

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG \_\_\_\_\_ ELECTRIC LOGS \_\_\_\_\_ FILE  WATER SANDS \_\_\_\_\_ LOCATION INSPECTED \_\_\_\_\_ SUB. REPORT/abd. \_\_\_\_\_

DATE FILED **1/11/91**

LAND: FEE & PATENTED \_\_\_\_\_ STATE LEASE NO. \_\_\_\_\_ PUBLIC LEASE NO. **U-30693** INDIAN \_\_\_\_\_

DRILLING APPROVED: **1/16/91 (CAUSE NO. 197-4(A))**

SPUDDED IN: \_\_\_\_\_

COMPLETED: **LA'D 7-9-91** PUT TO PRODUCING: \_\_\_\_\_

INITIAL PRODUCTION: \_\_\_\_\_

GRAVITY A.P.I. \_\_\_\_\_

GOR: \_\_\_\_\_

PRODUCING ZONES: \_\_\_\_\_

TOTAL DEPTH: \_\_\_\_\_

WELL ELEVATION: \_\_\_\_\_

DATE ABANDONED: **LA'D PER BLM EFF 7-9-91**

FIELD: **NATURAL BUTTES**

UNIT: \_\_\_\_\_

COUNTY: **UINTAH**

WELL NO. **NELSON FEDERAL #12-31** API NO. **43-047-31937**

LOCATION **1891' FNL** FT. FROM (N) (S) LINE. **1009' FWL** FT. FROM (E) (W) LINE. **SW NW** 1/4 - 1/4 SEC. **31**

| TWP. | RGE. | SEC. | OPERATOR           | TWP. | RGE. | SEC. | OPERATOR |
|------|------|------|--------------------|------|------|------|----------|
| 10S  | 20E  | 31   | APACHE CORPORATION |      |      |      |          |

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

SUBMIT IN THIS CASE\*  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 1004-0136  
Expires August 31, 1985

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. TYPE OF WORK  
 DRILL       DEEPEN       PLUG BACK

b. TYPE OF WELL  
 OIL WELL       GAS WELL       OTHER       SINGLE ZONE       MULTIPLE ZONE

2. NAME OF OPERATOR  
 Apache Corporation

3. ADDRESS OF OPERATOR  
 1700 Lincoln, Ste. 1900, Denver, CO 80203-4519

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements\*)  
 At surface      1891' FNL, 1009' FWL (SW NW)  
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 Approximately 53 miles from Roosevelt

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)      1009'

16. NO. OF ACRES IN LEASE      800

17. NO. OF ACRES ASSIGNED TO THIS WELL      160

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.      ---

19. PROPOSED DEPTH      6610' WSTC

20. ROTARY OR CABLE TOOLS      Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 5387' GR

22. APPROX. DATE WORK WILL START\*  
 1/17/91

5. LEASE DESIGNATION AND SERIAL NO.  
 U-30693

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 Ute

7. UNIT AGREEMENT NAME  
 ---

8. FARM OR LEASE NAME  
 Nelson Federal

9. WELL NO.  
 #12-31

10. FIELD AND POOL, OR WILDCAT  
 Natural Buttes 630

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 Sec. 31-T10S-R20E

12. COUNTY OR PARISH      13. STATE  
 Uintah      Utah

RECEIVED  
 DIVISION OF  
 OIL, GAS & MINING  
 JAN 11 1991

23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|---------------|--------------------|
| 12 1/4"      | 9 5/8"         | 24#             | 230'          | 125 sxs to sfc     |
| 7 7/8"       | 4 1/2"         | 11.6#           | 6610'         | 1351 sxs           |

The subject well will be drilled to test the productive potential of the Wasatch zone. Significant oil/gas shows will be tested. The well will be cased and cemented as described above. If the well is plugged and abandoned, the operation will be completed in accordance with instructions from the Bureau of Land Management. Anticipated BHP is 2862 psi.

- Attachments are as follows:
- Conditions of Approval for Notice to Drill Survey Plat
  - Multi-Point Surface Use Plan which includes:
    - 1) Topo showing access roads
    - 2) One mile radius map
    - 3) Drillsite plan
    - 4) Drillsite Cross-Section

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 David M. Talbott      TITLE Sr. Drlg/Production Engr      DATE 12/20/90  
 David M. Talbott

(This space for Federal or State office use)  
 PERMIT NO. API 43-047-31937      APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_      TITLE \_\_\_\_\_      DATE 1-16-91  
 CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_  
199-40A

\*See Instructions On Reverse Side

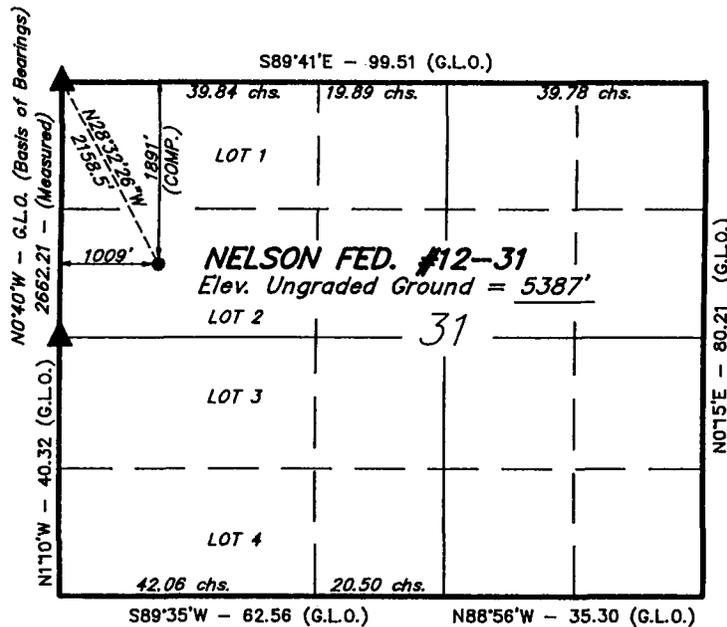
**APACHE CORPORATION**

Well location, Nelson Fed. #12-31, located as shown in Lot 2, Section 31, T10S, R20E, S.L.B.&M. Uintah County, Utah

**T10S, R20E, S.L.B.&M.**

BASIS OF ELEVATION

SPOT ELEVATION AT THE NORTHWEST CORNER OF SECTION 31, T10S, R20E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN. NW QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5334 FEET.



**EXHIBIT D**

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Robert L. Kay*  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 5709  
 STATE OF UTAH

▲ = SECTION CORNERS LOCATED. (BRASS CAPS)

|  |                            |
|--|----------------------------|
| <b>UINTAH ENGINEERING &amp; LAND SURVEYING</b><br>85 SOUTH 200 EAST - VERNAL, UTAH 84078<br>(801) 789-1017 |                            |
| SCALE<br>1" = 2000'  | DATE<br>12-1-90            |
| PARTY<br>GS BC REH   | REFERENCES<br>G.L.O. PLAT  |
| WEATHER<br>COOL  | FILE<br>APACHE CORPORATION |

**SELF CERTIFICATION STATEMENT**

Please be advised that Apache Corporation is considered to be the operator of the Nelson Federal #12-31, SW 1/4, NW 1/4 Section 31, Township 10S, Range 20E; Lease U-30693; Uintah County, Utah; and is responsible under the terms and conditions of the lease for the operations conducted upon the leased land. Bond coverage is provided by Insurance Company of North America.

APACHE CORPORATION  
NELSON FEDERAL 12-31  
1891' FNL & 1009' FWL  
SW NW Section 31-T10S-R20E  
Uintah County, Utah  
U-30693

MULTI-POINT SURFACE USE PLAN

1. Existing Roads:

a. Location of proposed well in relation to town or other reference point: See Exhibit A.

b. Proposed route to location:

Take Hwy 40 to half way between Roosevelt and Vernal (16 miles from Vernal). Turn south at the Ouray sign.

Follow road south to the Green river bridge at Oray, UT. Continue south until a west side road intersection in the road at about (8.4 miles) and turn right (west). This is the Willow Creek road (locals call this the Turkey track).

1. Note: The road starting at the Green River bridge is under construction.

Go approximately 4 miles into the river bottom heading south. There is an old Cotton Petroleum sign at a "Y" in the road. Turn right at the sign, should see yellow bridge.

Cross bridge, go approximately .3 miles, turn sharp right, go up dugway.

Follow road about 5 miles staying on main traveled road, there is a pipeline and fence line on the north side of the road. Turn left on lease road (will be marked by signs).

Location is approximately 900' to the SW.

Total Distance from Roosevelt is 53 mi.

c. Location and description of roads in the area: See Exhibit A.

d. Plans for improvement and/or maintenance of existing roads: Road will be graded and gravelled as needed to handle the traffic associated with our operations at this site.

2. Planned Access Roads:

- a. Length: Approximately 900'.
- b. Width: 30' right-of-way with 18' running surface maximum.
- c. Maximum grades: Maximum grade will not exceed 5%
- d. Turnouts: No turnouts are planned.
- e. Location and size of culverts and/or bridges and brief description of any major cut and fills: None
- f. Drainage: A drainage ditch will be constructed on the uphill side with a 4:1 slope with diversions away from the road as required on the downhill side where the slope exceeds 2%.
- g. Surface Materials (source): All surface material will be local soil and rock.

3. Location of Existing Wells:

See Attached Exhibit B.

4. Location of Tank Batteries and Production Facilities:

All permanent structures and facilities constructed or installed on location will be painted a flat, non-reflective, earth-tone color to match the standard environmental colors, as determined by the Bureau of Land Management. A structure or facility will be considered permanent if it has been on location more than six months. All permanent structures and facilities will be painted within six months of installation. Facilities required to comply with OSHA regulations will be excluded from painting.

If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain the capacity of the largest vessel. The integrity of the dike will be maintained.

If a tank battery is constructed it will be placed on the NE corner of the location.

Load lines will be placed inside the dike surrounding the tank battery.

The tank battery will comply with all site security guidelines identified in 43 CFR 3162.7 regulations.

All off-lease storage, measurement, or commingling on or off-lease will have prior written approval from the AO.

5. Location and Type of Water Supply:

All water needed for drilling purposes will be obtained from:

An existing fresh-water well located in from an existing water well located in Section 17-T10S-R20E. Well is operated by CNG under permit #49-367.

6. Source of Construction Material:

No road surfacing and pad construction material will be required from off location.

The use of materials under jurisdiction of the BLM will conform to 43 CFR 3610.2-3.

