

OCD-HOBBS

SUBMIT IN TRIPLICATE *
(Other Instructions on
reverse side)FORM APPROVED K-06-41
OMB NO. 1004-0136

Expires: February 28, 1995

1288
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

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 Mesalero 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 450' FSL, 450' FEL, Unit P (SE $\frac{1}{4}$ SE $\frac{1}{4}$)At proposed prod. Zone 450' FSL, 450' FEL, Unit P (SE $\frac{1}{4}$ SE $\frac{1}{4}$)

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

±3.5 miles Northwest of Eunice, NM

15. DISTANCE FROM PROPOSED *

LOCATION TO NEAREST 1770'
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE

560.00

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40.00

18. DISTANCE FROM PROPOSED LOCATION *

TO NEAREST WELL, DRILLING, COMPLETED 1130'
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

7,025'

20. ROTARY OR CABLE TOOLS

Rotary

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

3,494' (KB)

22. APPROX. DATE WORK WILL START *

ASAP

23. PROPOSED CASING AND CEMENTING PROGRAM

Capitan Controlled Water Basin

| 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: H₂S 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, RPL (Bonnie)

TITLE Permit Agent for

Apache Corporation

DATE 8-16-06

(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: /s/ Don Peterson

APPROVED BY

TITLE

FIELD MANAGER

DATE

SEP 15 2006

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.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

GWW

LIMPUSJONES, LLC

OIL & GAS LAND SERVICES

BUREAU OF LAND MGMT
CARLSBAD FIELD OFFICE

2006 SEP -5 PM 3: 04

RECEIVED

August 31, 2006

Ms. Betty Hill
Bureau of Land Management
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220

RE: Application for Permit to Drill
Lease NMLC-031741A
Hawk A-4 #4, Hawk A-5 #4, Hawk A-5 #5
Hawk A #30, Hawk A #31, Hawk A #33
Township 21 South, Range 37 East, NMPM
Lea County, New Mexico

Dear Ms. Hill:

Please be advised that the Surface Owner's Agreement for the Hawk A-4 #4, Hawk A-5 #4, Hawk A-5 #5, Hawk A #30, Hawk A #31, Hawk A #33 wells were executed by Apache Corporation and the Trustee of the Millard Deck Estate, surface owner, on August 31, 2006. It is my understanding that this statement is sufficient for your needs and that you may now proceed with approval of the Applications for Permit to Drill, received by your office on within the past two weeks.

Sincerely,

LIMPUSJONES, LLC



Bonita L. Limpus Jones, RPL
Consulting Landman, Permit Agent for Apache Corporation

/bj
Enclosure

EXHIBIT "A"
Hawk A-5 # 4
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 | 1306' |
| Yates | 2723' |
| Queen | 3497' |
| Grayburg | 3793' |
| San Andres | 4080' |
| Glorieta | 5259' |
| Blainebury | 5724' |
| Tubb | 6241' |
| Drinkard | 6601' |
| Abo | 6854' |
| TD | 7025' |

- 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 | Blainebury@5724' Tubb@6241' Drinkard@ 6601' |
| 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>SIZE</u> | <u>PER</u> | <u>REMARKS</u> |
| <u>OD / ID</u> | <u>GRADE</u> | <u>FOOT</u> | <u>DEPTH</u> |
| <u>SACKS</u> | <u>CEMENT</u> | | |
| 12 1/4" | 8 5/8" | J55 STC | 24# |
| 8.097" | | | 1300' |
| | | Witness Surface Casing | 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" | J55 LTC | 17# |
| 4.892" | | | 7,025' |
| | | | 1,400 |
| | | | TOC - Surface |
| | | | Float Collar set @ |
| | | | 6980' / 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 – 70 BC (HH:MM)-4:00;</u> | 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 (HH:MM)-4:00;</u> | 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 |
| 3825 ft | x | 0.1733 cf/ft | with 159% excess | = | 1717 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 | | | | | = 2581.60 cf |
| | | | | | = 459.76 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 – H₂S 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 A-5 # 4

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

No H₂S is anticipated.

