S, R-37-E

Lease:

NMNM-90161

# **I. DRILLING OPERATIONS REQUIREMENTS:**

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5972 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. A Hydrogen Sulfide (H2S) Drilling Plan should be activated prior to drilling into the <u>Glorieta</u> Formation. A copy of the plan shall be posted at the drilling site. Hydrogen Sulfide has been reported in wells in section 3 and 10 in amounts from 200-800 ppm in gas streams and 400-130,000 in STVs.
- 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.
- 6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.
- 7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

#### II. CASING:

1. The 8-5/8 inch surface casing shall be set below usable water (25' into the Rustler) 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.

# Possible lost circulation in the Glorieta.

2. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>cement shall circulate</u> to surface.

# **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.
- 3. 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.

Engineer (after hours): 505-706-2779

District 1
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

Oil Conservation Division
1220 South St. Francis Dr.

Sents Fo. NPA 87505

For deviling appropria For down office

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

Form C-144 June 1, 2004

Santa Fe, NM 87505

Pit or Below-Grade Tank Registration or Closure
Is pit or below-grade tank covered by a "general plan"? Yes No

Type of action: Registration of a pit	or below-grade tank [ Closure of a pit or below-	ow-grade tank 🔲
Operator: Apache Corporation (0873) Telepho	918-491-4801 e-mail address	terry.gilbert@usa.apachecorp.com
6120 S. Yale Ave., #1500, Tulsa, OK 74136	- 0	
Facility or well name: Hawk B-1 #64 API #:	30-025 3619 U/L or Qtr/Qtr	I Sec 9 T 21S R 37E
County: Lea Latitude	Longitude	
Surface Owner: Federal State Private Indian	Longitude	1770. 1727 [3 5700 [
Pit	Below-grade tank	
Type: Drilling Production Disposal	Volume:bbl Type of fluid:	
Workover	Construction material:	
Lined X Unlined	Double-walled, with leak detection? Yes	
Liner type: Synthetic X Thickness 20 mil Clay		
Pit Volume 7105 bbl	10 1. 5.	
t o	Coss than 50 feet	(20 points)
Depth to ground water (vertical distance from bottom of pit to seasonal	<b>4</b> %	(10
high water elevation of ground water.)	Y00 Qu or more	(10 points) /D
100	<del></del>	
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water sources.)	· No	( 0 points)
	Less than 200 feet	(20 points)
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points)
irrigation canals, ditches, and perennial and ephemeral watercourses.)	1000 feet or more	( 0 points)
	Ranking Score (Total Points)	//
	Naming Store (1 oraș 1 omia)	
If this is a pit clasure: (1) Attach a diagram of the facility showing the pit		• •
your are burying in place) onsite 🔲 offsite 🔲 If offsite, name of facility_	(3) Attach a ge	neral description of remedial action taken including
remediation start date and end date. (4) Groundwater encountered; No 🔲	Yes I If yes, show depth below ground surfac	eft. and attach sample results.
(5) Attach soil sample results and a diagram of sample locations and excav-	ations.	
Additional Comments:		
		······································
I hereby certify that the information above is true and complete to the bes has been/will be constructed or closed according to NMOCD guideling		
	ics (, a general permit (), or an (attached) a	жегнату¢ ОСD-арргоуец plan ∐. ∕
Date: 8-25-66		11/
Printed Name/Title Printed Il Bert	Signature /	Uh,
Your certification and NMOCD approval of this application/closure does otherwise endanger public health or the environment. Nor does it relieve regulations.	not relieve the operator of liability should the co the operator of its responsibility for compliance	entents of the pit or tank contaminate ground water or with any other federal, state, or local laws and/or
Approval:	2 . /	- 0 - 1
Printed Name/Title CHRIS WILL/AMS/DIST. S	SIA Signature	Sellem Date: 12/4/06