

OCD-HOBBS

Form 3160-3
(August 1999)FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000
 UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

I-42

APPLICATION FOR PERMIT TO DRILL OR REENTER

687

| | | |
|--|--|---|
| 1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. NMLC031741A |
| 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone | | 6. If Indian, Allottee or Tribe Name |
| 2. Name of Operator APACHE CORPORATION Contact: BONNIE JONES E-Mail: senoj@dfm.com | | 7. If Unit or CA Agreement, Name and No. |
| 3a. Address 6120 SOUTH YALE, SUITE 1500 TULSA, OK 74136-4224 | | 8. Lease Name and Well No. HAWK A 19 |
| 3b. Phone No. (include area code) Ph: 505.624.9799 Fx: 505.624.9799 | | 9. API Well No. 30-025-36339 |
| 4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface SENE Lot H 1420FNL 150FEL At proposed prod. zone SENE Lot H 1420FNL 150FEL | | 10. Field and Pool, or Exploratory DRINKARD |
| 14. Distance in miles and direction from nearest town or post office* 3.5 | | 11. Sec., T., R., M., or Blk. and Survey or Area Sec 8 T21S R37E Mer NMP SME: FEE |
| 15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1220 | 16. No. of Acres in Lease | 12. County or Parish LEA |
| 17. Spacing Unit dedicated to this well 40.00 | 18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 757 | 13. State NM |
| 19. Proposed Depth 6950 MD | 20. BLM/BIA Bond No. on file | |
| 21. Elevations (Show whether DF, KB, RT, GL, etc.) 3509 GL | 22. Approximate date work will start | 23. Estimated duration 28 DAYS |

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

| | | |
|--|---|---------------------|
| 25. Signature (Electronic Submission) | Name (Printed/Typed) BONNIE JONES | Date 06/20/2003 |
| Title AGENT | | |
| Approved by (Signature) /S/ JOE G. LARA | Name (Printed/Typed) /S/ JOE G. LARA | Date JUL 17 2003 |
| Title FIELD MANAGER | | |
| Office CARLSBAD FIELD OFFICE | | |

Application approval does not warrant or certify 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, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

Additional Operator Remarks (see next page)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

Electronic Submission #23488 verified by the BLM Well Information System
For APACHE CORPORATION, sent to the Hobbs
Committed to AFMSS for processing by Linda Askwig on 06/24/2003 (03LA0202AE)

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISE

OPER. OGRID NO. 873
PROPERTY NO. 24426
POOL CODE 19190
EFF. DATE 7-22-03
API NO. 30-025-36339

Additional Operator Remarks:

Surface Owner: MILLARD DECK ESTATE (C/O BANK OF AMERICA, TRUSTEE)
ATTN: TIM WOLTERS
P.O BOX 270
MIDLAND, TX 79701
915-685-2864

Revisions to Operator-Submitted EC Data for APD #23488

Operator Submitted

Lease: LC-031741-A
Agreement:
Operator: APACHE CORPORATION
6120 S. YALE, SUITE 1500
TULSA, OK 74136-4224
Ph: 918.491.4900
Fx: 918.491.4869

Admin Contact: BONNIE JONES
AGENT
P. O. BOX 8309
ROSWELL, NM 88202-8309
Ph: 505.624.9799
Fx: 505.624.9799
E-Mail: bonita@dfn.com

Tech Contact:

Well Name: HAWK A
Number: 19
Location:
State: NM
County: LEA
S/T/R: Sec 8 T21S R37E Mer NMP
Surf Loc: SENE Lot H 1420FNL 150FEL
Field/Pool: DRINKARD/BLINEBRY/TUBB

Bond:

BLM Revised (AFMSS)

NMLC031741A
APACHE CORPORATION
6120 SOUTH YALE, SUITE 1500
TULSA, OK 74136-4224
Ph: 918-491-4957

BONNIE JONES
AGENT
6120 SOUTH YALE, SUITE 1500
TULSA, OK 74136-4224
Ph: 505.624.9799
Fx: 505.624.9799
Cell: 505.626.0567
E-Mail: senoj@dfn.com

HAWK A
19

NM
LEA
Sec 8 T21S R37E Mer NMP
SENE Lot H 1420FNL 150FEL
DRINKARD

EXHIBIT "A"
HAWK A #19

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> |
|------------------|--------------|
| Rustler | 1309' |
| Yates | 2685' |
| Queen | 3493' |
| San Andres | 4064' |
| Glorieta | 5246' |
| Blinberry | 5621' |
| Tubb | 6213' |
| Drinkard | 6548' |
| Abo | 6908' |
| TD | 6950' |

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

| <u>SUBSTANCE</u> | <u>DEPTH</u> |
|------------------|---------------------|
| Fresh water | None |
| Oil | 5621', 6213', 6548' |
| Gas | 5621', 6213' |

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: See Exhibit A-1
- B. Proposed Cement Program: See Exhibit A-1

- V. A. Proposed Mud Program - See Exhibit A-1

- 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, and to test to 1500 psi using rig pumps.** 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:
Litho-Density, Dual Laterolog/MSFL, Sonic, Formation tester from TD-4000'
CNL, GR from TD-Surface
- C. Coring Program: None planned
- IX. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, however, the proposed mud program will be modified to increase the mud-weight. The estimated maximum bottom hole pressure is 1980 psi.