7. Method of Handling Waste Disposal:

The reserve pit will be lined.

Burning will not be allowed. Rubbish will be collected in a large wire-mesh cage set on the location site. Rubbish will be removed from the cage periodically and hauled to an approved disposal site.

Produced waste water will be confined to a lined pit for a period not to exceed 90 days after initial production. During the 90-day period an application for approval of a permanent method of disposal will be submitted to the AO for approval. All required water analyses will accompany the application. Failure to submit an application within the allotted time will be considered an incidence of non-compliance, which is grounds for issuing a shut-in order.

8. Ancillary Facilities:

Camp facilities will not be required.

9. Well Site Layout:

The reserve pit will be located: SE corner of the location. Also see Exhibit C for pit location.

Topsoil will be stockpiled. See Exhibit C.

Excess material from construction of the location will be stored on the SE corner of the location.

Access to the well pad will be from the NW. Also see Exhibits A and C for the location of the planned access road.

The trash cage will be located: See Exhibit C.

Reserve pits will be fenced with wire-mesh and topped with at least one strand of barbed wire.

10. Plans for Restoration of Surface:

Immediately upon completion of drilling, the location and surrounding area will be cleared of all debris, materials, trash and junk not required for production.

Before any dirt work to restore the location takes place, the reserve pit must be completely dry and all cans, barrels, pipe, etc. will be removed. The reserve pit and that portion of the location and access road not needed for production facilities/operations will be reclaimed. The reserve pit will be reclaimed with 90 days from the date of well completion.

All disturbed areas will be recontoured to the approximate natural contours.

The stockpiled topsoil will be evenly distributed over the disturbed areas.

Prior to reseeding, all disturbed areas, including the access roads, will be scarified and left with a rough surface.

Seed will be broadcast or drilled at a time specified by the BLM. If broadcast, a harrow or some other implement will be dragged over the seeded area to assure seed coverage and the seed mixture will be proportionately larger (double the lbs. per acre).

An appropriate seed mixture will be determined by the BLM, either as part of the Conditions of Approval of the APD or at the time restoration activities are scheduled to begin.

All seeding will be done from September 30 until the ground freezes.

At such time as the well is plugged and abandoned the operator will submit a surface reclamation plan to the Surface Management Agency for prescribed seed mixtures and reseeding requirements.

11. Surface and Mineral Ownership:

Surface owner: Ute Indian Tribe  
Mineral rights owner: U.S. Government

12. Other Information:

There will be no deviation from the proposed drilling and completion program without prior approval from the AO. Safe drilling and operating practices will be observed. All wells, whether drilling, producing, suspended or abandoned will be identified in accordance with 43 CFR 3162.2.

"Sundry Notices and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 40 CFR 3162.2.

The dirt contractor, Apache Corporation Field Foremen and Operator's Representative will be provided with an approved copy of the surface use plan.

A cultural resource clearance was done on November 30, 1990. A copy of this report is enclosed.

This permit will be valid for a period of one year from the date of approval. After the permit terminates, a new application will be filed for approval of any future operations.

13. Lessee's or Operator's Representatives & Certification:  
Representative:

Name: David M. Talbott  
Sr. Drilling/Production Engineer

Address: Apache Corporation  
1900 United Bank Center, 1700 Lincoln Street  
Denver, Colorado 80203-4519

Phone Nos: 303/837-5428 Office  
303/690-6518 Home

Alternate Representative:

Name: Alex Nash, Jr.  
Engineering Manager

Address: Apache Corporation  
1900 United Bank Center, 1700 Lincoln Street  
Denver, Colorado 80203-4519

Phone Nos.: 303/837-5433 Office  
303/741-3353 Home

**CERTIFICATION:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route, that I am familiar with the conditions which currently exist, that the statements made in this 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:

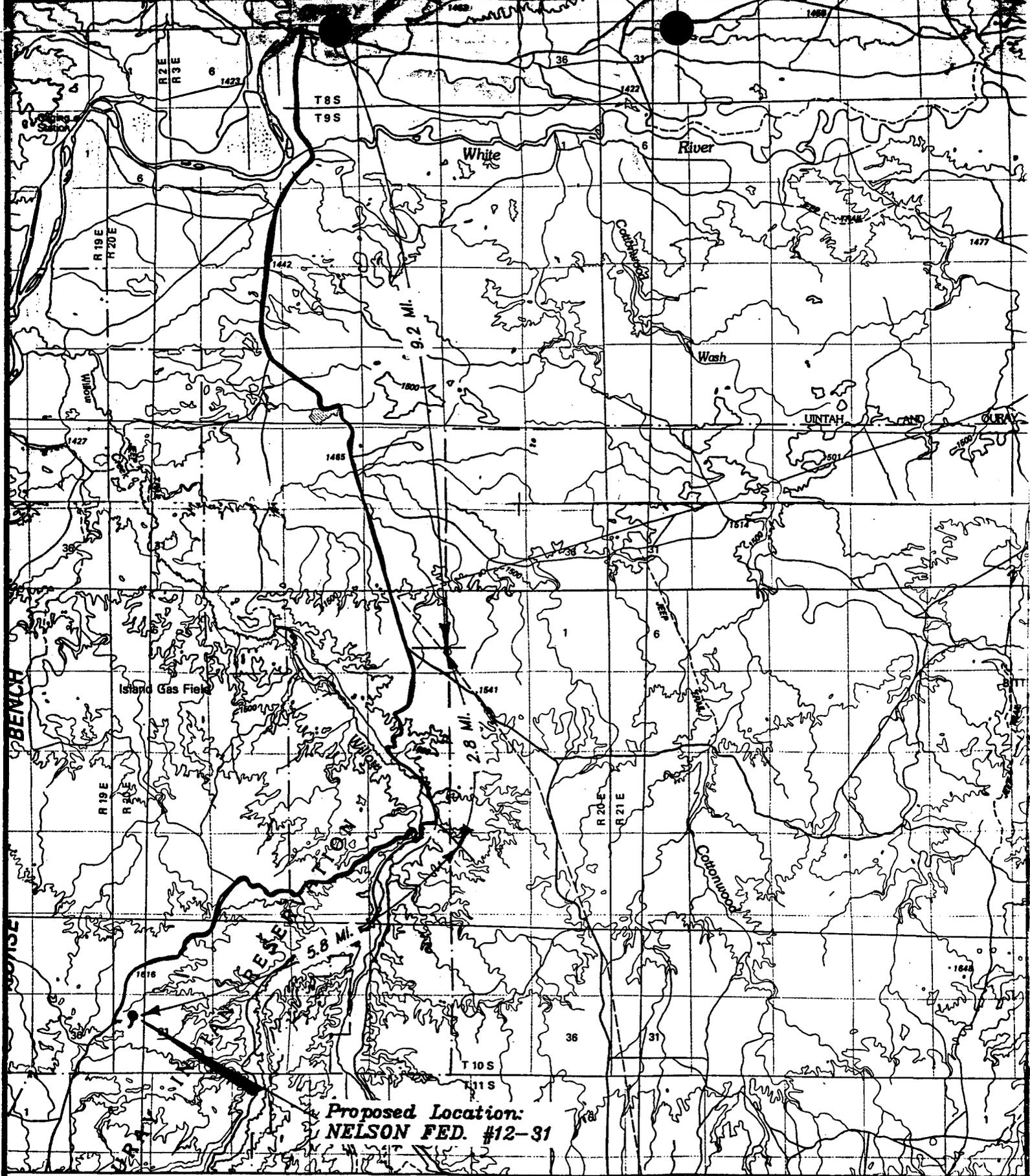
**APACHE CORPORATION**

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.

12/20/90  
Date

David M. Talbott  
David M. Talbott  
Sr. Drilling/Prod. Engineer

APACHE CORPORATION  
Nelson Federal #12-31  
1891' FNL & 1009' FWL  
SWNW Section 31-T10S-R20E  
Uintah County, Utah  
U-30693



**Proposed Location:**  
**NELSON FED. #12-31**

TOPOGRAPHIC  
 MAP "A"

