

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE \*  
(Other instructions on  
reverse side)

FORM APPROVED  
OMB NO. 1004-0136

Expires: February 28, 1995

5. LEASE DESIGNATION AND SERIAL NO.

NMNM-90161

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

NMNM-116284

8. FARM OR LEASE NAME, WELL NO.

Hawk B-1 #66

9. API WELL NO.

30-025-38521

10. FIELD AND POOL OR WILDCAT

Eunice; Blinberry-Tubb-Drinkard, North (22900)

11. SEC., T., R., M., OR BLK.

AND SURVEY OR AREA

Sec. 8, T21S-R37E, NMPM

1a TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☒

2. NAME OF OPERATOR

Apache Corporation (CO1463 Bond) (0873 OGRID)

3. ADDRESS AND TELEPHONE NO. Agent: 705 W Mescalero Rd., Roswell, NM 88201 505-624-9799 (Bonnie Jones)

Apache: 6120 S. Yale Ave., #1500 Tulsa, OK 74136 918-491-4801 (Terry Gilbert)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At Surface 2620' FSL, 20' FEL, Unit I (NE 1/4 SE 1/4)

At proposed prod. Zone 2620' FSL, 20' FEL, Unit I (NE 1/4 SE 1/4)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

±3.75 miles Northwest of Eunice, NM

12. COUNTY FOR PARISH

Lea

13. STATE

NM

15. DISTANCE FROM PROPOSED \*

LOCATION TO NEAREST 20'

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE

958.25

17. NO. OF ACRES ASSIGNED

TO THIS WELL

40.00

18. DISTANCE FROM PROPOSED LOCATION \*

TO NEAREST WELL, DRILLING, COMPLETED 553'

OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

6,975'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3,522' (KB)

22. APPROX. DATE WORK WILL START \*

ASAP

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
		See Exhibit A		

Anticipated Duration of Program: Drilling - 14 days

Completion - 28 days

See attached Exhibit A for complete Drilling Program

EXHIBITS

Exhibit A: Drilling Program

Exhibit D: Survey Plat

Exhibit G: Rig Layout

Exhibit B: H<sub>2</sub>S Plan

Exhibit E: Location Plat

Exhibit H: BOP Layout

Exhibit C: Surface Use Plan

Exhibit F: Existing Well Plat

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

*Bonita L. L. Jones*  
Bonita L. L. Jones, RPL (Bonnie)

TITLE Permit Agent for

Apache Corporation

DATE

8-24-06

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

FIELD MANAGER

SEP 15 2006

APPROVED BY

TITLE

DATE

\*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, or to make to any matter within its jurisdiction.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

APPROVAL FOR 1 YEAR

## State of New Mexico

Energy, Minerals and Natural Resources Department

## DISTRICT I

1625 N. FRENCH DR., HOBBS, NM 88240

## DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

## 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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number <b>30-025-38521</b>	Pool Code <b>22900</b>	Pool Name <b>Eunice; Blinebry-Tubb-Drinkord, North</b>
Property Code <b>24427</b>	Property Name <b>HAWK B-1</b>	Well Number <b>66</b>
OGRID No. <b>0873</b>	Operator Name <b>APACHE CORPORATION</b>	Elevation <b>3522'</b>

## 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>1</b>	<b>8</b>	<b>21-S</b>	<b>37-E</b>		<b>2620</b>	<b>SOUTH</b>	<b>20</b>	<b>EAST</b>	<b>LEA</b>

## 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 <b>40.00</b>	Joint or Infill	Consolidation Code	Order No. <b>NSL-5464 (SD)</b>						

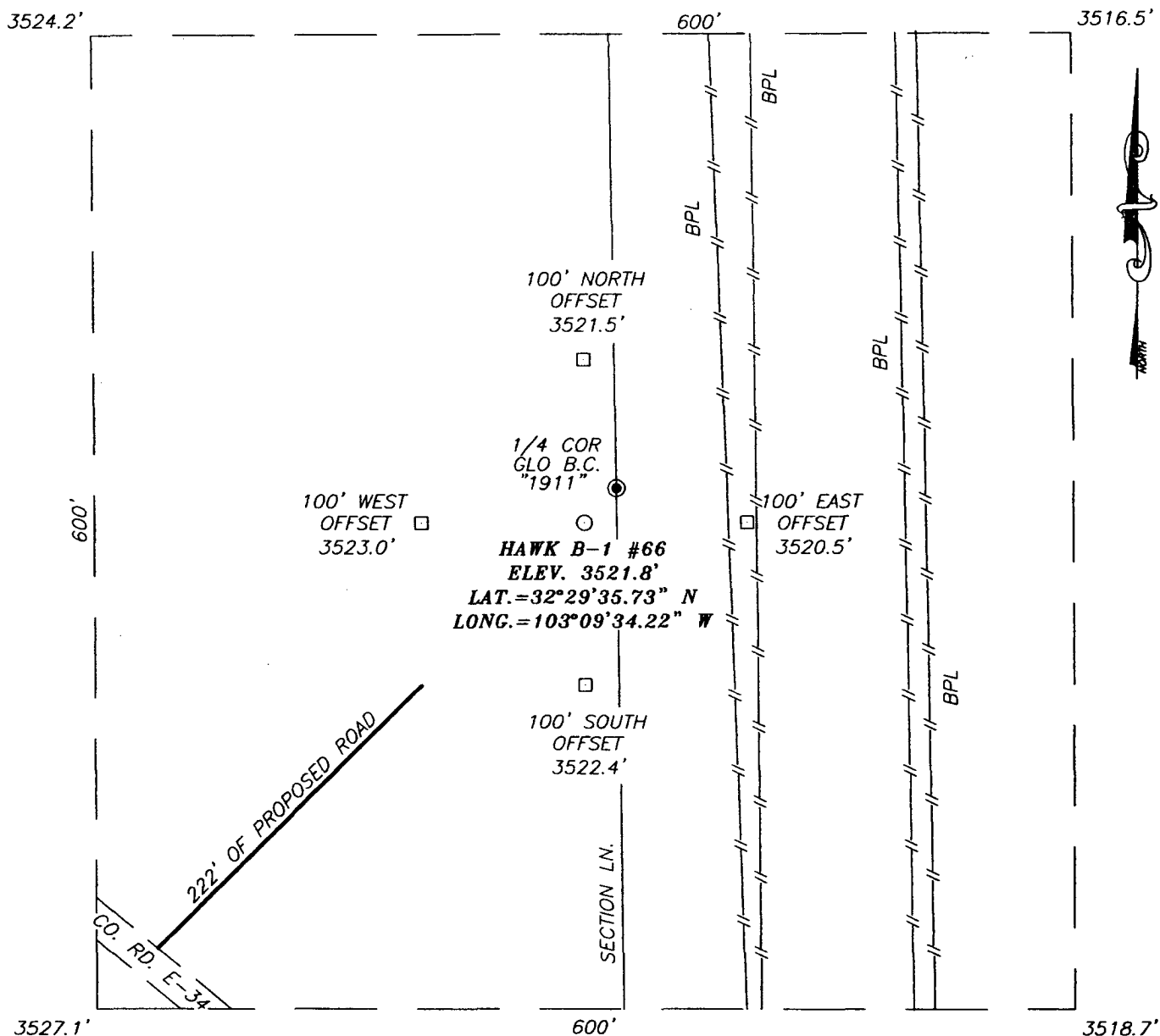
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=545096.0 N X=856790.5 E</p> <p>LAT.=32°29'35.73" N LONG.=103°10'34.22" W</p>		<p>SECTION 8</p> <p>SECTION 9</p>		<p>20'</p> <p>SEE DETAIL</p>		<p>DETAIL</p> <p>3524.2' 3516.5'</p> <p>600' 600'</p> <p>3527.1' 3518.7'</p>		<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Lana Williams</i> Signature</p> <p><b>Lana Williams</b> Printed Name</p> <p><b>Eng. Tech</b> Title</p> <p><b>7/26/06</b> Date</p>		<p><b>SURVEYOR CERTIFICATION</b></p> <p>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 supervision, and that the same is true and correct to the best of my belief.</p> <p><b>JANUARY 18, 2006</b></p> <p>Date Surveyed <b>Rev 2/1/06 JR</b></p> <p>Signature &amp; Seal of Professional Surveyor</p> <p><i>Gary Eidson</i> <b>2/1/06</b></p> <p><b>06.11.0068</b></p> <p>Certificate No. <b>GARY EIDSON</b> <b>12841</b></p>	
--	--	-----------------------------------	--	----------------------------------	--	--	--	--	--	---	--