DISTRICT I
1634 N. FRENCH DR., HOBBBS, 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-1

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

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| | | |
|-----------------------------------|--|------------------------------|
| API Number 30-025-38128 | Pool Code 19190 | Pool Name Drinkard |
| Property Code 31036 | Property Name HAWK A-5 | Well Number 4 |
| OGRID No. 0873 | Operator Name APACHE CORPORATION | Elevation 3494' |

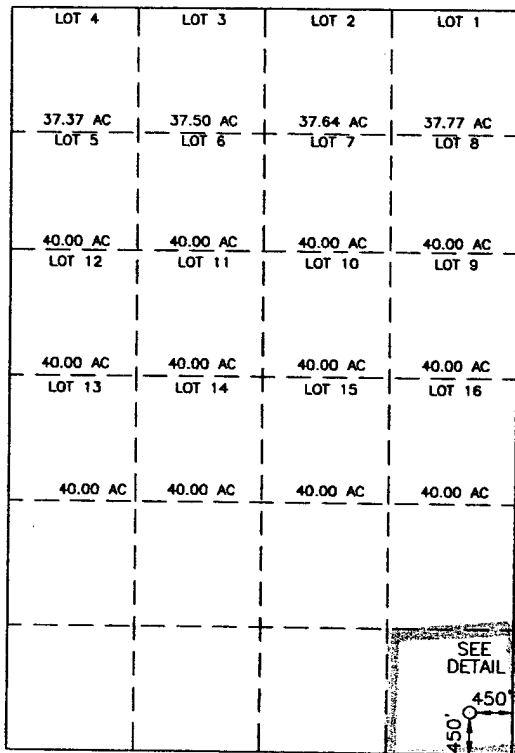
Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| P | 5 | 21-S | 37-E | | 450 | SOUTH | 450 | 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 40.00 | 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

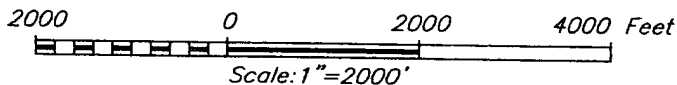
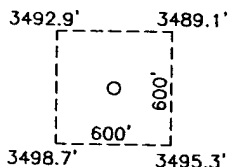


GEODETIC COORDINATES
NAD 27 NME

Y=548204.7 N
X=856325.1 E

LAT.=32°30'06.54" N
LONG.=103°10'39.26" W

DETAIL



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Lana Williams 7/26/06
Signature Date
Lana Williams
Printed Name

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 supervision, and that the same is true and correct to the best of my belief.