Operator Apache Corporation
Well Name: Hawk A #19
Job 8 5/8" Surface Casing
Date: May 9, 2003

Exhibit A-1



Proposal No: 215353111A

JOB AT A GLANCE

| | |
|---------------------------------|--------------------------|
| Depth (TVD) | 1,3504,325 ft |
| Depth (MD) | 1,3504,325 ft |
| Hole Size | 12.25 in |
| Casing | 8 5/8 in, 24 lbs/ft J-55 |
| Pump Via | 8 5/8" O.D. (8.097" I.D) |
| Total Mix Water | 7,127 gals |
| Lead Slurry | |
| Surface - Lead - 65:35 C | 550 sacks |
| Density | 12.7 ppg |
| Yield | 1.88 cf/sack |
| Tail Slurry | |
| Class C + 2% CaCl2 | 250 sacks |
| Density | 14.8 ppg |
| Yield | 1.35 cf/sack |
| Displacement | |
| Fresh Water | 82 bbls |
| Density | 8.3 ppg |

Operator Apache Corporation
 Well Name: Hawk A #19
 Job 8 5/8" Surface Casing
 Date: May 9, 2003

Exhibit A-1



Proposal No: 215353111A

WELL DATA

ANNULAR

| ANNULAR I.D. (in) | DEPTH(ft) | |
|----------------------|--------------|---------------|
| | MEASURED | TRUE VERTICAL |
| 12.250 HOLE | 1,325 1,350' | 1,325 1,350' |

SUSPENDED

| DIAMETER (in) | | WEIGHT T | DEPTH(ft) | |
|---------------|-------|-------------|--------------|---------------|
| O.D. | I.D. | | MEASURED | TRUE VERTICAL |
| 8.625 | 8.097 | 24 | 1,325 1,350' | 1,325 1,350' |

Float Collar set @ 1,285 ft
 Mud Density 8.34 ppg
 Est. Static Temp. 89 ° F
 Est. Circ. Temp. 83 ° F

VOLUME CALCULATIONS

978 ft x 0.4127 cf/ft with 156 % excess = 1031.9 cf
 347 ft x 0.4127 cf/ft with 125 % excess = 322.1 cf
 40 ft x 0.3576 cf/ft with 0 % excess = 14.3 cf (inside pipe)
TOTAL SLURRY = 1368.2 cf
 = 244 bbls

Operator Apache Corporation
Well Name: Hawk A #19
Job 8 5/8" Surface Casing
Date: May 9, 2003

Exhibit A-1



Proposal No: 215353111A

FLUID SPECIFICATIONS

| <u>FLUID</u> | <u>VOLUME</u> <u>CU-FT</u> | <u>VOLUME</u> <u>FACTOR</u> | <u>AMOUNT AND TYPE OF</u> |
|--------------|-------------------------------|--------------------------------|---|
| Lead Slurry | 1032 | / 1.88 | = 550 sacks (35:65) Poz (Fly Ash):Class C Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.003 gps FP-6L + 6% bwoc Bentonite gel |
| Tail Slurry | 336 | / 1.35 | = 250 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water |
| Displacement | | | 81.8 bbls Fresh Water Displacement @ 8.34 ppg |

CEMENT PROPERTIES

| | <u>SLURRY</u> <u>NO. 1</u> | <u>SLURRY</u> <u>NO. 2</u> |
|--------------------------------|-------------------------------|-------------------------------|
| Slurry Weight (ppg) | 12.70 | 14.80 |
| Slurry Yield (cf/sack) | 1.88 | 1.35 |
| Amount of Mix Water (gps) | 10.07 | 6.35 |
| Amount of Mix Fluid (gps) | 10.07 | 6.35 |
| Estimated Pumping Time - 70 BC | | 3:00 |

Note: All slurry properties represented above are estimates and will be tested based upon the best available well data prior to the cementing service.

Obtain log temperature for testing if available.