# SECTION 8, TOWNSHIP 21 SOUTH, RANGE 37 EAS

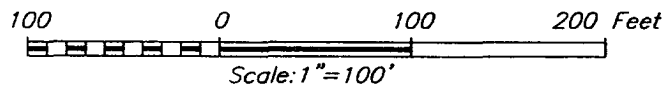
LEA COUNTY,

Exhibit D-2  
NEW MEXICO



## DIRECTIONS TO LOCATION

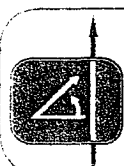
FROM THE INTERSECTION OF ST. HWY. #207 CO. RD. E-34 (HILL RD.) GO NW ON CO. RD. E-34 APPROX. 1.5 MILES TO A PROPOSED ROAD SURVEY. FOLLOW PROPOSED ROAD SURVEY APPROX. 222' NE TO THIS LOCATION.



## APACHE CORPORATION

HAWK B-1 #66 WELL  
LOCATED 2620 FEET FROM THE SOUTH LINE  
AND 20 FEET FROM THE EAST LINE OF SECTION 8,  
TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.

Survey Date: 1/18/06	Sheet 1 of 1 Sheets
W.O. Number: 06.11.0068	Dr By: J.R.
Date: 1/25/06	Disk: CD#6
06110068	Scale: 1"=100'



PROVIDING SURVEYING SERVICES  
SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
412 N. DAL PASO  
HOBBS, N.M. 88240  
(505) 393-3117

DISTRICT I  
1825 N. FRENCH DR., HOBBS, NM 88240

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

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

DISTRICT IV  
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Exhibit D-3

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name HAWK B-1	Well Number 66
OGRID No.	Operator Name APACHE CORPORATION	Elevation 3522'

Surface Location

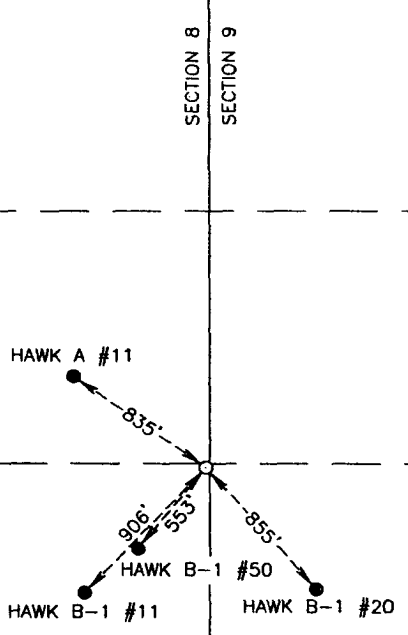
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	8	21-S	37-E		2620	SOUTH	20	EAST	LEA