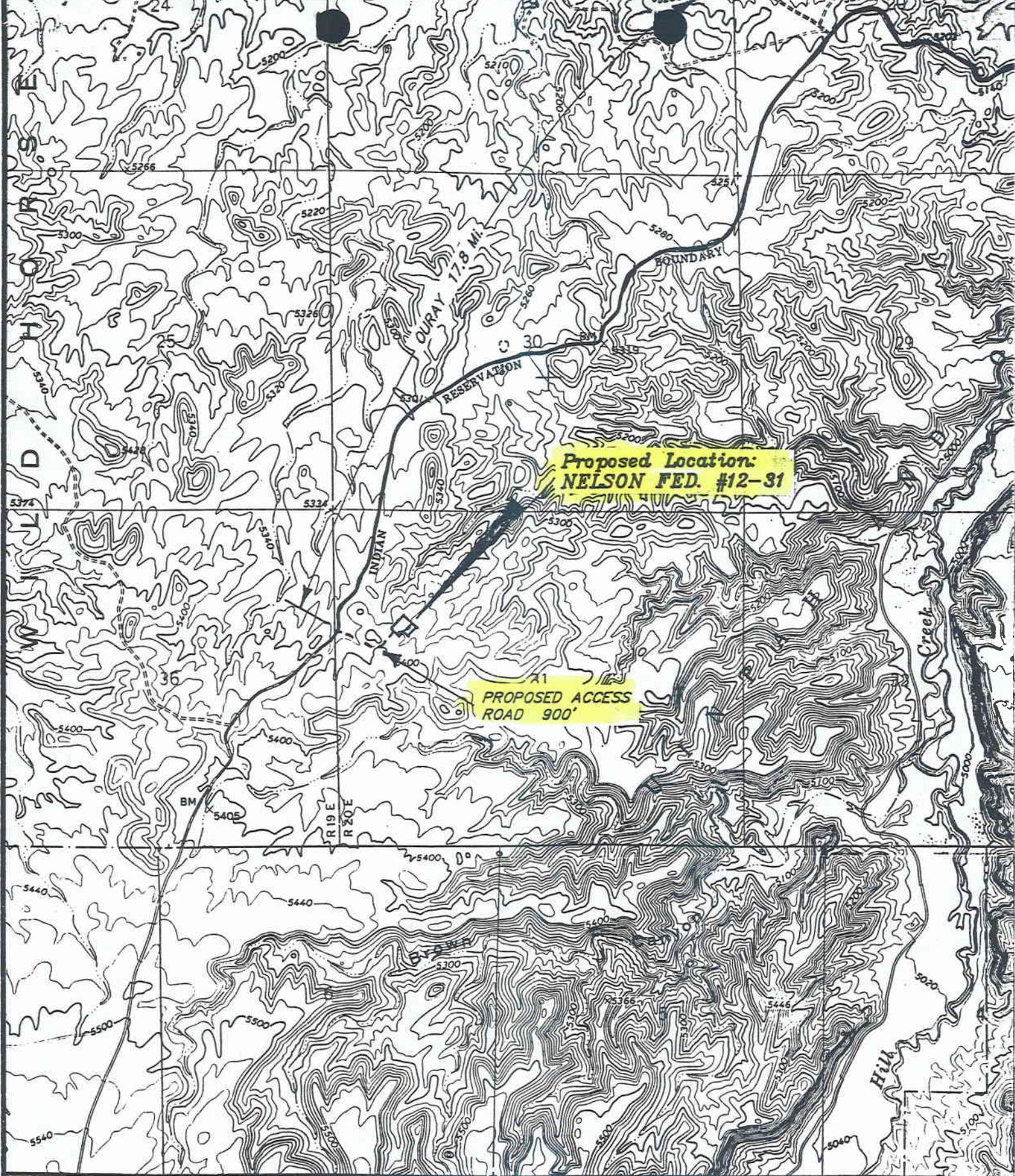
12-3-90



**APACHE CORPORATION**

NELSON FED. #12-31  
 LOT 2, SECTION 31, T10S, R20E, S.L.B.&M

**EXHIBIT A**



TOPOGRAPHIC  
MAP "B"  
SCALE: 1" = 2000'  
12-3-90

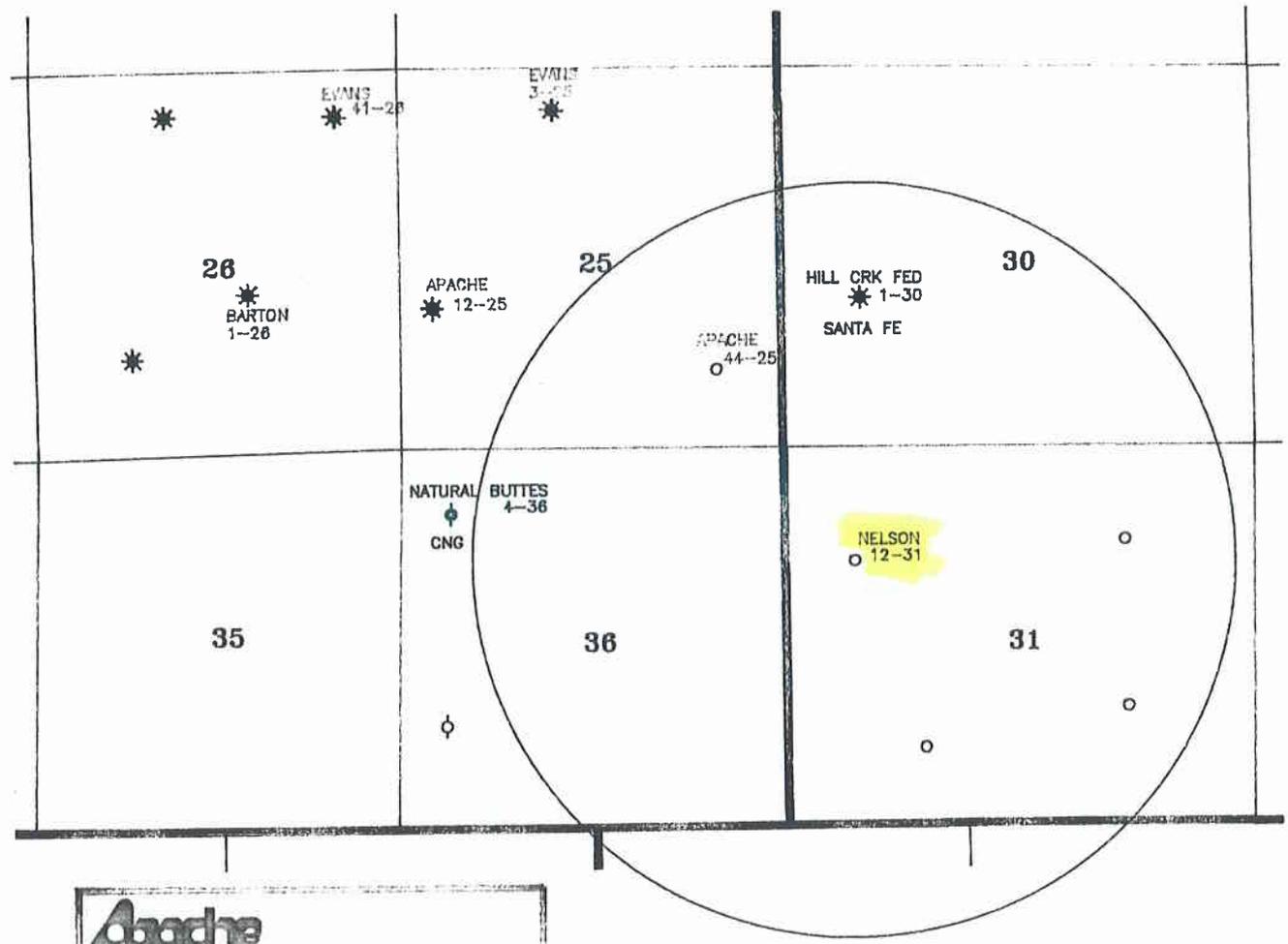


**APACHE CORPORATION**  
NELSON FED. #12-31  
LOT 2, SECTION 31, T10S, R20E, S.L.B.&M

R 19 E

R 20 E

T 10 S

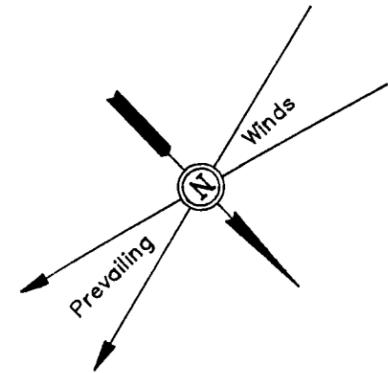
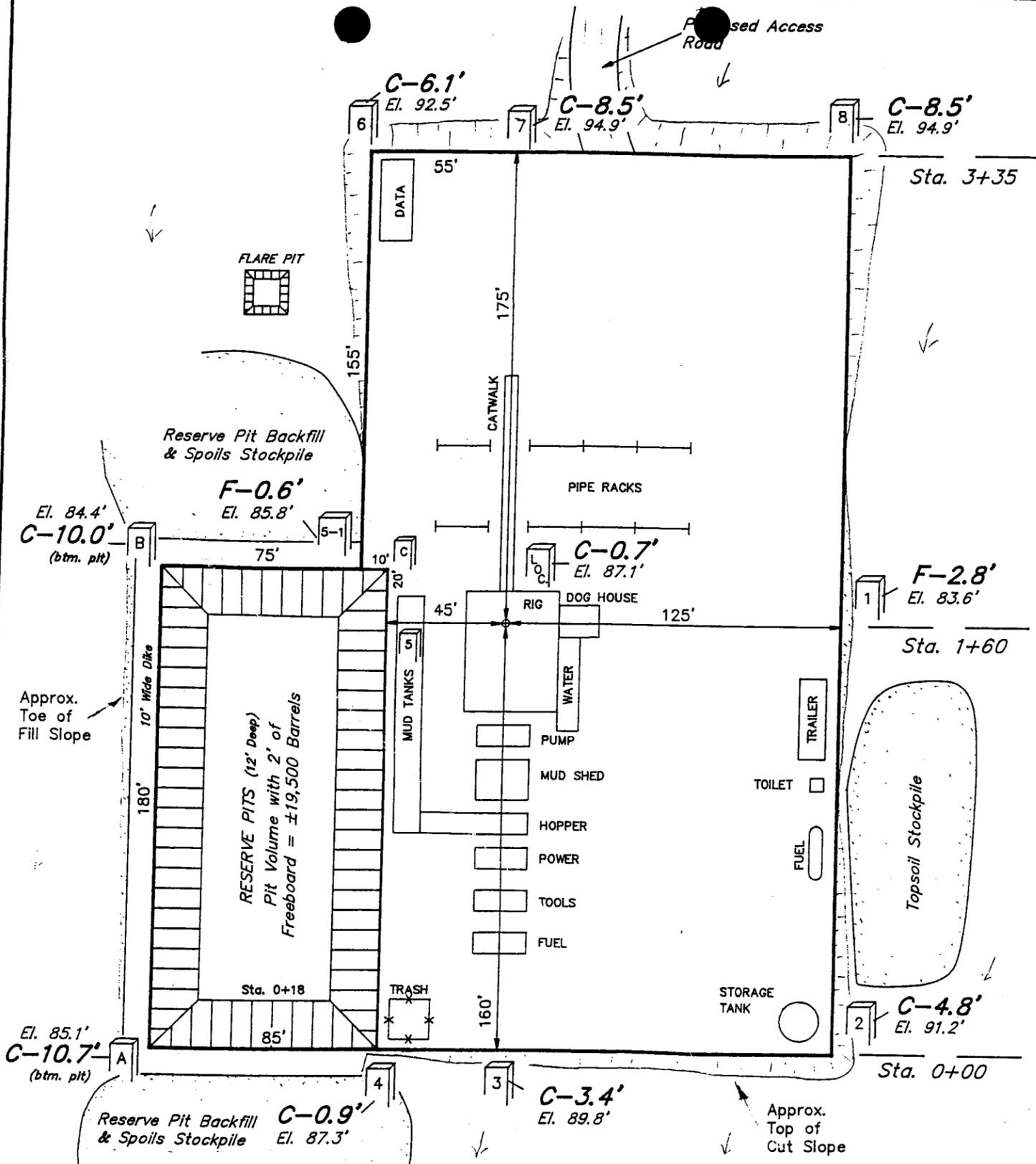