JUNE 05, 2006

Date Surveyed MR

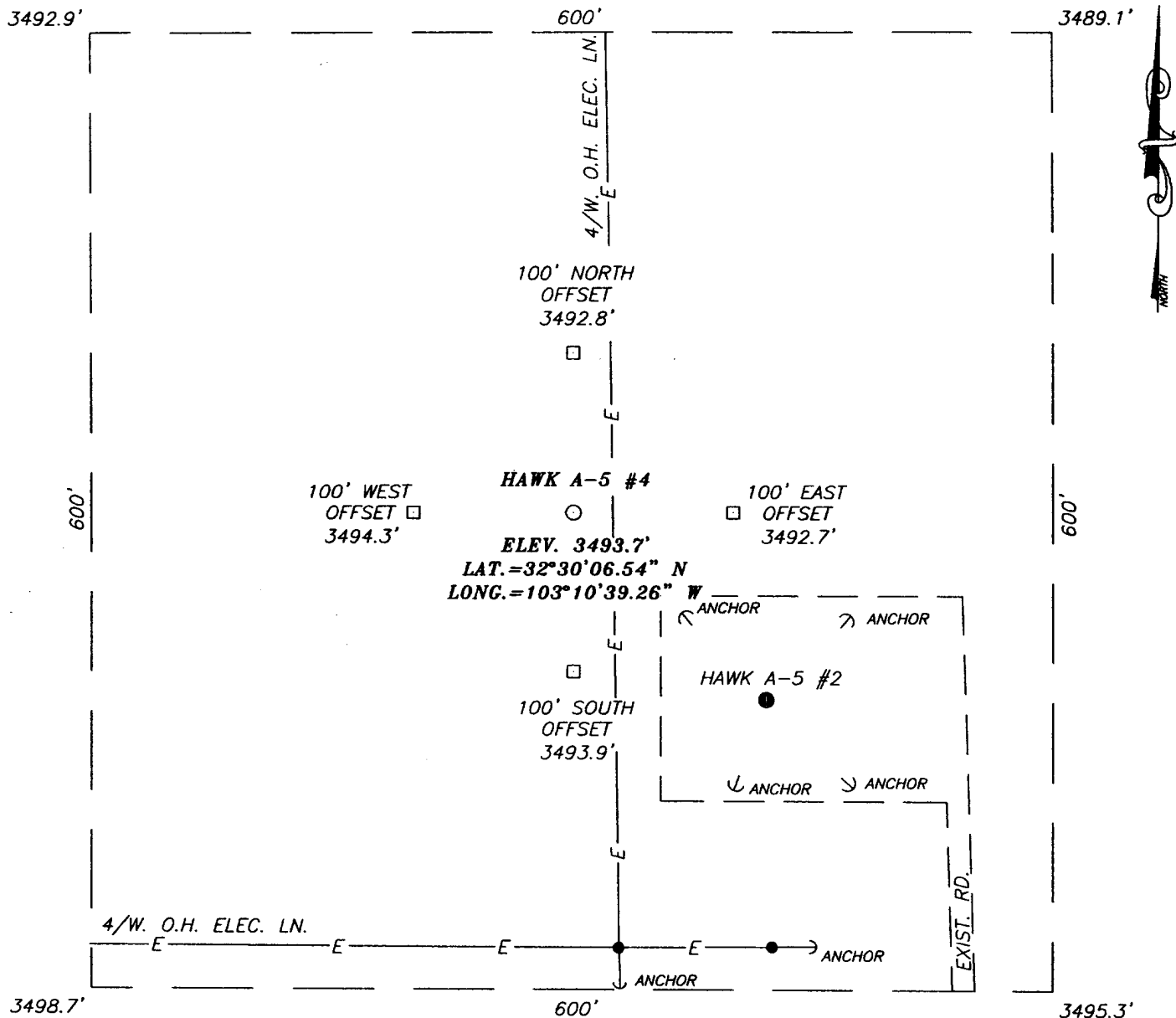
Signature & Seal of
Professional Surveyor

Ronald J. Eidson 6/19/06
06.11.0941

Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

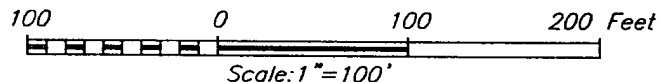
SECTION 5, TOWNSHIP 21 SOUTH, RANGE 37 EA.
LEA COUNTY,

Exhibit D-2
NEW MEXICO



DIRECTIONS TO LOCATION

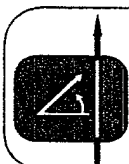
FROM THE INTERSECTION OF ST. 207 AND CO. RD. E-49 (HILL RD.), GO NORTHWEST ON HILL RD. APPROX. 2.0 MILES. TURN RIGHT AND GO NORTH APPROX. 100 FEET. TURN RIGHT AND GO EAST APPROX. 0.3 MILES. TURN LEFT AND GO NORTH APPROX. 0.1 MILE TO EXISTING APACHE HAWK A-5 #2 WELL PAD. THIS LOCATION IS APPROX. 150 FEET NORTH.



APACHE CORPORATION

HAWK A-5 #4
LOCATED 450 FEET FROM THE SOUTH LINE
AND 450 FEET FROM THE EAST LINE OF SECTION 5,
TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

| | |
|-------------------------|---------------------|
| Survey Date: 06/05/06 | Sheet 1 of 1 Sheets |
| W.O. Number: 06.11.0941 | Dr By: M.R. |
| Date: 06/16/06 | Disk: CD#6 |
| 06110941 | 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
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

State of New Mexico

Energy, Minerals and Natural Resources Department

Exhibit D-3

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| | | | |
|---------------|-------------------------------------|-----------|--------------------|
| API Number | | Pool Code | Pool Name |
| Property Code | Property Name HAWK A-5 | | Well Number 4 |
| OGRID No. | Operator Name APACHE CORPORATION | | Elevation 3494' |

Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| P | 5 | 21-S | 37-E | | 450 | SOUTH | 450 | EAST | LEA |

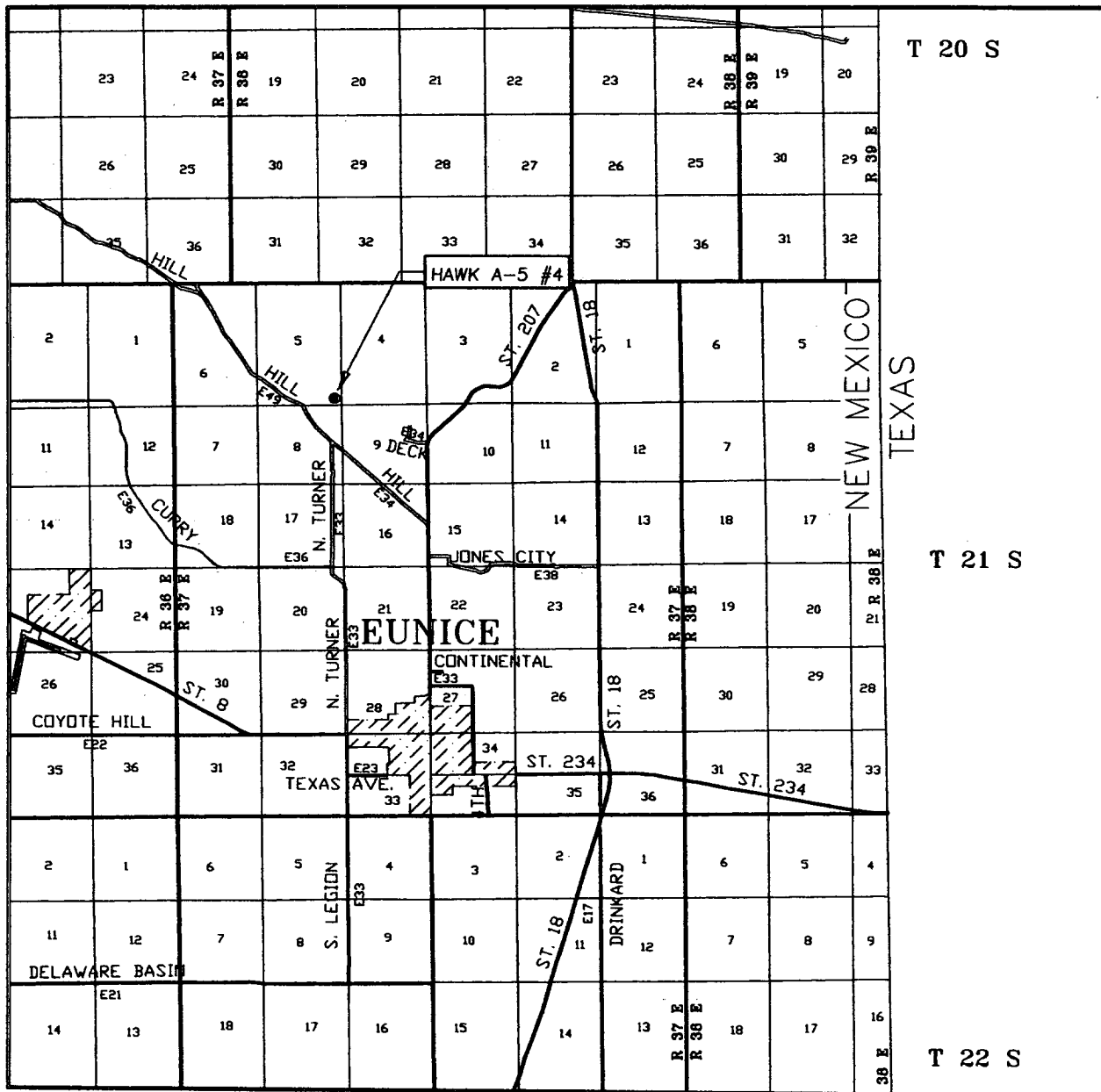
Bottom Hole Location If Different From Surface

| | | | | | | | | | |
|-----------------|---------|-----------------|--------------------|---------|---------------|------------------|---------------|----------------|--------|
| 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