Bottom Hole Location If Different From Surface

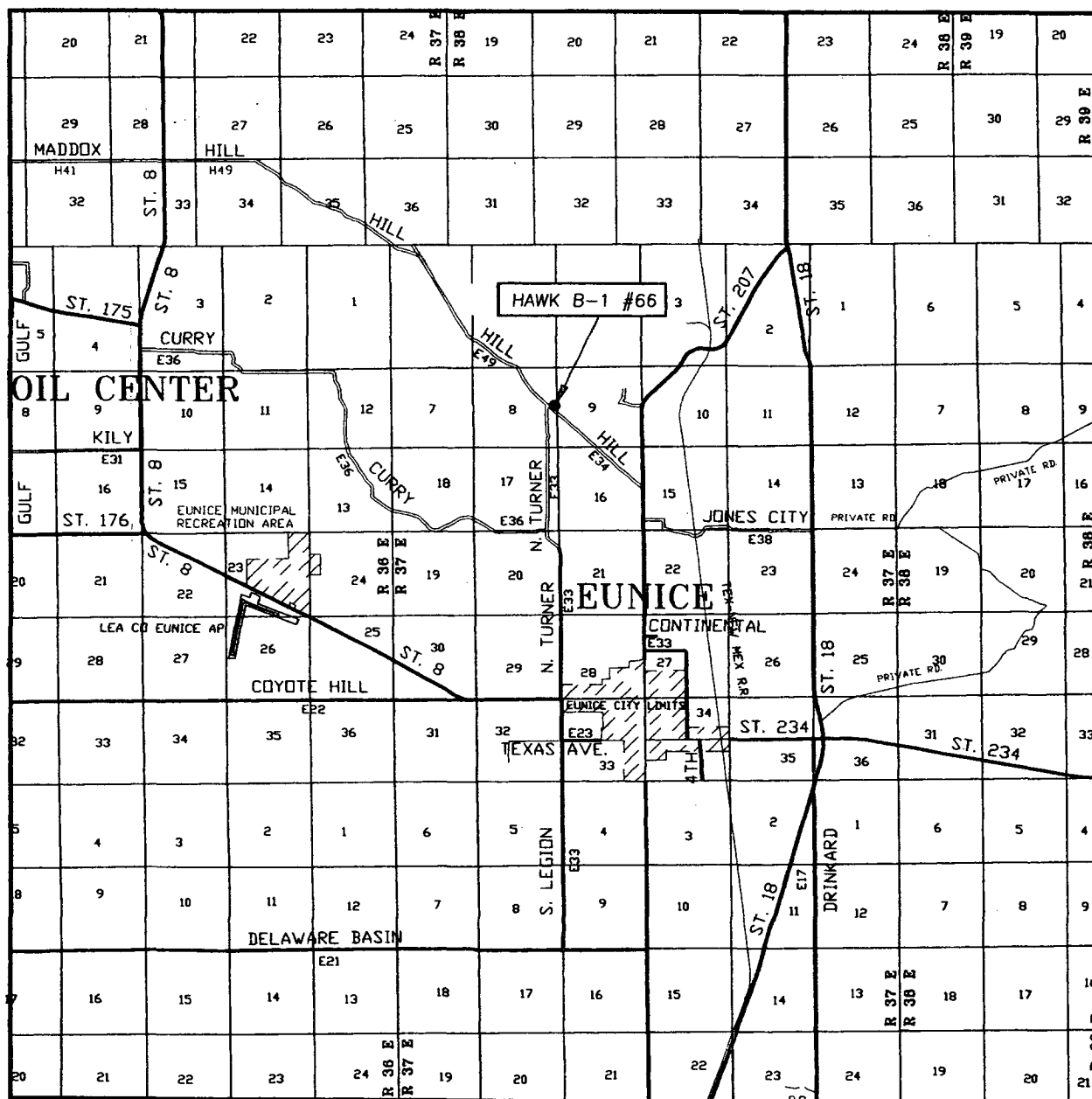
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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

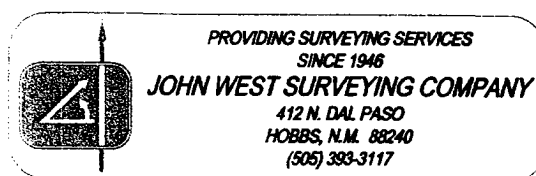
	<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  <u>Lana Williams</u> Signature <u>Lana Williams</u> Printed Name <u>Eng. Tech</u> Title <u>7/26/06</u> Date
	<b>SURVEYOR CERTIFICATION</b>  I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.  JANUARY 18, 2006 Date Surveyed <u>Rev. 2/1/06</u> JR Signature & Seal of Professional Surveyor
	06.11.0068
	Certificate No. GARY EIDSON 12841