Operator Apache Corporation
Well Name: Hawk A #19
Job 5-1/2" Production Casing
Date: May 9, 2003

Exhibit A-1



Proposal No: 215353111A

JOB AT A GLANCE

| | | |
|---------------------|--------------------------|------|
| Depth (TVD) | 6,950 ft | |
| Depth (MD) | 6,950 ft | |
| Hole Size | 7.875 in | |
| Casing | 5 1/2 in, 17 lbs/ft | J-55 |
| Pump Via | 5 1/2" O.D. (4.892" I.D) | |
| Total Mix Water | 11,297 gals | |
| Spacer | | |
| Water | 30 bbls | |
| Density | 8.3 ppg | |
| Lead Slurry | | |
| 50:50 Poz "Class C" | 635 sacks | |
| Density | 11.8 ppg | |
| Yield | 2.44 cf/sack | |
| Tail Slurry | | |
| 50/50 Poz (Class C) | 400 sacks | |
| Density | 14.2 ppg | |
| Yield | 1.29 cf/sack | |
| Displacement | | |
| Fresh Water | 161 bbls | |
| Density | 8.3 ppg | |

Operator Apache Corporation
 Well Name: Hawk A #19
 Job 5-1/2" Production Casing
 Date: May 9, 2003

Exhibit A-1



Proposal No: 215353111A

WELL DATA

ANNULAR

| ANNULAR I.D. (in) | DEPTH(ft) | |
|----------------------|--------------|---------------|
| | MEASURED | TRUE VERTICAL |
| 8.097 CASING | 1,325 1,350' | 1,325 1,350' |
| 7.875 HOLE | 6,950 | 6,950 |

SUSPENDED

| DIAMETER (in) | | WEIGH T | DEPTH(ft) | |
|---------------|-------|------------|-----------|---------------|
| O.D. | I.D. | | MEASURED | TRUE VERTICAL |
| 5.500 | 4.892 | 17 | 6,950 | 6,950 |

Float Collar set @ 6,910 ft
 Mud Density 10.40 ppg
 Est. Static Temp. 143 ° F
 Est. Circ. Temp. 119 ° F

VOLUME CALCULATIONS

| | | | | | | |
|---------------------|---|--------------|------|-------------|---|----------------------|
| 1,325 ft | x | 0.1926 cf/ft | with | 0 % excess | = | 255.2 cf |
| 4,027 ft | x | 0.1733 cf/ft | with | 86 % excess | = | 1296.9 cf |
| 1,598 ft | x | 0.1733 cf/ft | with | 85 % excess | = | 512.3 cf |
| 40 ft | x | 0.1305 cf/ft | with | 0 % excess | = | 5.2 cf (inside pipe) |
| TOTAL SLURRY | | | | | = | 2069.6 cf |
| | | | | | = | 369 bbls |

Operator Apache Corporation
Well Name: Hawk A #19
Job 5-1/2" Production Casing
Date: May 9, 2003



Exhibit A-1

Proposal No: 215353111A

FLUID SPECIFICATIONS

| Spacer | | | | 30.0 bbls Water @ 8.3 ppg |
|--------------|-------------------------------|---|--------------------------------|--|
| <u>FLUID</u> | <u>VOLUME</u> <u>CU-FT</u> | | <u>VOLUME</u> <u>FACTOR</u> | <u>AMOUNT AND TYPE OF</u> |
| Lead Slurry | 1552 | / | 2.44 | = 635 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 gel |
| Tail Slurry | 518 | / | 1.29 | = 400 sacks (50:50) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.003 gps FP-6L + 2% bwoc Bentonite + 58.7% Fresh Water |
| Displacement | | | | 160.6 bbls Fresh Water Displacement @ 8.34 ppg |

CEMENT PROPERTIES

| | SLURRY NO. 1 | SLURRY NO. 2 |
|--------------------------------|-------------------------|-------------------------|
| Slurry Weight (ppg) | 11.80 | 14.20 |
| Slurry Yield (cf/sack) | 2.44 | 1.29 |
| Amount of Mix Water (gps) | 14.07 | 5.91 |
| Amount of Mix Fluid (gps) | 14.07 | 5.91 |
| Estimated Pumping Time - 70 BC | 4:00 | 3:00 |

Note: All slurry properties represented above are estimates and will be tested based upon the best available well data prior to the cementing service.
 Compatibility test should be completed with mud and spacer samples prior to performing the cementing services.
 Obtain log temperature for testing if available.

EXHIBIT "B"
HAWK A #19

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

No H₂S is anticipated.