**Apache**  
CORPORATION  
ROCKY MOUNTAIN REGION

**WILD HORSE PROSPECT**  
**Natural Buttes Field**  
UNITAH COUNTY, UTAH

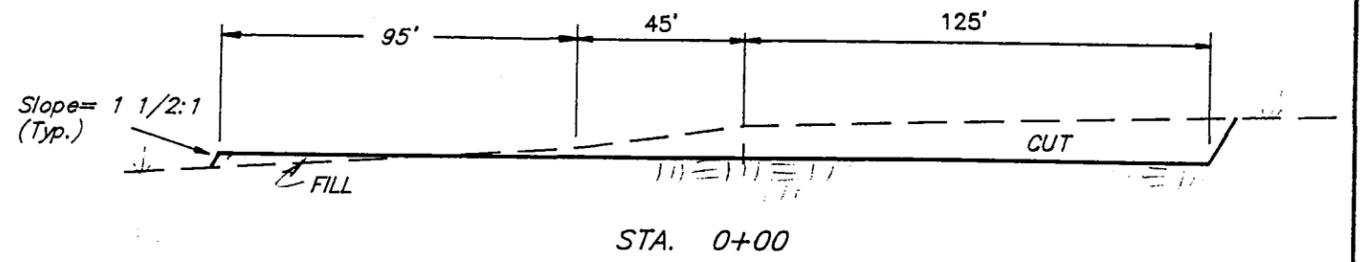
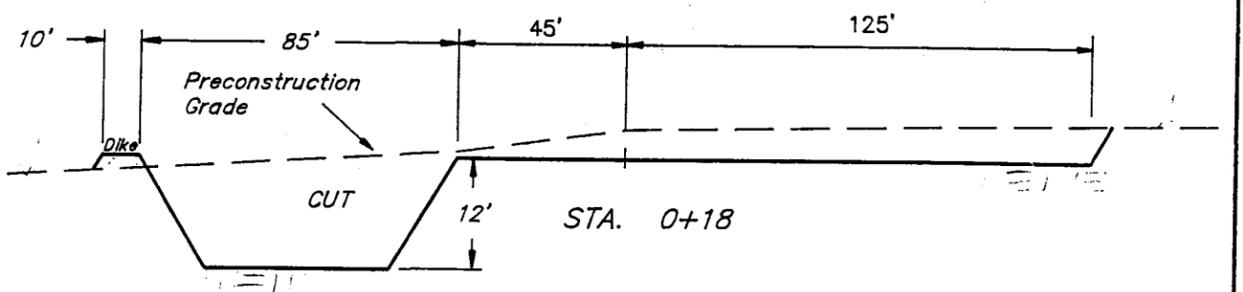
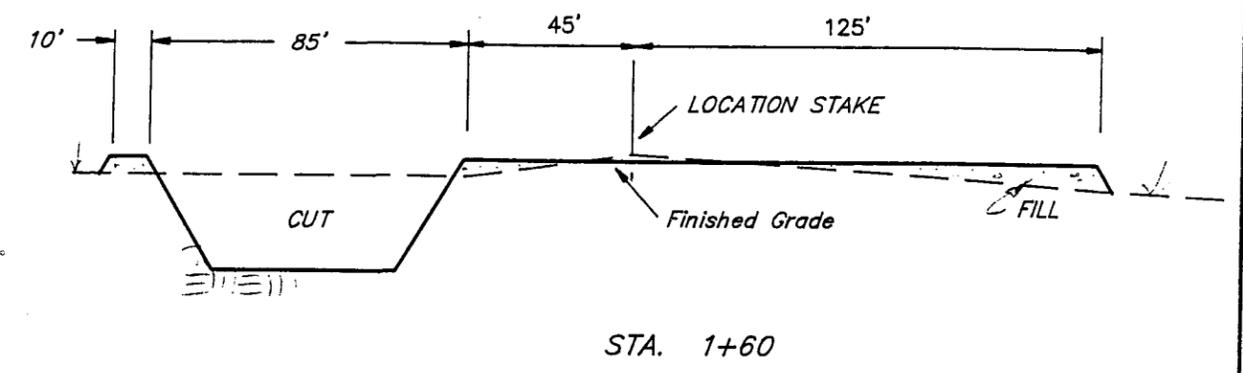
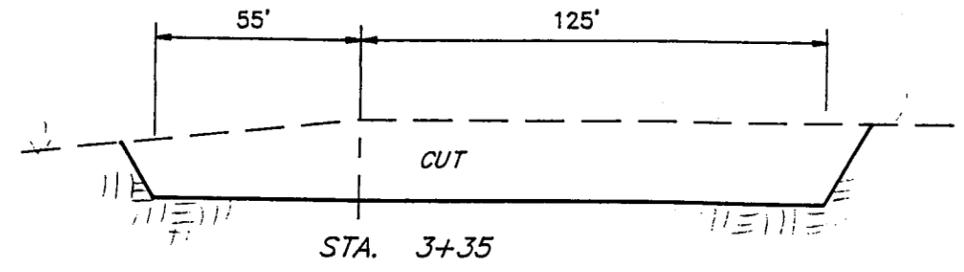
**ONE MILE RADIUS**  
**MAP**

APACHE CORPORATION  
 LOCATION LAYOUT FOR  
 NELSON FED. #12-31  
 SECTION 31, T10S, R20E, S.L.B.&M.



SCALE: 1" = 50'  
 DATE: 12-1-90  
 Drawn By: J.R.S.

X-Section Scale  
 1" = 20'  
 1" = 50'



TYP. LOCATION LAYOUT TYP. CROSS SECTIONS

APPROXIMATE YARDAGES

|                        |                         |
|------------------------|-------------------------|
| (6") Topsoil Stripping | = 1,370 Cu. Yds.        |
| Remaining Location     | = 10,260 Cu. Yds.       |
| <b>TOTAL CUT</b>       | <b>= 11,630 CU.YDS.</b> |
| <b>FILL</b>            | <b>= 1,310 CU.YDS.</b>  |

|   |                   |
|---|-------------------|
| EXCESS MATERIAL AFTER 5% COMPACTION     | = 10,250 Cu. Yds. |
| Topsoil & Pit Backfill (1/2 Pit Vol.)   | = 3,780 Cu. Yds.  |
| EXCESS UNBALANCE (After Rehabilitation) | = 6,470 Cu. Yds.  |

Elev. Ungraded Ground at Location Stake = 5387.1'  
 Elev. Graded Ground at Location Stake = 5386.4'

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL  
DRILLING PROGRAM

COMPANY: APACHE CORPORATION WELL NO: NELSON FEDERAL 12-31

LOCATION: SW NW Sec. 31-T10S-R20E LEASE NO: U-30693  
UINTAH COUNTY, UTAH

ON-SITE INSPECTION DATE: Conducted December 13, 1990

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

A. DRILLING PROGRAM

1. Surface Formation and Estimated Formation Tops:

|             |         |
|-------------|---------|
| Uinta       | Surface |
| Green River | 1076'   |
| Wasatch     | 4524'   |
| TD          | 6610'   |

2. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are expected to be encountered:

|                          |  |       |
|--------------------------|--|-------|
| Expected Oil zones:      | Green River                                  | 1076' |
| Expected Gas zones:      | Green River                                  | 1076' |
|                          | Wasatch                                      | 4524' |
| Expected Water zones:    | None   |       |
| Expected Minerals zones: | No coal or uranium is expected in this area. |       |

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 will be tested to determine commercial potential.

3. Pressure Control Equipment:

A double gate hydraulic BOP, Shaffer type LWS, 10", 3000# WP (or equivalent) with pipe rams and blind rams will be installed on the 8-5/8" casing head. Stack will be tested to 1000 psi prior to drilling under surface; and operational checks will be made daily or on trips. Please see attached Exhibit E.

BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

4. Casing Program and Auxiliary Equipment:

Surface Casing:

230' of 8-5/8", 24#, K-55, ST&C used inspected casing set from 230' to surface. Cement with 125 sxs Class A with 2% CaCl<sub>2</sub>, volume based on hole size with 100% excess. Circ. cement to surface. 8-5/8" guide shoe and insert float valve fillup attachment used for cementing.

Production Casing:

6610' 4-1/2", 11.6#, N-80, LT&C new casing set from 6610' to surface.

Pre-Flushes -

- 1) 50 bbls water
- 2) 2000 gals Mud Flush
- 3) 2000 gals Super Flush

Lead Cement -

315 sxs Hi-Fill cement (11.0 pounds/gallon; 3.2 cubic feet/sx; 23.0 gallons/sack)

Tail-In Cement -

1035 sxs 50/50 Pozmix with 2% gel, 10% salt, 0.5% Halad-322, and 1/4 pound/sk Flocele. (14.4 pounds/gallon; 1.28 cubic feet/sack; 5.75 gallons/sack).

One 4-1/2" float shoe, float collar and centralizers.

Auxiliary equipment will be a kelly cock, a full opening stabbing valve will be on the floor at all times. The mud system will be visually monitored.

5. Mud Program and Circulating Medium:

Surface 0-230'

Will air drill surface hole to 230' or use spud mud gel/lime system with funnel viscosity of 27-35 sec./qt, API water loss no control.

230-6610' TD

Clear water with polyacrylamide sweeps. Weight 8.33-8.5, viscosity water, water loss no control.

These drilling fluids values will be maintained or improved in order to obtain samples while drilling through the potential pay zones.

No chromate additives will be used in the mud system on Federal/Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

6. Coring, Logging and Testing Program:

a. No Cores are planned at this time.

b. No anticipated DST's.

c. Logging Program:

DIL TD to base of surface pipe

CNL/FDC TD to 100' above Green River

d. A conventional mud-logger will be used from 4550' to TD.

e. Planned completion involves selectivity perforating sands in the Wasatch.

f. Productive zones will be swab tested. Water produced during testing will be contained in the temporary reserve pit. All possible oil will be stored and sold.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion or operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, well-test data, geologic summaries, sample description and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the authorized officer (AO).

No abnormal temperatures, pressures or potential hazards such as H<sub>2</sub>S are anticipated.

7. Abnormal Conditions, Bottom Hole Pressures and Potential Hazards:

No abnormal temperatures, pressures or potential hazards such as H<sub>2</sub>S are anticipated.

8. Anticipated Starting Dates & Notifications of Operations:

Construction Date: January 17, 1991

Spud Date: January 31, 1991

No location will be constructed or moved, no well will be plugged and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

The spud date will be reported orally to the AO within 48 hours after spudding. If the spudding occurs on a weekend or holiday, the report will be submitted on the following regular work day. The oral report will be followed by a Sundry Notice.

In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 9-329 "Monthly Report of Operations", starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed, in duplicate, to the Vernal BLM District Office, Vernal, Utah.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, no later than 5 days following the date on which the well is placed on production.