## VICINITY MAP

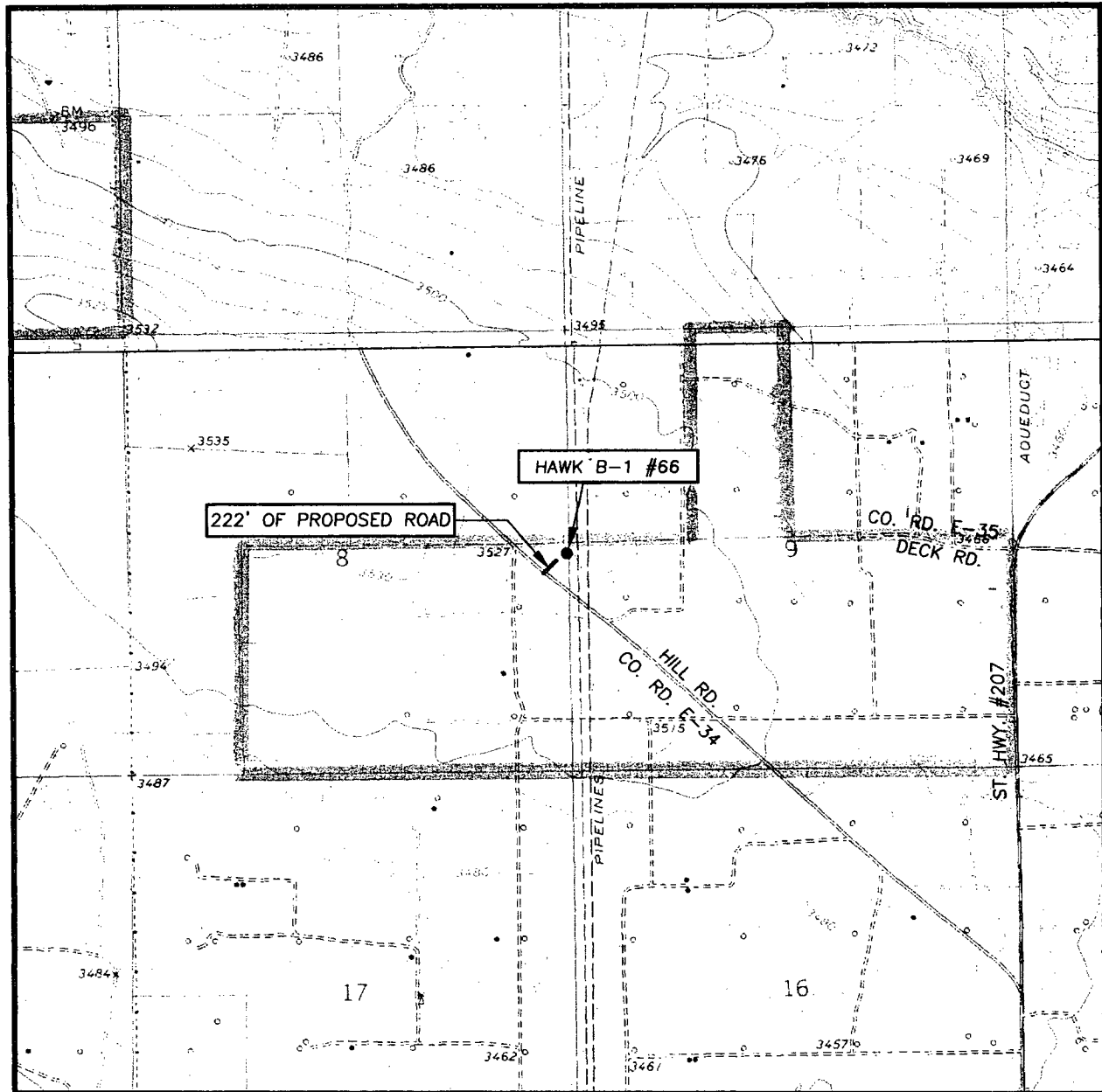


SCALE: 1" = 2 MILES

SEC. 8 TWP. 21-S RGE. 37-E  
 SURVEY N.M.P.M.  
 COUNTY LEA STATE NEW MEXICO  
 DESCRIPTION 2620' FSL & 20' FEL  
 ELEVATION 3522'  
 OPERATOR APACHE CORPORATION  
 LEASE HAWK B-1



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. 8 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 2620' FSL & 20' FEL

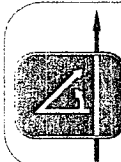
ELEVATION 3522'

OPERATOR APACHE CORPORATION

LEASE HAWK B-1

U.S.G.S. TOPOGRAPHIC MAP  
HOBBS SW, N.M.

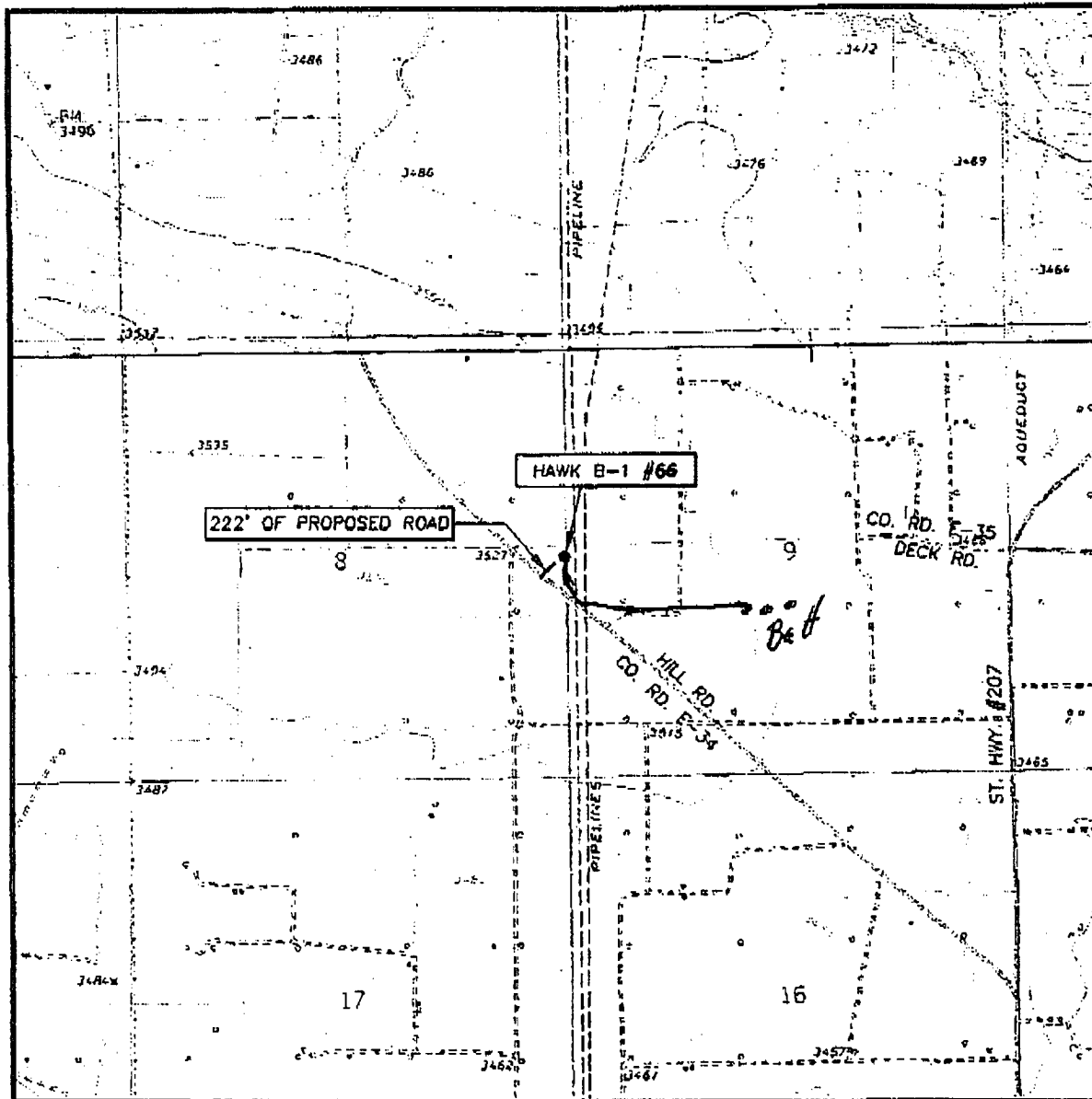
CONTOUR INTERVAL:  
HOBBS SW, N.M. - 5'  
EUNICE, N.M. - 10'



PROVIDING SURVEYING SERVICES  
SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
412 N. DAL PASO  
HOBBS, N.M. 88240  
(505) 393-3117

**LEASE BOUNDARY**

## LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
HOBBS SW, N.M. - 5'  
EUNICE, N.M. - 10'

SEC. 8 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

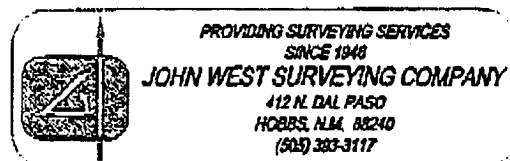
COUNTY LEA STATE NEW MEXICO

DESCRIPTION 2620' FSL &amp; 20' FEL

ELEVATION 3522'