EXHIBIT "C"

SURFACE USE AND OPERATIONS PLAN
CULTURAL RESOURCES SURVEY
APPROXIMATE REHABILITATION SCHEDULE

LOCALITY: **HAWK A #19**
OPERATOR: **APACHE CORPORATION**

LOCATION: SE¼NE¼ 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
ROSWELL DISTRICT OFFICE
2909 WEST 2ND STREET
ROSWELL, NEW MEXICO 88201
TELEPHONE (505) 627-0272

This plan is submitted to provide permitting agencies with information necessary to allow an appraisal of the environmental effects associated with the proposed drilling operations. Within the context of typical drilling operations, this plan provides for protection of surface resources and other environmental components. This plan has been developed in conformity with the United States Geological Survey NTL-6 guidelines, Bureau of Land Management Oil and Gas Order No. 1, and in connection and consultation with the private surface owner of record, if other than the United States of America, as well as the Roswell District Office for the Bureau of Land Management and the United States Department of the Interior personnel.

PART #1:

- 1) Surface Location:
SE¼NE¼ of Section 8, Township 21 South, Range 37 East, N.M.P.M.
Lea County, New Mexico
1420' FNL, 150' FEL, Unit H
See attached Exhibits "D" and "E"
- 2) Bottom Hole Location:
SE¼NE¼ of Section 8, Township 21 South, Range 37 East, N.M.P.M.
Lea County, New Mexico
1420' FNL, 150' FEL, Unit H
See attached Exhibits "D" and "E"
- 3) Leases Issued: LC-031741-A

- 4) Record Lessee:

| | |
|---------------------------|-----|
| Apache Corporation | 50% |
| BP America Production Co. | 25% |
| Chevron USA Inc. | 25% |

- 5) Acres in Lease:

Township 21 South, Range 37 East, NMPM

Section 4: W½SW¼

Section 5: SE¼

Section 8: N½NW¼, NE¼

Section 9: W½NW¼

Total Acres: 560.00

- 6) Acres Dedicated to Well:

There are 40.00 acres dedicated to this well, which takes in the SE¼NE¼ 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 and State Highway 18. The well is ±3.5 miles northwest of Eunice, New Mexico. From Eunice, go north approximately 2.5 miles on State Highway 18. Turn northwest on existing lease roads to location as illustrated on Exhibit "E-2".

- 2) Planned Access:
 - A. Length and Width: A new 437' access road, 20' wide, will be constructed from the exiting lease/access road to the well site. Extra width may be needed in the turns. Application for a buried pipeline will be made if it becomes necessary.
 - B. Construction: The new road will be 20' wide with a center crown, with 6 inches compacted caliche. The existing roads will be lightly graded and topped with compacted caliche as needed.
 - C. Turnouts: None required.
 - D. Culverts: None required.
 - E. Cuts and Fills: As needed.
 - F. Gates and Cattleguards: None required.

- 3) Location of Existing Wells:

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

- 4) Location of Existing and/or Proposed Facilities:
 - A. There are production facilities within the area of the Northeast Drinkard Unit, which is adjacent to the wellsite.
 - 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: 140' x 200' 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 6 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 Trustee of the Millard Deck Estate, c/o Tim Wolters, Bank of America, P. O. Box 270, Midland, TX 79702. A Surface Damage Release agreement for this tract has been executed by the Millard Deck Estate and Apache Corporation.
 - H. Archaeological, Historical, and Other Cultural Sites:
Don Clifton, Archaeological Consultant, of Pep, New Mexico, will be conducting an archaeological survey of the proposed Hawk A #19 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):

Jim McKinney
Apache Corporation
Suite 1500 – Two Warren Place
6120 South Yale Avenue
Tulsa, Oklahoma 74136
(918) 491-4800

Project (Operations Engineer):

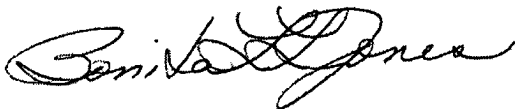
Kevin Mayes
Apache Corporation
Suite 1500 – Two Warren Place
6120 South Yale Avenue
Tulsa, Oklahoma 74136
(918) 491-4972

Drilling Operations (Operations Engineer):

Glenn Bone
Apache Corporation
Suite 1500 – Two Warren Place
6120 South Yale Avenue
Tulsa, Oklahoma 74136
(918) 491-4907

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, RLP, Consulting Landman
Agent for Apache Corporation
P. O. Box 8309
Roswell, New Mexico 88202-8309
(505) 624-9799 FAX (505) 624-9799
E-Mail: bonita@dfn.com