Pursuant to NTL-2B, with the approval of the District Engineer, produced water may be temporarily disposed of into unlined pits for a period of up to 90 days. During the period so authorized, an application for approval of the permanent disposal method, along with the required water analysis and other information, must be submitted to the District Engineer.

A schematic facilities diagram as required by 43 CFR 3162.7-2, 3162.7-3, and 3162.7-4 shall be submitted to the appropriate District Office within 30 days of installation of first production, whichever occurs first. All site security regulations as specified in 43 CFR 3162.7 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-4.

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

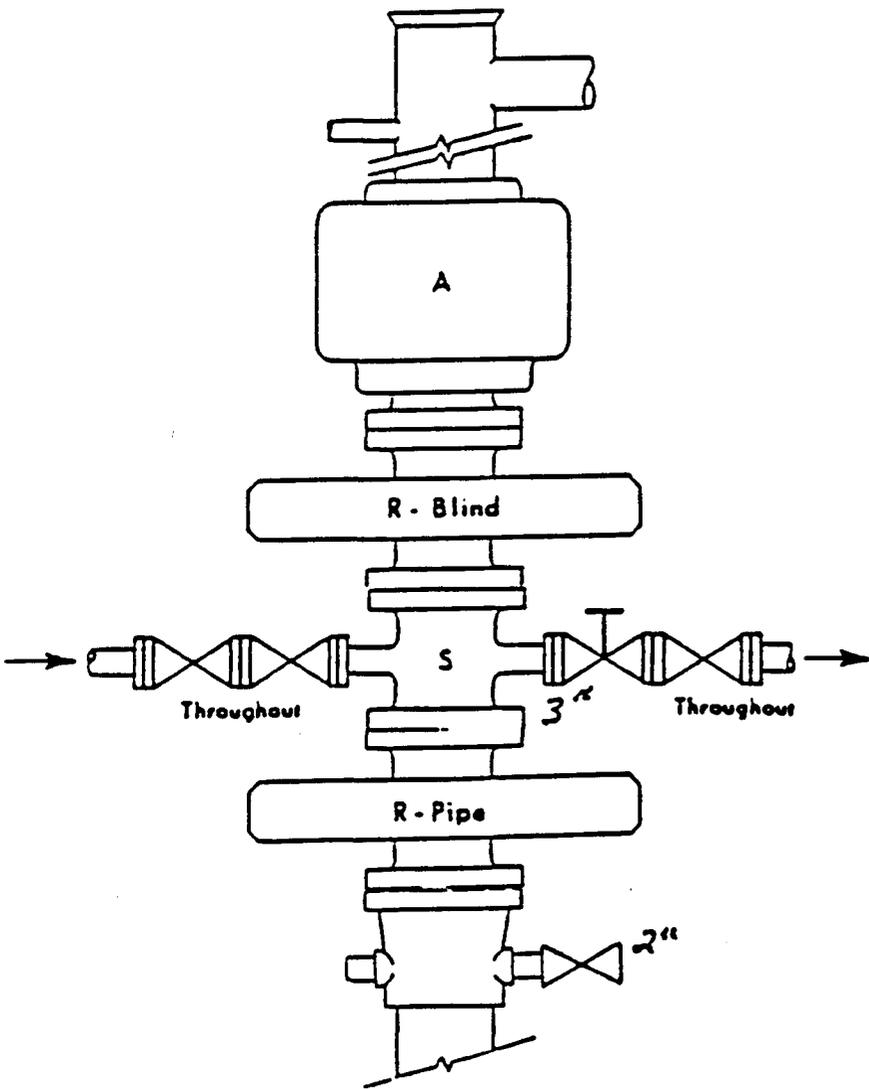
Pursuant to Onshore Oil and Gas Order No. 1, lessees and operators have the responsibility to see that their exploration, development, production and construction operations are conducted in a manner which conforms with applicable Federal laws and regulations and with State and Local laws and regulations to the extent that such State and Local laws are applicable to operations on Federal or Indian lands.



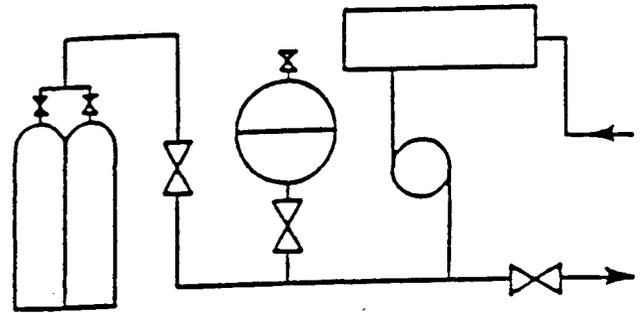
\_\_\_\_\_  
David M. Talbott  
Sr. Drilling/Production Engineer  
APACHE CORPORATION

APACHE CORPORATION  
Nelson Federal #12-31  
1891' FNL & 1009' FWL  
Section 31-T10S-R20E  
Uintah County, Utah  
U-30693

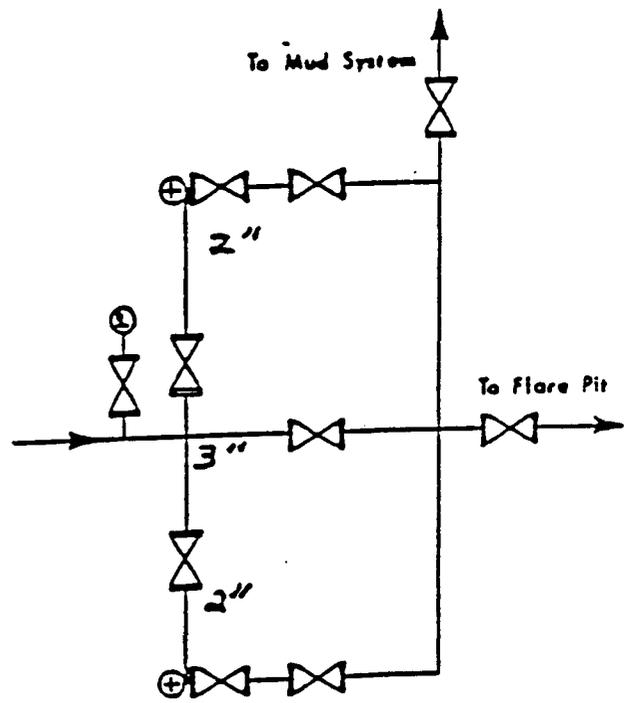
PRESSURE RATING  
3,000 psi



BLOWOUT PREVENTION STACK



ACCUMULATOR SYSTEM



Flanged Connections Throughout  
MANIFOLD SYSTEM

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

Bond No. KO 07 66 21 5

NATIONWIDE OIL AND GAS LEASE BOND

KNOW ALL MEN BY THESE PRESENTS, That we, Apache Corporation

of Minneapolis, Minnesota

as principal, and Insurance Company of North America

of Philadelphia, PA

as surety are held and firmly bound unto the United States of America in the sum of ~~seven hundred thousand dollars~~ <sup>One Hundred and Fifty Thousand Dollars (\$150,000.00)</sup>, lawful money of the United States, for the payment of which, well and truly to be made, we bind ourselves and each of us, our and each of our heirs, successors, executors, administrators, and assigns, jointly and severally, firmly by these presents.

Sealed with our seals and dated this 30 day of September 19 82

The condition of this obligation is such that whereas the said principal has heretofore or may hereafter enter into or otherwise acquire an interest in oil and gas mining leases and oil and gas prospecting permits of various dates and periods of duration covering lands or interests in lands held by the United States in trust for individual Indians, or tribes or bands of Indians, or subject to restrictions against alienation without the consent of the Secretary of the Interior or his authorized representative, which leases and permits have been or may hereafter be granted or approved by the Secretary of the Interior or his authorized representative, and the identification of which herein is expressly waived by both principal and surety hereto.

WHEREAS the principal and surety agree that the coverage of this bond shall extend to and include all extensions and renewals of leases and permits covered by this bond, such coverage to continue without any interruption due to the expiration of the term set forth therein.

WHEREAS the surety hereby waives any right to notice of any modification of any such lease or permit, or obligation thereunder whether effected by extension of time for performance, by commitment of such lease to unit, cooperative, or communization agreement, by waiver, suspension, or change in rental, except an increase thereof, by minimum royalty payment, except an increase thereof, by compensatory royalty payment, or otherwise, this bond to remain in full force and effect notwithstanding.

WHEREAS the principal and surety agree that the neglect or forbearance of the obligee of any such lease or permit in enforcing the payment of any rental or royalty or the performance of any other covenant, condition, or agreement of any such lease or permit shall not in any way release the principal and surety, or either of them, from any liability under this bond; and

WHEREAS the principal and surety agree that in the event of any default under any such lease or permit, the obligee may prosecute any claim, suit, action, or other proceeding against the principal and surety, or either of them, without the necessity of joining the other.

Now, if the said principal herein shall faithfully carry out and observe all the obligations assumed in said leases and permits to which Apache Corporation is now or may hereafter become a party, and shall observe all the laws of the United States and regula-

tions made, or which shall be made, thereunder, for the government of trade and intercourse with Indian tribes. and all rules and regulations that have been or shall hereafter be lawfully prescribed by the Secretary of the Interior relative to said oil and gas mining leases and permits, and shall in all particulars comply with the provisions of said leases, permits, rules and regulations, then this obligation shall become null and void; otherwise, to remain in full force and effect.

The rate of premium charged on this bond is \$ 5/M; the total premium paid is \$ 750.00

Signed and sealed in the presence of—

WITNESSES\*

Sherley P. Moll  
P.O. Fochy Tower Implo Mn

Apache Corporation

as to Beatrice L. Huston [SEAL]  
Beatrice L. Huston, V.P. & Secy

P.O. [Signature]  
P.O. 100 Washington Square, Minneapolis, MN

Insurance Company Of North America

as to [Signature] [SEAL]  
Sharon Albrecht, Attorney In Fact

David a. Nyke  
P.O. 100 Washington Square, Minneapolis, MN

P.O. \_\_\_\_\_  
\_\_\_\_\_

as to \_\_\_\_\_ [SEAL]

P.O. \_\_\_\_\_

P.O. \_\_\_\_\_

as to \_\_\_\_\_ [SEAL]

P.O. \_\_\_\_\_

\*Two witnesses to each signature.