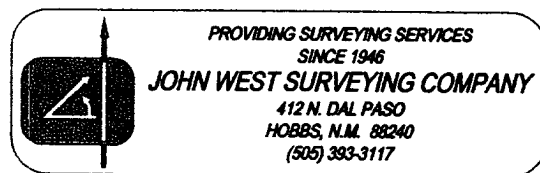
| | |
|--|---|
| <p>2000 0 2000 4000 Feet Scale: 1"=2000'</p> | <p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Lana Williams</i> 7/26/06 Signature Date</p> <p>Lana Williams Printed Name</p> <p>SURVEYOR CERTIFICATION</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>JUNE 05, 2006</p> <p>Date Surveyed MR</p> <p>Signature & Seal of Professional Surveyor</p> <p>06.11.0941</p> <p>Certificate No. GARY EIDSON 12641 RONALD J. EIDSON 3239</p> |
|--|---|

VICINITY MAP



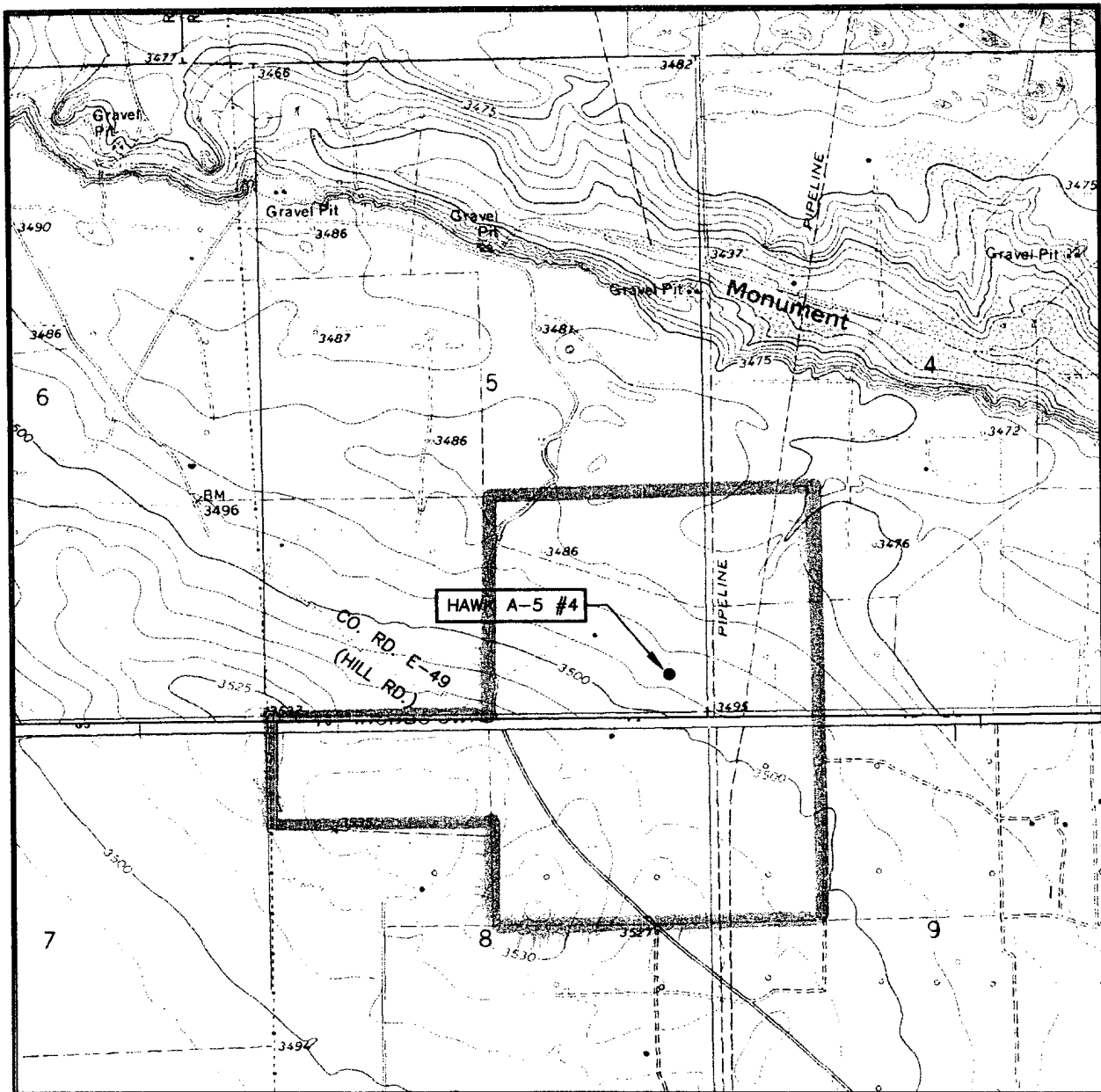
SCALE: 1" = 2 MILES