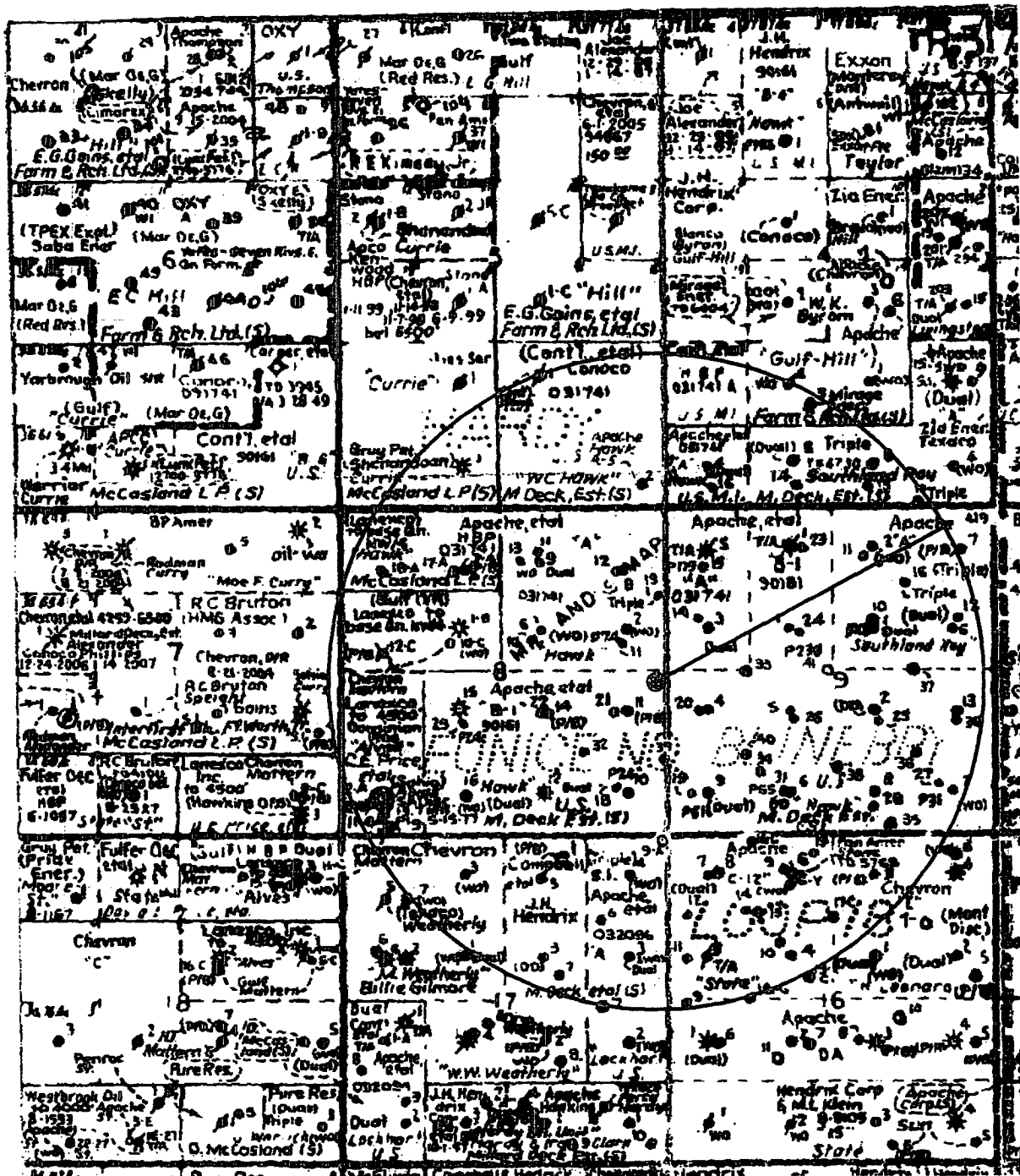
OPERATOR APACHE CORPORATION

LEASE HAWK B-1

U.S.G.S. TOPOGRAPHIC MAP  
HOBBS SW, N.M.

Flow Lines

# Lea County, New Mexico





## EXHIBIT "A"

Hawk B-1 #66

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	1309'
Yates	2702'
Queen	3494'
Grayburg	3787'
San Andres	4049'
Glorieta	5229'
Blaine	5707'
Tubb	6206'
Drinkard	6530'
Abo	6807'
TD	6975'

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

<u>SUBSTANCE</u>	<u>DEPTH</u>
Oil	Blaine@3788' Tubb@4052' Drinkard@6530'
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:

<u>HOLE</u>	<u>CASING</u>	<u>WEIGHT</u>		<u>ESTIMATED TOC -</u>	
<u>SIZE</u>	<u>OD / ID</u>	<u>GRADE</u>	<u>PER FOOT</u>	<u>DEPTH</u>	<u>REMARKS</u>
12 1/4"	8 5/8" 8.097"	J55 STC	24#	1300'	600
					TOC - Surface 8.9 ppg Water-based Mud; 89 ° F Est. Static Temp; 83 ° F Est. Circ. Temp.
7 7/8"	5 1/2" 4.892"	J55 LTC	17#	6,975'	1,400
					TOC - Surface Float Collar set @ 6930' / 10.10 ppg Brine Mud; 141 ° F Est. Static Temp; 117 ° F Est. Circ. Temp.

B. Proposed Cement Program:

<u>CASING</u>	<u>LEAD SLURRY</u>	<u>TAIL SLURRY</u>	<u>DISPLACEMENT</u>
8 5/8"	400 sacks 35:65 Poz:Class C Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.003 gps FP-6L + 6% bwoc Bentonite gel 752 Vol. Cu Ft 1.94 Vol. Factor Slurry Weight (ppg) 12.7 Slurry Yield (cf/sack) 1.88 Amount of Mix Water (gps) 10.7; <u>Estimated Pumping Time –</u> 70 BC (HH:MM)-4:00;	200 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water 270 Vol. Cu Ft 1.94 Vol. Factor Slurry Weight (ppg) 14.8 Slurry Yield (cf/sack) 1.35 Amount of Mix Water (gps) 6.35 Estimated Pumping Time – 70 BC (HH:MM)-3:00;	80 bbls Fresh Water @ 8.33 ppg

8 5/8" Casing: Volume Calculations:

1260 ft	x	0.4127 cf/ft	with 100% excess	=	1040.0 cf
40 ft		x 0.8214 cf/ft	with 0% excess	=	32.8 cf
40 ft	x	0.3576 cf/ft	with 0% excess	=	14.3 cf (inside pipe)
TOTAL SLURRY VOLUME				=	1087.1 cf
				=	193.6 bbls