Pursuant to delegation of authority in 10 BIAM 5.6 (F.R. 74-16125)

DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS  
Washington 25, D. C.

11/19/82, 19\_\_\_\_\_

Approved:

Acting

Director, Office of Trust Responsibilities

[Signature]



Rider to be attached to and form a part of Bond Number K0 07 66 21 5

on behalf of APACHE CORPORATION

(Name)

MINNEAPOLIS MINNESOTA

(Address)

(Principal),

and in favor of UNITED STATES OF AMERICA

(Obligee),

executed by the Company indicated above (Surety) in the amount of ONE HUNDRED FIFTY THOUSAND AND NO/100---

Dollars (\$ 150,000.00 ) effective SEPTEMBER 30 19 82

The Principal and the Surety hereby consent to changing the said bond as follows:

1. THE ADDRESS OF THE PRINCIPAL IS CHANGED TO: 1700 LINCOLN STREET, DENVER COLORADO 80203
2. THE ADDRESS OF THE SURETY IS CHANGED TO: 1600 ARCH STREET, PHILADELPHIA PENNSYLVANIA 19103  
HAVING A USUAL PLACE OF BUSINESS AT 525 W. MONROE, SUITE 2227, CHICAGO, ILLINOIS 60606
3. THE RATE OF PREMIUM IS CHANGED TO: \$10.00 PER THOUSAND PER BOND AMOUNT PER ANNUM.

This change is effective SEPTEMBER 30 19 89

Nothing herein contained shall vary, alter or extend any provision or condition of the bond other than as above stated.

Signed, Sealed and dated this 31 day of OCTOBER, 19 90

APACHE CORPORATION

BY: Clyde E. McKenzie

Clyde E. McKenzie, Vice President & Treasurer

INSURANCE COMPANY OF NORTH AMERICA

By Magdalena Arteaga

MAGDALENA ARTEAGA

ATTORNEY-IN-FACT

**POWER OF ATTORNEY**

Insurance Company of North America  
a CIGNA company



252784

**Know all men by these presents:** That **INSURANCE COMPANY OF NORTH AMERICA**, a corporation of the Commonwealth of Pennsylvania, having its principal office in the City of Philadelphia, Pennsylvania, pursuant to the following Resolution, adopted by the Board of Directors of the said Company on December 5, 1983, to wit:

**RESOLVED**, That pursuant to Articles 3.15 and 5.1 of the By-Laws, the following Rules shall govern the execution for the Company of bonds, undertakings, recognizances, contracts and other writings in the nature thereof:

- (1) That the President, any Senior Vice President, any Vice President, any Assistant Vice President, or any Attorney-in-Fact, may execute for and on behalf of the Company any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof, the same to be attested when necessary by the Corporate Secretary, or any Assistant Corporate Secretary, and the seal of the Company affixed thereto; and that the President, any Senior Vice President, any Vice President or any Assistant Vice President may appoint and authorize any other Officer (elected or appointed) of the Company, and Attorneys-in-Fact to so execute or attest to the execution of all such writings on behalf of the Company and to affix the seal of the Company thereto.
- (2) Any such writing executed in accordance with these Rules shall be as binding upon the Company in any case as though signed by the President and attested to by the Corporate Secretary.
- (3) The signature of the President, or a Senior Vice President, or a Vice President, or an Assistant Vice President and the seal of the Company may be affixed by facsimile on any power of attorney granted pursuant to this Resolution, and the signatures of a certifying Officer and the seal of the Company may be affixed by facsimile to any certificate of any such power, and any such power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company.
- (4) Such other Officers of the Company, and Attorneys-in-Fact shall have authority to certify or verify copies of this Resolution, the By-Laws of the Company, and any affidavit or record of the Company necessary to the discharge of their duties.
- (5) The passage of this Resolution does not revoke any earlier authority granted by Resolutions of the Board of Directors adopted on June 9, 1963, May 26, 1975 and March 23, 1977.

does hereby nominate, constitute and appoint **JOHN W. QUIGLEY, G. LULLO, DENISE DOYLE BUDNEY, AMY R. VOSS, SHIRL ROGERS, MAGDALENA ARTEAGA, LOUIS M. J. GRALLO, CARMELITA GARCIA-KAYES, KATHLEEN J. KYLE, DENNIS M. McMANUS, JEAN MORGAN, and ROBERT W. STEIN**, all of the City of Chicago, State of Illinois

each individually if there be more than one named, its true and lawful attorney-in-fact, to make, execute, seal and deliver on its behalf, and as its act and deed any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof. And the execution of such writings in pursuance of these presents, shall be as binding upon said Company, as fully and amply as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office.

IN WITNESS WHEREOF, the said R. E. Giveans, Vice-President, has hereunto subscribed his name and affixed the corporate seal of the said **INSURANCE COMPANY OF NORTH AMERICA** this 18th day of August 1990



**INSURANCE COMPANY OF NORTH AMERICA**

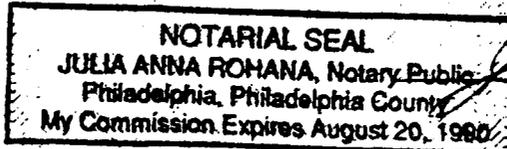
by R. E. Giveans

R. E. GIVEANS Vice President

COMMONWEALTH OF PENNSYLVANIA  
COUNTY OF PHILADELPHIA ss.

On this 18th day of August, A.D. 1990, before me, a Notary Public of the Commonwealth of Pennsylvania in and for the County of Philadelphia came R. E. Giveans, Vice-President of the **INSURANCE COMPANY OF NORTH AMERICA** to me personally known to be the individual and officer who executed the preceding instrument, and he acknowledged that he executed the same, and that the seal affixed to the preceding instrument is the corporate seal of said Company; that the said corporate seal and his signature were duly affixed by the authority and direction of the said corporation, and that Resolution, adopted by the Board of Directors of said Company, referred to in the preceding instrument, is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Philadelphia the day and year first above written.



Julia Anna Roman  
Notary Public

THIS DOCUMENT PRINTED ON RED BACKGROUND  
Not valid for mortgage, note, loan, letter of credit, bank deposit, currency rate, interest rate or residual value guarantees.



I, the undersigned, Secretary of **INSURANCE COMPANY OF NORTH AMERICA**, do hereby certify that the original POWER OF ATTORNEY, of which the foregoing is a full, true and correct copy, is in full force and effect.

In witness whereof, I have hereunto subscribed my name as Secretary, and affixed the corporate seal of the Corporation, this 31 day of OCTOBER 1990

James S. Wylie  
Secretary

THIS POWER OF ATTORNEY MAY NOT BE USED TO EXECUTE ANY BOND WITH AN INCERTION DATE AFTER August 18, 1992



# SENCO-PHENIX

INTENSIVE CULTURAL RESOURCE SURVEY  
AND INVENTORY OF THE NELSON FEDERAL 12-31  
WELL PAD AND ACCESS ROAD

PERFORMED FOR  
APACHE CORPORATION

In accordance with BLM and State of Utah Guidelines in  
Uintah County, Utah,  
State of Utah Antiquities Permit #U90SC586i  
Under Authority of the Ute Tribe

SP-UT-130  
November 30, 1990

John A. Senulis  
Direct Charge of Fieldwork

INTENSIVE CULTURAL RESOURCE SURVEY  
AND INVENTORY OF THE NELSON FEDERAL 12-31  
WELL PAD AND ACCESS ROAD

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In accordance with BLM and State of Utah Guidelines in  
Uintah County, Utah,  
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Under Authority of the Ute Tribe

SP-UT-130  
November 30, 1990

A handwritten signature in cursive script that reads "John A. Senulis". The signature is written in dark ink and is positioned above a horizontal line.

John A. Senulis

Principal Investigator

## ABSTRACT

An intensive cultural resource survey was performed on the Nelson Federal 12-31 well pad, surrounding ten acres, and access road for Apache Corporation by John A. Senulis of SENCO-PHENIX.

Cultural resources were located in the form of an isolated reddish tan siltstone "possible" biface. No other cultural resources were located and archeological clearance for the proposed project is recommended.

## SURVEY LOCATION

The well pad is proposed in the SW/NW of Section 31, T10S, R20E. The access road will begin in the SW/NW of Section 31, T10S, R20E off an existing oilfield road. The route proceeds southerly to the staked well pad location.

The project area location is noted on the enclosed copy of the U.S.G.S. 7.5' quad Big Pack Mtn., NW, Utah, (PR 1987). The well pad and access road were staked. The project area is within the Uintah Ouray Indian Reservation boundaries.

## GENERAL ENVIRONMENT

The general area is part of the Colorado Plateau physiographic province noted by horizontal rock strata with retreating escarpments forming the canyonlands in the south of the Colorado River and Green River.

The Uinta Basin subdivision is bound by the south flank of the Uinta Mountains on the north, and by Book Cliffs to the south. The northeasterly flowing Green River Drainage is the major water source.

Predominant bedrock in the basin is quartzite in the basin proper grading into sandstones, shales and glacial outwash on the slopes.

The mid-latitude semi-arid climate is typically Continental with cold winters and warm summers. Precipitation is directly related to altitude and degree of slope; the minima is less than 10 inches annually on the basin floor to the maxima of more than 10 inches annually above 8,000 feet.

Soils and vegetation are also reflective of the type of soil, moisture and altitude conditions.

The White River Drainage has moderately alkaline, fine, sandy desert loams that are well drained and have a moderate rate of deposition. Primary vegetation consists of Indian ricegrass, needle and thread, winterfat, with some black sagebrush and shadscale depending upon the alkalinity of the soil.

The drainages grade into the predominant shale based shadscale-sagebrush zones of the lower slopes where alkalinity is increased by less permeable desert loams. In addition to the above, saltbush, greasewood, and other alkaline adapted grasses, shrubs and forbs become more common.

Above 6,000 feet the upland shallow hardpans, stony hills, gravels, and loams support the juniper-pinyon pine zone with muttongrass, bluebunch, wheatgrass, and prickly pear.

The juniper-pinyon pine zone gradually diminishes toward 8,000 feet giving way to the mountain stony and shallow loams supporting gambel oak, mountain brome and serviceberries.

This general environment has supported a rich faunal assemblage which formerly contained bison in large numbers. Today the area is dominated by deer, rabbits, and burrowing animals with occasional forays of elk and moose. A seasonal waterfowl population and other migratory and raptorial birds complete the scenario.