SEC. 5 TWP. 21-S RGE. 37-E
SURVEY _____ N.M.P.M. _____
COUNTY LEA STATE NEW MEXICO
DESCRIPTION 450' FSL & 450' FEL
ELEVATION _____ 3493' _____
OPERATOR _____ APACHE CORPORATION _____
LEASE _____ HAWK A-5



LOCATION VERIFICATION

EXHIBIT E-2



SCALE: 1" = 2000'

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

SEC. 5 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

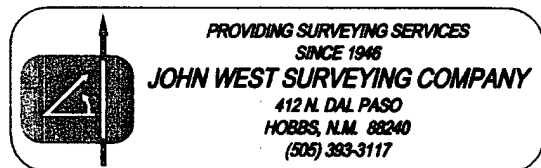
DESCRIPTION 450' FSL & 450' FEL

ELEVATION 3494'

OPERATOR APACHE CORPORATION

LEASE HAWK A-5

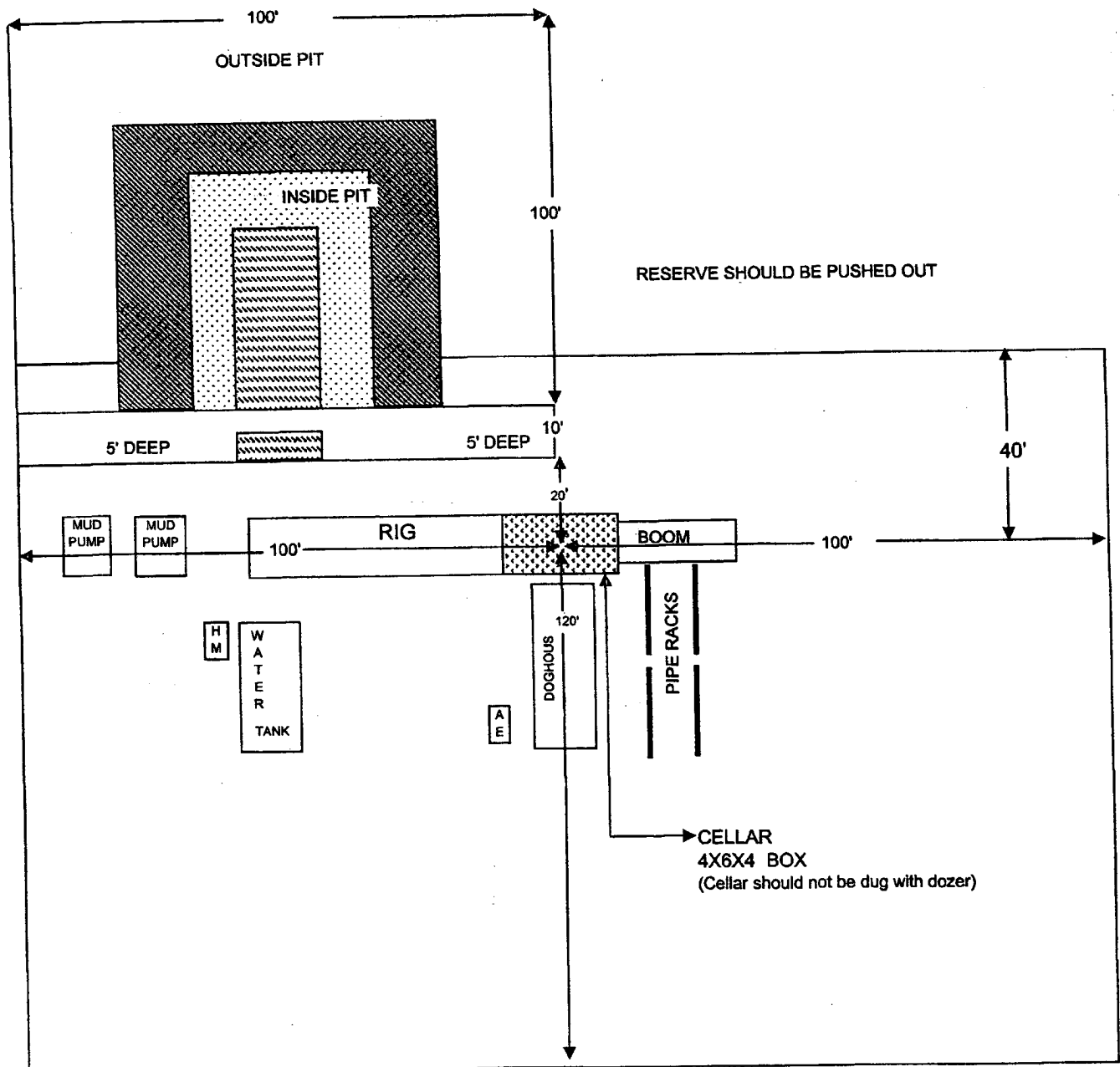
U.S.G.S. TOPOGRAPHIC MAP
HOBBS SW, N.M.