Date: 6-20-03

May-21-2003 01:37PM FROM-APACHE CORP DRILL

EXHIBIT D-1

4860

T-567 P.001/004 F-145

P.A. Box 1500, Santa Fe, NM 87504-1500

Bureau, Minerals and Natural Resources Department

Form O-102

Revised February 18, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II

P.O. Box 1500, Santa Fe, NM 87504-1500

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III

1000 Mc Brannan Rd., Aztec, NM 87410

DISTRICT IV

P.O. Box 9999, Santa Fe, NM 87504-9999

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| | | |
|----------------------------|-------------------------------------|---|
| API Number 30-025-36339 | Pool Code 1919006660/60240 | Pool Name Drinkard/Blinbery Oil & Gas/Tubb Oil & Gas (Oil) |
| Property Code 24426 | Property Name HAWK "A" | Well Number 19 |
| OGSIN No. 873 | Operator Name APACHE CORPORATION | ELEVATION 3509' |

Surface Location

| UL or lot No. | Section | Township | Range | Lot No. | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| H | 8 | 21-S | 37-E | | 1420' | NORTH | 150' | EAST | LEA |

Bottom Hole Location If Different From Surface

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

| Dedicated Acres | Joint or InPDI | Consolidation Code | Order No. |
|-----------------|----------------|--------------------|-----------|
| 40.00 | | | NSL-4924 |

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

| | |
|--|---|
| | OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature LARRY E. Rader Printed Name Tech. Coordinator-Dry. Title 5/21/03 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 supervision, and that the same is true and correct to the best of my belief. April 30, 2003 Date Surveyed Signature Ronald E. Gibson Professional Surveyor 03.11.04505 Certificate No. RONALD E. GIBSON 0230 State of New Mexico 1994-44 |
| | GEODETIC COORDINATES NAD 27 NME Y = 846480.2 X = 856844.8 LAT. 37°28'48.52"N LONG. 103°10'33.41"W |
| | |

DISTRICT I

P.O. Box 1000, Hobbs, NM 88401-1000

DISTRICT II

P.O. Box 1000, Hobbs, NM 88401-1000

DISTRICT III

1000 N. Grand St., Artes, NM 87410

DISTRICT IV

P.O. Box 1000, Santa Fe, NM 87504-1000

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Form C-102

Revised February 10, 1994

Return 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 "A" | Well Number 19 |
| UGED No. | Operator Name APACHE CORPORATION | Elevation 3509 |

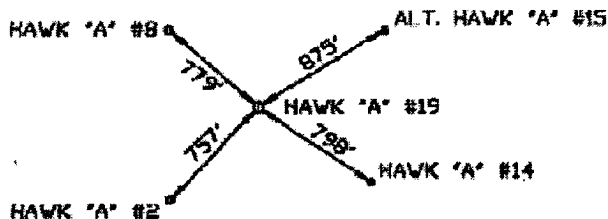
Surface Location

| Oil or Lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|----------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| H | 8 | 21-S | 37-E | | 1420' | NORTH | 150' | EAST | LEA |

Bottom Hole Location If Different From Surface

| Oil or Lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|----------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |
| Directed 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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Larry E. Rader
Signature

LARRY E. RADER
Printed Name

TECH. Coordinator-Orig.
Title

5/21/03
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of recent surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