The dominant ground patterns have changed dramatically in the past 100 years with the introduction of grazing animals, primarily sheep and cattle, and agriculture. The patterns have resulted in an increase of scavengers and pests such as badgers and coyotes.

Variations of the modern topography have been induced by agriculture, grazing, recreation, and oil and gas exploration. Some areas, such as watersheds and wildlife habitats have stabilized parts of the environment.

### SPECIFIC ENVIRONMENT

The project area falls within the Central Badlands District physiographic region of the Uintah Basin. The Badlands district is characterized by long and broad erosional benches adjacent to extensive badlands. The benches are deeply dissected by intermittent streams which eventually drain into the Green River, northwest of the project area.

The project area is situated along a terrace of Wild Horse Bench with a topographical form of dissected uplands at an elevation of approximately 5380 feet.

The immediate drainages are Hill Creek and Willow Creek, which flow north into the Green River some 10 miles away.

Soils range from rocky colluviums mixed with tan silty loams, areas of desert pavement, to small pockets of stabilized sand dunes. No bedrock outcroppings were present in the survey area.

Vegetation falls within the desert shrub community with shadscale, saltbush, bud sagebrush, winterfat, ephedra, rabbitbrush and greasewood.

Fauna for the area includes deer, antelope, rabbits and other burrowing animals. Birds, rodents and reptiles complete the scenario. On the day of survey no wildlife was observed.

### ARCHEOLOGICAL POTENTIAL

A files search conducted on November 21, 1990 by John A. Senulis at the Utah Division of State History, Antiquities Section indicated that no sites have been recorded in Section 31.

### METHODOLOGY

On November 28, 1990, a walkover survey was conducted by John A. Senulis and Jeanne Senulis, accompanied by Craig Moulton of Apache Corporation, and Pat Padia of the Ute Tribe. Transect spacing was 15 meters, with a total right-of-way along the access road of 30 meters. Special attention was paid to areas of ground exposure from animal burrowing and erosion, dunal areas, desert pavement areas, and to areas of human activity.

## SURVEY CONDITIONS

The sky was clear and sunny with temperatures of 40 degrees F.

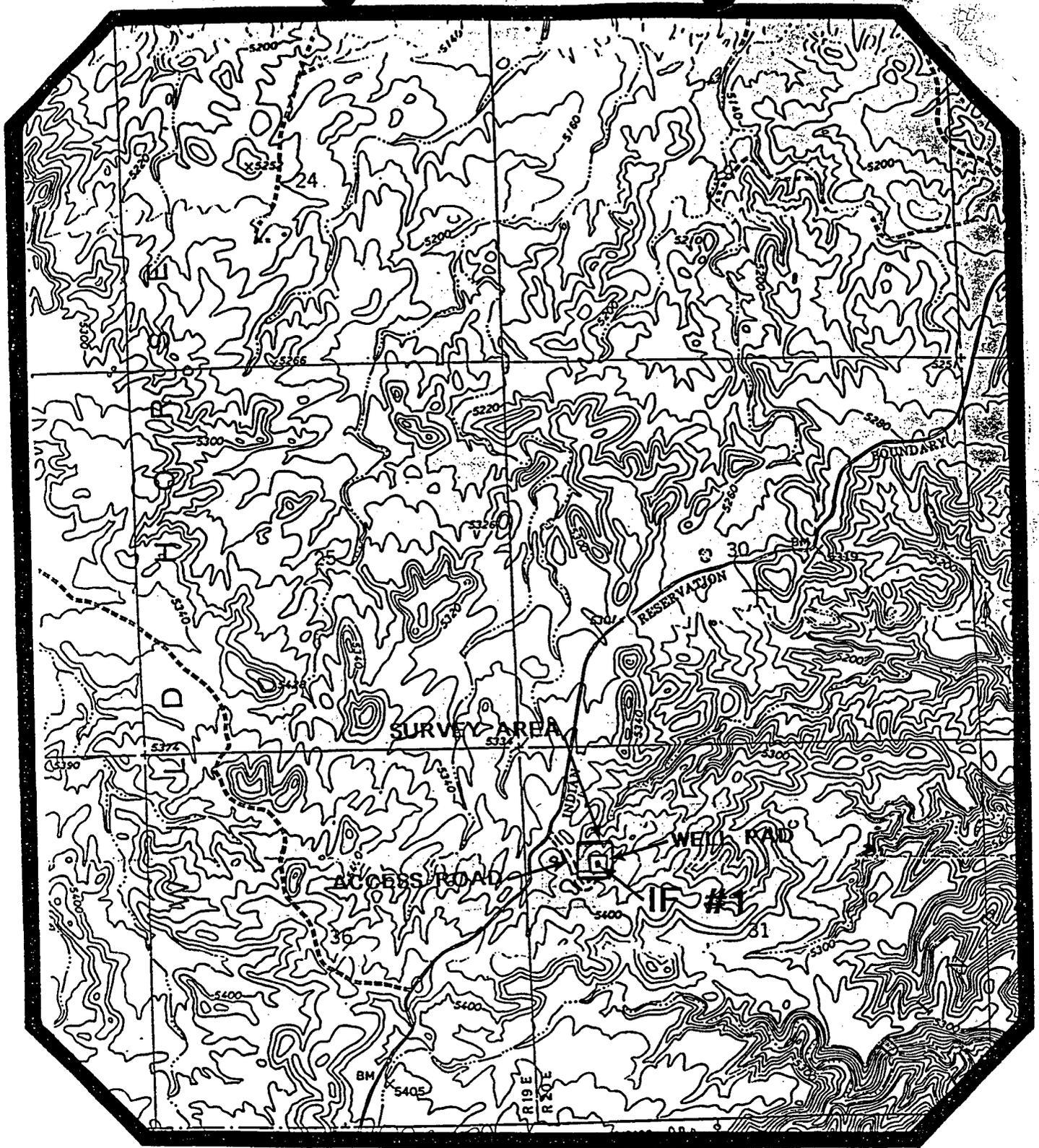
Visibility was generally very good, 80%, because of sparse vegetational cover and no snow. Soils on the day of the survey ranged from damp to dry.

## FINDINGS AND RECOMMENDATIONS

One isolated reddish tan, siltstone, "possible" biface was located on the proposed well pad. The artifact is of extremely crude manufacture using local material, but the shape is within the range of artifact types and it appeared to have been retouched on the edges. Careful inspection of the area surrounding the find revealed no other cultural material. The artifact was relocated outside of the impact area per request of Pat Padia. Archeological clearance is recommended for the proposed project.

If any cultural values are observed during operation of this lease/permit/right-of-way, they are to be left intact and the Director of the Energy and Mineral Resources Department of the Ute Tribe in Fort Duchesne should be notified immediately. The Director should conduct an evaluation of the cultural value to establish suitable mitigation measures.

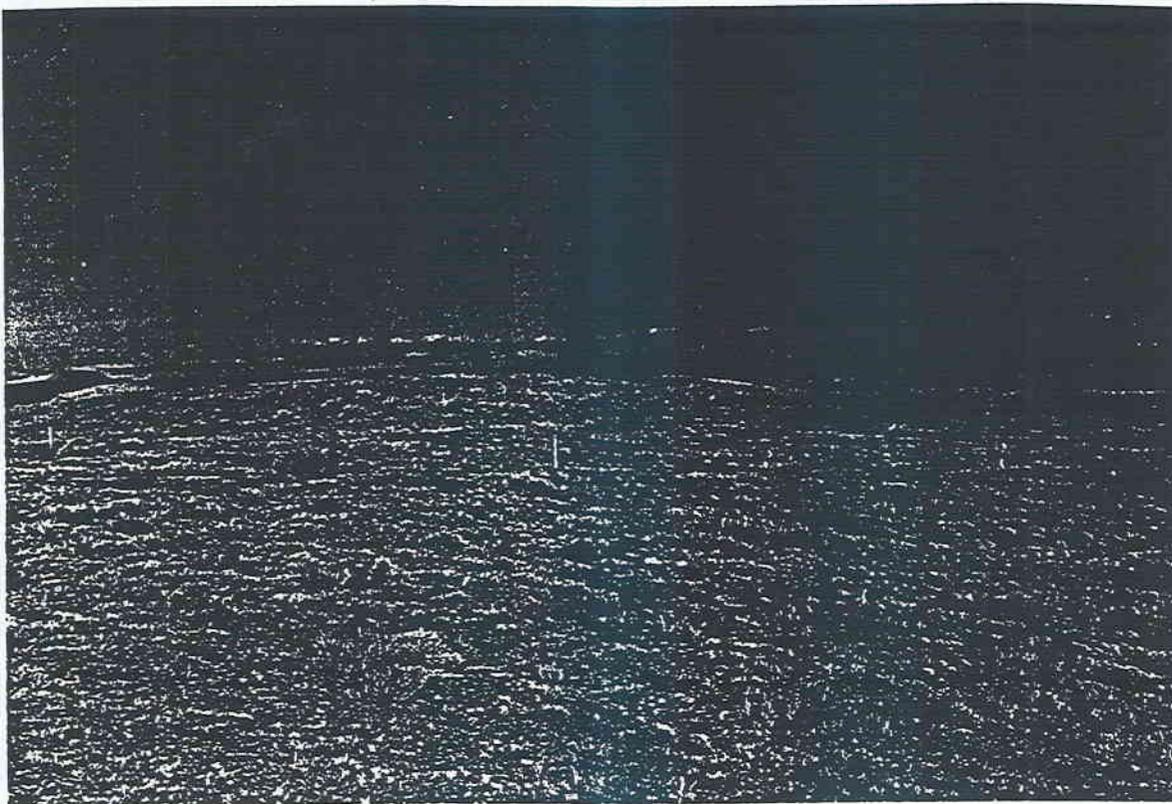
These recommendations are subject to approval or modification by the Ute Tribe, Energy and Minerals Department, and the Utah State Historic Preservation Office.