Spacer 20.0 bbls Water @ 8.33 ppg

<u>CASING</u>	<u>LEAD SLURRY</u>	<u>TAIL SLURRY</u>	<u>DISPLACEMENT</u>
5 1/2"	950 sacks (50:50) Poz (Fly Ash): Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.003 gps FP-6L + 10% bwoc Bentonite 2318 Vol. Cu Ft 2.66 Vol. Factor Slurry Weight (ppg) 11.8 Slurry Yield (cf/sack) 2.44 Amount of Mix Water (gps) 14.07; Amount of Mix Fluid (gps) 14.07 <u>Estimated Pumping Time – 70 BC</u> (HH:MM)-4:00;	450 sacks (50:50) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride +0.003 gps FP- 6L 581 Vol. Cu Ft 1.84 Vol. Factor Slurry Weight (ppg) 14.2 Slurry Yield (cf/sack) 1.29 Amount of Mix Water (gps) 5.91; Amount of Mix Fluid(gps) 5.91; Estimated Pumping Time – 70 BC (HH:MM)-3:00;	160 bbls 2% Kcl Water @ 8.43 ppg

5 1/2" Casing: Volume Calculations:

1300 ft	x	0.1926 cf/ft	with 0% excess	=	250.4 cf
3775 ft	x	0.1733 cf/ft	with 159% excess	=	1694 cf
1900 ft	x	0.1733 cf/ft	with 85% excess	=	609.0 cf
40 ft	x	0.1305 cf/ft	with 0% excess	=	5.2 cf (inside pipe)
TOTAL SLURRY VOLUME				=	2558.6 cf
				=	455.67 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

<u>DEPTH</u>	<u>MUD PROPERTIES</u>	<u>REMARKS</u>
0 – 1,300'	Weight: 8.6 – 9.6 ppg Viscosity: 34 – 36 sec/qt  pH: NC Filtrate: NC	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.
1300' – 5600'	Weight: 9.9 – 10.1 ppg Viscosity: 28 – 29 sec/qt  pH: 9-10 Filtrate: NC	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. Use Lime to maintain pH at 9-10. Mix one gallon of New-55 at flowline 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 ppg Viscosity: 30 – 40 sec/qt  pH: 9-10 Filtrate: 8-15 cm/30 min	From 5600' 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 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" x 3000 psi mud cross – H<sub>2</sub>S 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