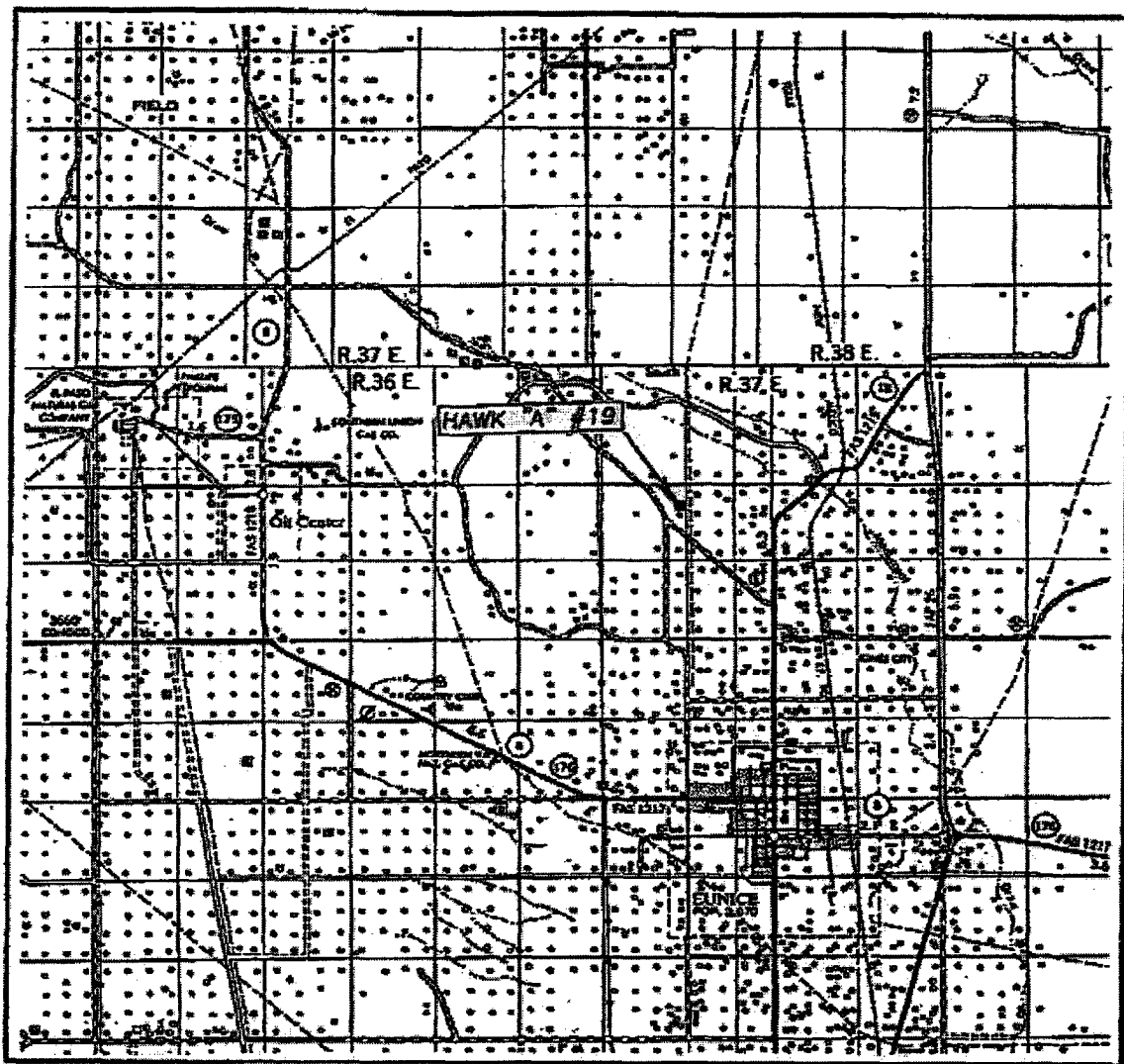
April 30, 2003

Date Surveyed A.W.B.
Signature & Seal of
Professional Surveyor

03.11.0450

Certificate No. RONALD E. EMMON 8226
GARY EMMON 18043

VICINITY MAP

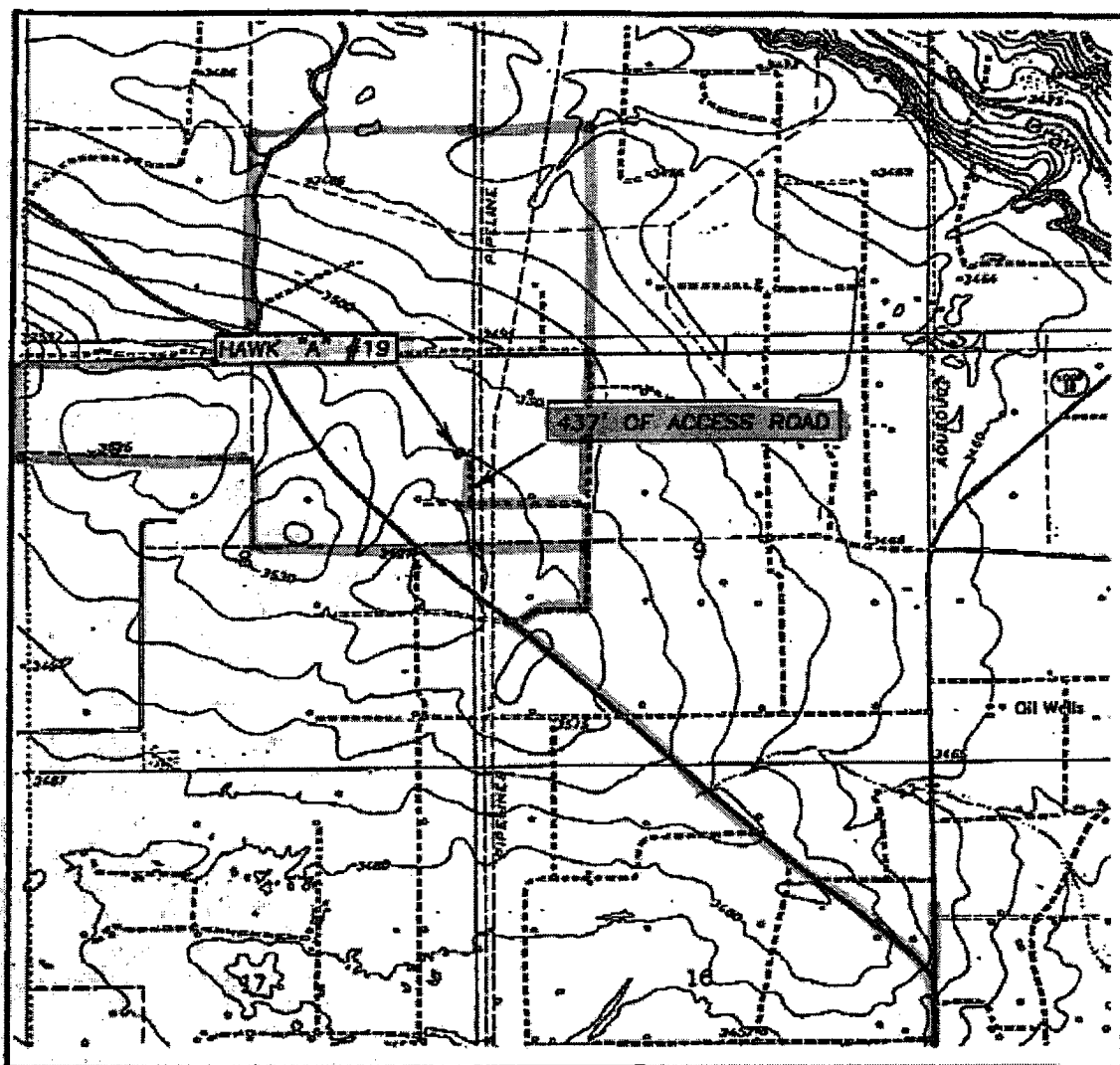


SCALE: 1" = 2 MILES

SEC. 8 TWP. 21-S RGE. 37-E
SURVEY N.M.P.M.
COUNTY LEA
DESCRIPTION 1420' FNL & 150' FEL
ELEVATION 3509'
OPERATOR APACHE CORPORATION
LEASE HAWK "A"

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
EUNICE, N.M.

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

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1420' FNL & 150' FEL

ELEVATION 3509'

OPERATOR APACHE CORPORATION

LEASE HAWK "A"

U.S.G.S. TOPOGRAPHIC MAP
EUNICE, N.M.

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

ACCESS

LEASE BOUNDARY

EXHIBIT E-3

DISTRICT I
P.O. Box 1000, Santa Fe, NM 87504-1000

DISTRICT II
P.O. Box 1000, Santa Fe, NM 87504-1000

DISTRICT III
P.O. Box 1000, Santa Fe, NM 87504-1000

DISTRICT IV
P.O. Box 1000, Santa Fe, NM 87504-1000

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Revised February 14, 1994
Submitted to Appropriate District Office
State License - 11000
Pen License - 11000

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| | | |
|---------------|--|--------------------------|
| APT Number | Page One | Pool Name |
| Property Code | Property Name HAWK "A" | Well Number 19 |
| DEED No. | Operator Name APACHE CORPORATION | SEVERITY 3509' |

Surface Location

| UL or lot No. | Section | Township | Range | Lot No. | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| H | 8 | 21-S | 37-E | | 1420' | NORTH | 150' | EAST | LEA |

Bottom Hole Location If Different From Surface

| UL or lot No. | Section | Township | Range | Lot No. | 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