 LEASE BOUNDARY

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

Rig #8



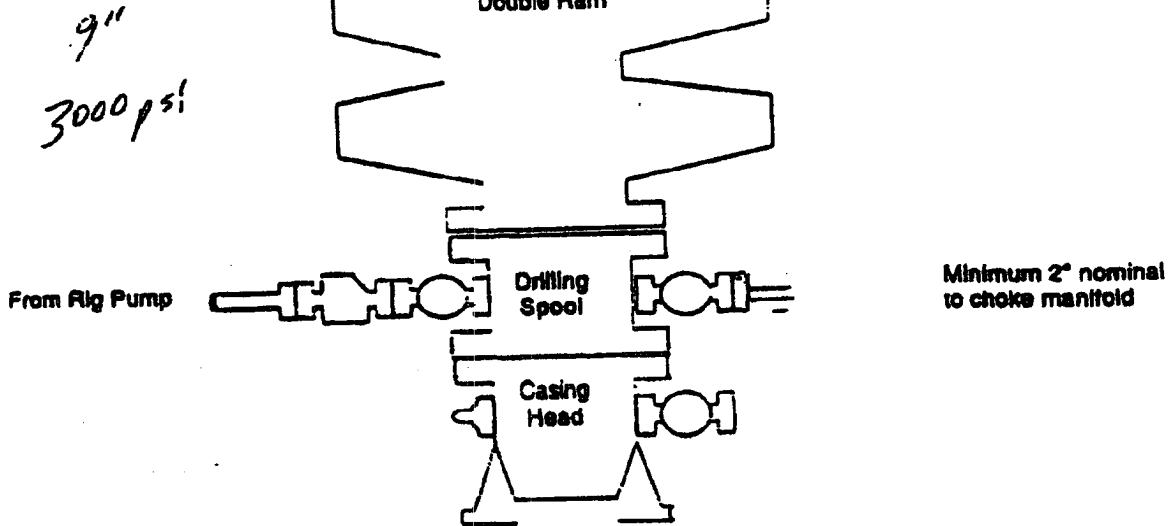
Cellar can be 4X4X4 if using a screw-on wellhead
 Working Pits dug 5' below ground level