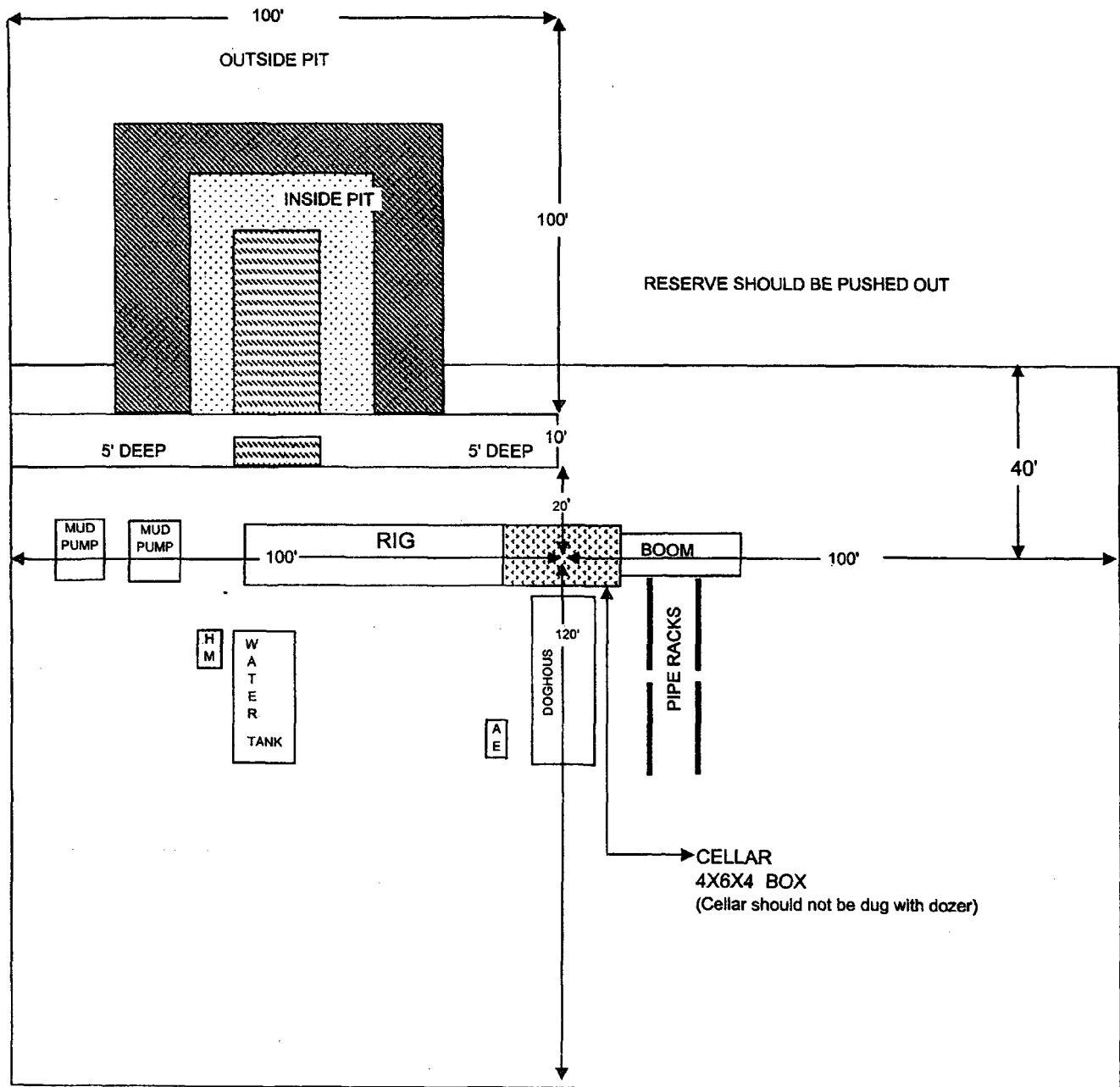
C. Coring Program: None planned

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

Rig #8



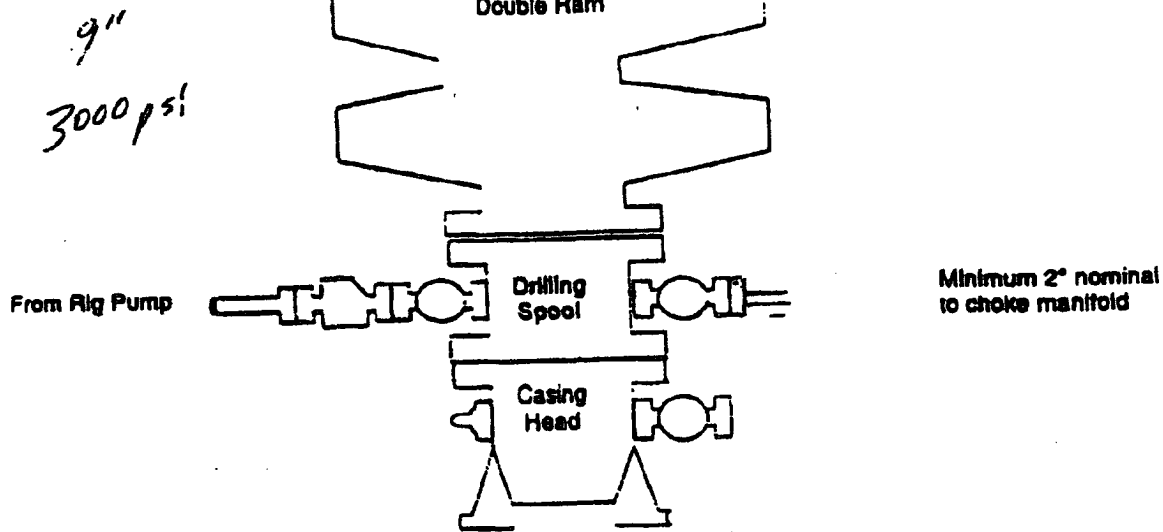
Cellar can be 4X4X4 if using a screw-on wellhead  
 Working Pits dug 5' below ground level

# Exhibit H

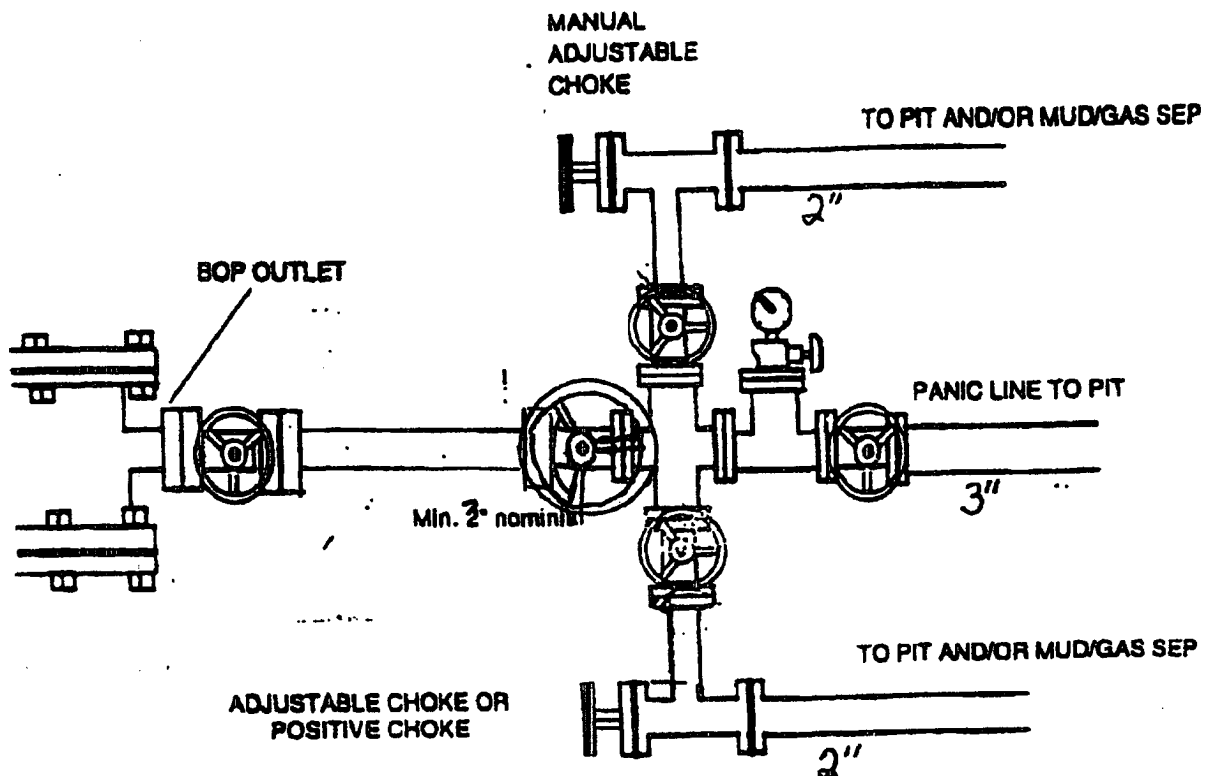
## BOP Schematic

\*Note: If BOP is equipped w/ side outlets below the rams, a spool is not required.

3000 psi WP Double Ram  
Blow-out Preventor. Must be tested  
to 1000 psi prior to drilling out  
8-5/8" surface casing.



## Choke Manifold Schematic



**EXHIBIT "B"**  
**Hawk B-1 #66**

**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 #66  
OPERATOR: APACHE CORPORATION**

**LOCATION: NE¼SE¼ OF SECTION 8, 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:**

NE¼SE¼ of Section 8, Township 21 South, Range 37 East, N.M.P.M.  
Lea County, New Mexico  
2620' FSL, 20' FEL, Unit I  
See attached Exhibits "D" and "E"

**2) Bottom Hole Location:**

NE¼SE¼ of Section 8, Township 21 South, Range 37 East, N.M.P.M.  
Lea County, New Mexico  
2620' FSL, 20' FEL, Unit I  
See attached Exhibits "D" and "E"

**3) Leases Issued: 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: E $\frac{1}{2}$ SE $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$   
Section 8: E $\frac{1}{2}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$   
Section 9: E $\frac{1}{2}$ NW $\frac{1}{4}$ , S $\frac{1}{2}$

Township 20 South, Range 37 East, NMPM  
Section 13: SW $\frac{1}{4}$ NE $\frac{1}{4}$ , NW $\frac{1}{4}$ SW $\frac{1}{4}$

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 Unit I of Section 8, 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 the intersection of Highway 8 and Loop Road 207 in Eunice, New Mexico, go 2.7 miles north on Loop 207. Turn left (west) on Hill Road and go 1.3 mile and turn right (north) 0.05 of a mile to location as illustrated on Exhibit "E-2".
- 2) Planned Access:
- A. Length and Width: A new, 222-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. 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 waste.