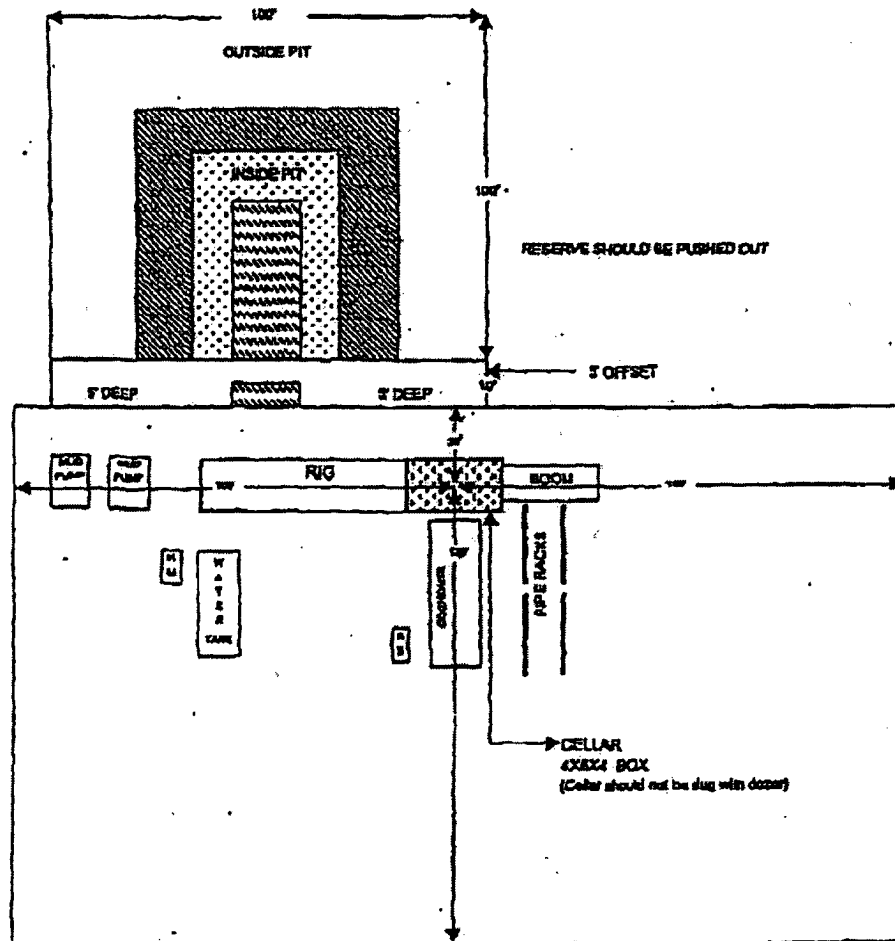
| | |
|---|---|
| <p>BATT</p> <p>8 TV</p> <p>1722</p> <p>3507.2'</p> <p>3505.3'</p> <p>3514.3'</p> <p>3510.1'</p> <p>DETAIL</p> <p>150'</p> <p>1420'</p> <p>GEODETIC COORDINATES NAD 27 NME Y = 345480.2 X = 855844.8 LAT. 32°29'48.52"N LONG. 102°16'33.41"W</p> | <p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature _____</p> <p>Printed Name _____</p> <p>Title _____</p> <p>Date _____</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>April 30, 2003</p> <p>Date Surveyed _____ A.W.B.</p> <p>Signature _____</p> <p>Printed Name _____</p> <p>PROFESSIONAL SURVEYOR NEW MEXICO 6377, 8450 3/02/03</p> <p>Consolidation No. _____</p> |
|---|---|

3560 FT.

Flow-line Route

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

EXHIBIT G



CAPSTAR DRILLING INC

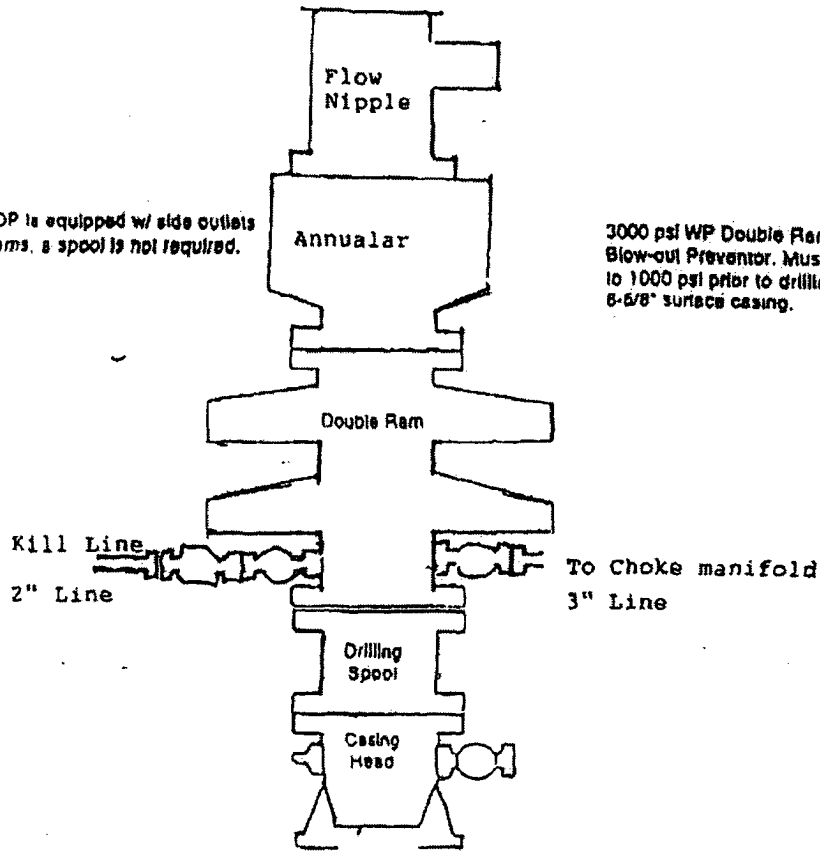
BOP SCHEMATIC

9" X 3000 psi

EXHIBIT "H"

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
6-5/8" surface casing.



Choke Manifold Schematic