Exhibit H

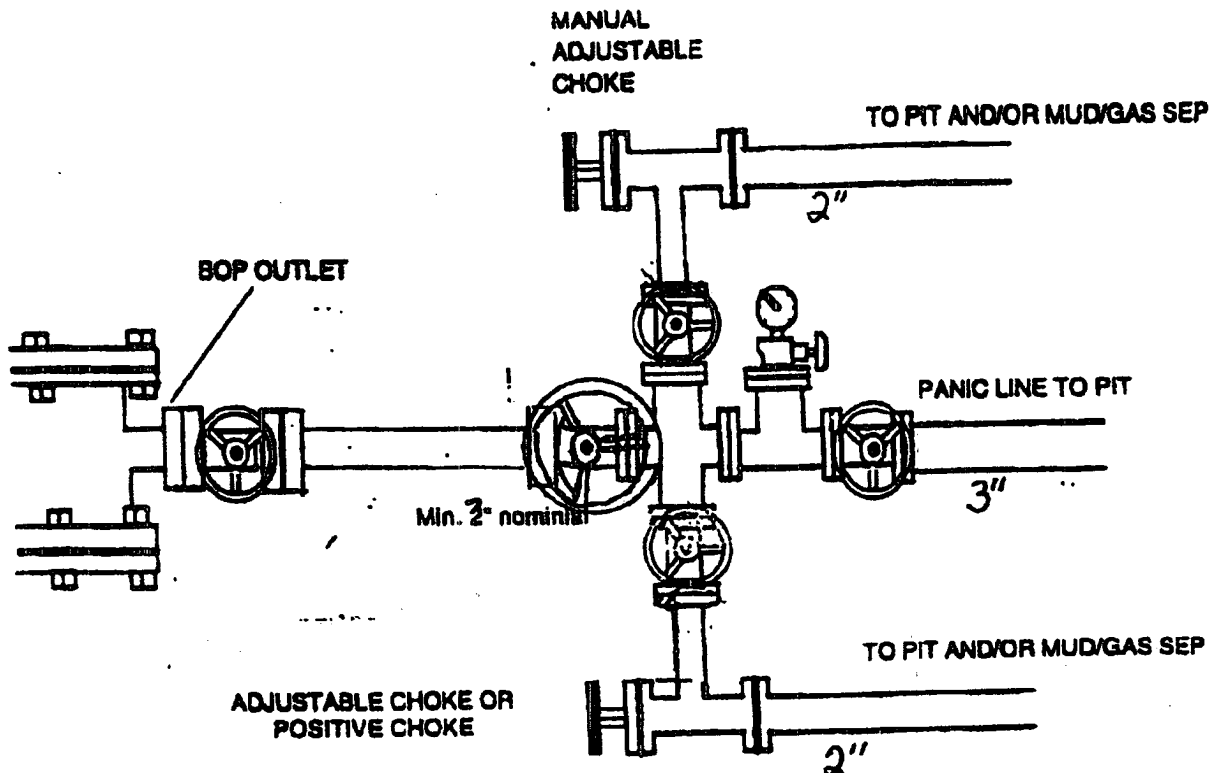
BOP Schematic

*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



CONDITIONS OF APPROVAL - DRILLING

Well Name & No. 4-Hawk A-5
Operator's Name: Apache Corporation
Location: 450 FSL, 450 FEL, SEC 5, T21S, R37E, Lea County, NM
Lease: LCo31741A

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 (H₂S) Drilling Plan should be activated prior to drilling into the ____ Formation. A copy of the plan shall be posted at the drilling site.
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

Revised 8-24-06

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 A-5 #4 | | API #: 30-025 38128 | U/L or Qtr/Qtr P | Sec 5 T 21S R 37E |
| County: Lea | | Latitude | Longitude | NAD: 1927 <input type="checkbox"/> 1983 <input type="checkbox"/> |
| Surface Owner: Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input checked="" type="checkbox"/> Indian <input type="checkbox"/> | | | | |
| Pit 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 20 mil Clay <input type="checkbox"/> Pit Volume 7105 bbl | | Below-grade tank 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 50 feet or more, but less than 100 feet 100 feet or more | | (20 points) (10 points) 20 (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 No | | (20 points) (0 points) 0 |
| Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.) | | Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more | | (20 points) (10 points) (0 points) 0 |
| | | Ranking Score (Total Points) | | 20 |

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: |
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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: 8-17-06
Printed Name/Title: Terry Gilbert
Signature: [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: GARY W. WINK / STAFF MGR
Printed Name/Title: Gary W. Wink
Signature: [Signature]
Date: 9/21/06