G. All waste materials will be contained to prevent scattering by the wind and will be removed from the well site within 30 days after drilling and/or completion operations are finished.

8) Ancillary Facilities: None planned.

9) Well Site Layout:

- A. Exhibit "G" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area have been staked and flagged.
- B. Mat Size: 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. Soil: 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. Flora and Fauna: 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. Residences and Other Structures: 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. Surface Ownership: 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**

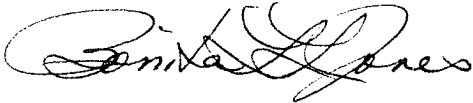
**6120 South Yale Avenue**

**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, RPL, 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: 8-24-06

## SPECIAL DRILLING STIPULATIONS

### THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: Apache Corporation Well Name & #: Hawk B-1 #66  
Location 2620 F S L & 20 F E L; Sec. 8, T. 21 S., R. 37 E.  
Lease #: NM-90161 County: Lea State: New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

#### I. SPECIAL ENVIRONMENT REQUIREMENTS

- ( ) Lesser Prairie Chicken (stips attached) ( ) Flood plain (stips attached)  
( ) San Simon Swale (stips attached) ( ) Other

#### II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

( X ) The BLM will monitor construction of this drill site. Notify the ( X ) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

( X ) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche upon completion of well and it is determined to be a producer.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately \_\_\_\_\_ inches in depth. Approximately \_\_\_\_\_ cubic yards of topsoil material will be stockpiled for reclamation.

( ) Other.

#### III. WELL COMPLETION REQUIREMENTS

( ) A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

( x ) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre. If broadcasting, the seeding rate must be doubled.

##### ( X ) A. Seed Mixture 1 (Loamy Sites)

Side Oats Grama (*Bouteloua curtipendula*) 5.0  
Sand Dropseed (*Sporobolus cryptandrus*) 1.0  
Plains lovegrass (*Eragrostis intermedia*) 0.5

##### ( ) B. Seed Mixture 2 (Sandy Sites)

Sand Dropseed (*Sporobolus crptandrus*) 1.0  
Sand Lovegrass (*Eragrostis trichodes*) 1.0  
Plains Bristlegrass (*Setaria magrostachya*) 2.0

##### ( ) C. Seed Mixture 3 (Shallow Sites)

Side oats Grama (*Bouteloua curtipendula*) 5.0  
Green Spangletop (*Leptochloa dubia*) 2.0  
Plains Bristlegrass (*Setaria magrostachya*) 1.0

##### ( ) D. Seed Mixture 4 (Gypsum Sites)

Alkali Sacaton (*Sporobolus airoides*) 1.0  
Four-Wing Saltbush (*Atriplex canescens*) 5.0

( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ) Other

## RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic.

Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

## OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- (1) Lined as specified above and
- (2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be re-contoured, all trash removed, and reseeded as specified in this permit.

## CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

## TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

BLM SERIAL NO: NM-90161  
COMPANY REFERENCE: Apache Corporation  
WELL NO. & NAME: Hawk B-1 #66

Seed Mixture 1, for Loamy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains lovegrass ( <i>Eragrostis intermedia</i> )	0.5
Sand dropseed ( <i>Sporobolus cryptandrus</i> )	1.0
Sideoats grama ( <i>Bouteloua curtipendula</i> )	5.0

\*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

## CONDITIONS OF APPROVAL - DRILLING

Well Name & No. 66-Hawk B-1  
Operator's Name: Apache Corporation  
Location: 2620 FSL, 20 FEL, SEC 8, T21S, R37E, Lea County, NM  
Lease: NM90161

### 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 \_\_\_\_ inch \_\_\_\_ inch

C. BOP tests

2. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan should be activated prior to drilling into the **GLORIETA** Formation. A copy of the plan shall be posted at the drilling site. Reported in sections three and ten.

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 ABOVE THE SALT, in THE RUSTLER ANHYDRITE and ATLEAST 25 feet INTO THE RUSTLER ANHYDRITE, below usable water 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.

2. The minimum required fill of cement behind the \_\_\_\_ inch salt protection casing is

3. The minimum required fill of cement behind the \_\_\_\_ inch intermediate casing is

4. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall extend upward a minimum of 500 feet above the BASE OF THE SALT and the uppermost hydrocarbon bearing interval.

5. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

### **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 8 5/8 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.

- A variance to test the \_\_\_\_\_ to the reduced pressure of \_\_\_\_psi with the rig pumps is approved.
- 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.



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

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

Form C-144  
June 1, 2004

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 ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: Apache Corporation (0873) Telephone: 918-491-4801 e-mail address: terry.gilbert@usa.apachecorp.com  
Address: 6120 S. Yale Ave., #1500, Tulsa, OK 74136  
Facility or well name: Hawk B-1 #66 API #: 30-025-38521 U/L or Qtr/Qtr I Sec 8 T 21S R 37E  
County: Lea Latitude \_\_\_\_\_ Longitude \_\_\_\_\_ NAD: 1927 ☐ 1983 ☐  
Surface Owner: Federal ☐ State ☐ Private ☒ Indian ☐

Pit	Below-grade tank
Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>20</u> mil Clay <input type="checkbox"/> Pit Volume <u>7105</u> bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not.
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet (20 points) 50 feet or more, but less than 100 feet (10 points) <u>10</u> 100 feet or more (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes (20 points) No <input checked="" type="radio"/> (0 points) <u>0</u>
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (20 points) 200 feet or more, but less than 1000 feet (10 points) <u>0</u> 1000 feet or more (0 points)
Ranking Score (Total Points) <u>10</u>	

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 you are burying in place) onsite ☐ offsite ☐ 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:

*Closed according to NMOCD guidelines. Cill*

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 OGD-approved plan ☐.

Date: 8-25-06 Terry Gilbert Signature \_\_\_\_\_

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank 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.

Approval:

Printed Name/Title CHRIS WILLIAMS - DIST. SUP Signature Chris Williams Date: 10/1/06