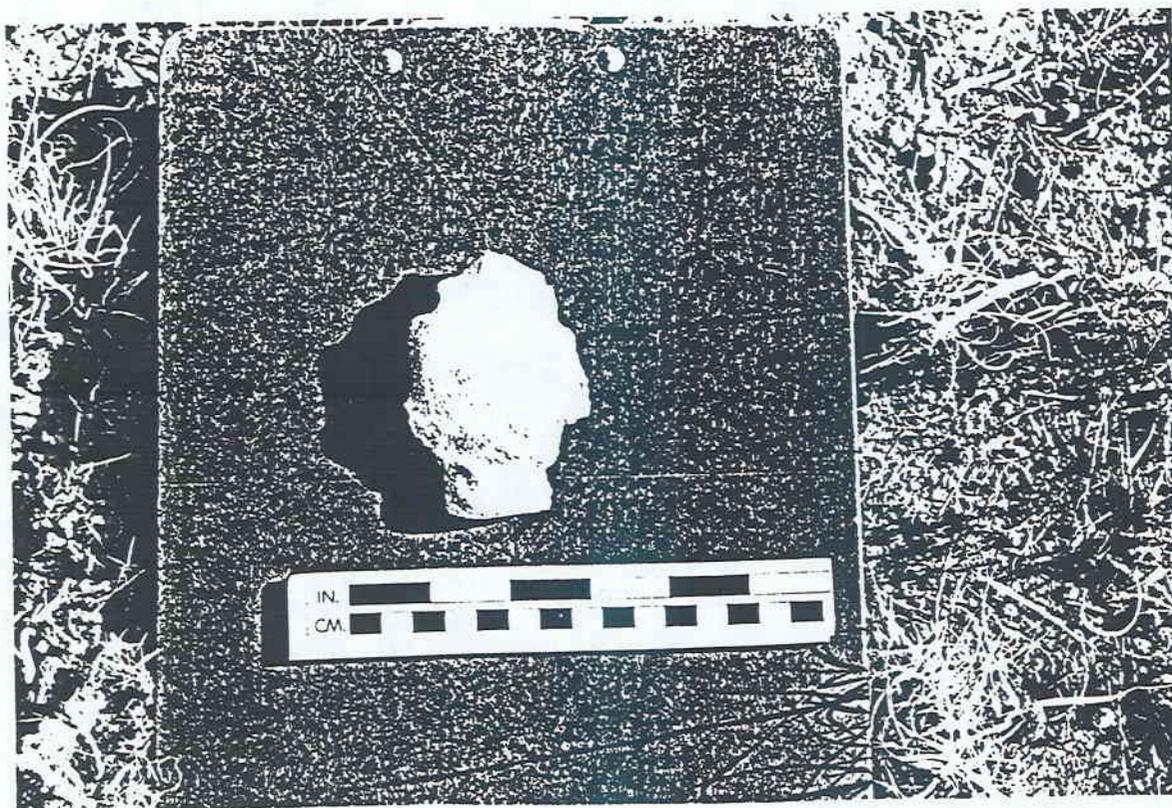
NELSON FEDERAL #12-31 WELL PAD AND ACCESS ROAD  
 APACHE CORPORATION  
 SECTION 31, T10S, R20E, UINTAH COUNTY, UTAH  
 U.S.G.S. 7.5' QUAD: BIG PACK MTN., NW, UT (PR1987)  
 SENCO-PHENIX (UT-130)  
 NOVEMBER 30, 1990



SENCO-PHENIX



VIEW NORTH OF NELSON FEDERAL #12-31 WELLPAD



DORSAL VIEW OF IF #1 BIFACE

ISOLATED ARTIFACT RECORD

- 1) Field Number SP-UT-130/IF #1 2) Curation Number N/A
- 3) Legal Location: T 10S R 20. E Sec. 30, NW1/4, NE1/4, SW1/4, NW1/4
- 4) County HINTEAH 5) USGS Map Reference BIG PACK MTPN., NW, UT
- 6) Artifact Owner (Landowner): Federal Agency/District UTE TRIBE  
State Agency/District \_\_\_\_\_ Private/Name and Address \_\_\_\_\_
- 7) Collected X No \_\_\_\_\_ Yes \_\_\_\_\_ Repository N/A
- 8) Name of Recorder John A. Senulis Date NOVEMBER 28, 1990  
Company/Institution SENCO-PHENIX, P.O. BOX 9197, SLC, UT 84109



9) Sketch or Photo: Scale

- 10) Artifact Description (Dimensions-Material-use/function-time period)  
An isolated reddish tan siltstone biface. Artifact is of crude manufacture using local material, but the shape is within the range of artifact types and it appears to have been retouched on the edges.
- 11) Environmental Location (Topography-vegetation-soils-slope-hydrology)  
Artifact was located on a terrace of Wild Horse Bench on a proposed well pad. Vegetation is primarily Shadscale/saltbush with sparse clumps of grass. Slight slope to east with intermittent drainages and no permanent water. Soils were gravelly sandy loams.

BEFORE THE BOARD OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH

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|  |   |
|--|---|
| IN THE MATTER OF THE REQUEST )<br>FOR AGENCY ACTION OF SANTA FE )<br>ENERGY OPERATING PARTNERS, )<br>L.P. TO EXTEND THE ORDER )<br>IN CAUSE NO. 197-4 TO )<br>ESTABLISH 640-ACRE DRILLING )<br>UNITS FOR THE DEVELOPMENT AND )<br>PRODUCTION OF OIL AND GAS FROM )<br>THE WASATCH-MESA VERDE )<br>FORMATIONS IN SECTIONS 27, 29, )<br>30, 31, 32, AND 33 OF TOWNSHIP )<br>10 SOUTH, RANGE 20 EAST, )<br>S.L.M., IN UINTAH COUNTY, UTAH ) | FINDINGS OF FACT, CONCLUSIONS<br>OF LAW, AND ORDER<br><br>Docket No. 89-019<br><br>Cause No. 197-4(A) |
|--|---|

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This cause came on regularly for hearing before the Board of Oil, Gas and Mining (the "Board") on Thursday, October 26, 1989, at 10:00 a.m., in the Boardroom of the Division of Oil, Gas and Mining at 355 West North Temple, 3 Triad Center, Suite 301, Salt Lake City, Utah.

The following board members were present: Gregory P. Williams, Chairman; E. Steele McIntyre; Richard B. Larsen; Judy F. Lever; John M. Garr; and Kent G. Stringham. Staff members of the Division of Oil, Gas and Mining (the "Division") present and participating in the hearing included Dr. Dianne R. Nielson, Director; Ronald J. Firth, Associate Director - Oil and Gas; John R. Baza, Petroleum Engineer; and Brad Hill, Geologist. Appearance was made by Phillip Wm. Lear of Van Cott, Bagley, Cornwall &

McCarthy for Santa Fe Energy Operating Partners, Ltd. Barbara W. Roberts appeared on behalf of the Board and Division. Robert A. Henricks, Chief, Branch of Fluid Minerals, Utah State Office and Jerry Kenczka of the Vernal District Office, appeared on behalf of the Bureau of Land Management.

NOW THEREFORE, the Board, having fully considered the testimony adduced and the exhibits received at the hearing and being fully advised in the premises, now makes and enters its Findings of Fact, Conclusions of Law, and Order as follows:

#### FINDINGS OF FACT

1. Notice of the time, place, and purpose of the October 26, 1989 hearing was mailed to all interested parties by certified mail, return receipt requested on October 3, 1989, and was published in the Deseret News and Salt Lake Tribune on October 8, 1989, and in the Vernal Express on October 10, 1989.

2. Copies of the Request for Agency Action were mailed to all interested persons as required by the law.

3. Santa Fe Energy Operating Partners, L.P. ("Santa Fe Energy") is a Delaware limited partnership, having its principal place of business in Houston, Texas.

4. Santa Fe Pacific Exploration Company is the managing general partner and is qualified to do business in the State of Utah.

5. The Board is empowered by section 40-6-6 of the Utah Code Annotated (1988) to establish drilling units covering any pool or stratigraphic zone of any pool upon terms and conditions that are just and reasonable.

6. Effective August 24, 1989, the Board entered its order in Cause No. 197-4, establishing a drilling unit for production from a common source of supply in the following described lands in Uintah County, Utah:

Township 10 South, Range 20 East, S.L.M.

Section 28: All

(containing 640.0 acres, more or less).

7. Santa Fe Energy or its affiliates are the lessees of record of or own working interest/operating rights of record in United States Oil and Gas Leases and of Ute Indian Tribe Oil and Gas Exploration and Development Leases-Allotted Indian Lands covering the following described lands in Uintah County, Utah:

Township 10 South, Range 20 East, S.L.M.

Section 27: All

Section 29: All

Section 30: All

Section 31: All

Section 32: All

Section 33: All

(containing 3,840.0 acres, more or less).

The Indian leases affect the stratigraphic interval from the surface down to the base of the Mancos formation. The foregoing lands are hereinafter sometimes referred as the "subject lands."

8. Santa Fe Energy has successfully drilled the Federal 1-27, 1-29, 1-30, and 1-32 Wells situated in the W $\frac{1}{2}$  of Sections 27, 29, 30, and 32, respectively. Said wells are capable of producing gas and associated hydrocarbons in paying quantities, but have been shut-in awaiting pipeline connection.

9. Geological and engineering data obtained during drilling and development operations for said wells and related technical studies conducted within the area indicate that the Order in Cause No. 197-4 should be extended to affect the subject lands. These lands are believed to be underlain by a common source of supply from which ~~oil~~, ~~gas~~, and associated hydrocarbons can be produced.

10. The lands to be spaced are currently subject to the authority of the well location and siting Rule R615-3-2 of the Oil and Gas Conservation General Rules of the Board, Utah Admin. Code (1989). That rule establishes locating and ~~s~~siting requirements for oil and gas wells, with the requirement that the well be located in the center of a 40-acre quarter-quarter section or substantially equivalent lot or tract, with the tolerance of 200 feet in any direction from the center location. ✓

11. The interval to be spaced is defined as being the same interval spaced in the Natural Buttes and River Bend Units for the common source of supply in the Wasatch-Mesa Verde formations, more particularly described as follows:

That interval below the top of the Wasatch formation defined as the stratigraphic equivalent of the 4,960 foot depth in the Dual Induction log run March 28, 1974, in the Conoco Home No. 1 Well located in the NW $\frac{1}{2}$ NW $\frac{1}{2}$  of Section 13, Township 10 South, Range 20 East, S.L.M., down to the top of the Mancos formation defined as depth 10,400 feet in said Dual Induction log.

The interval to be spaced is a definite and easily-identifiable stratigraphic horizon throughout the entire area which is customarily drilled and explored for gas potential.

12. Unit wells are to be located in the W $\frac{1}{2}$  of each government survey section. The Federal 1-27, 1-29, 1-30, and 1-32 Wells shall be the unit wells for their respective sections.

13. Only one producing well into the spaced interval should be permitted within the drilling unit established by the Board.

14. The maximum area that can be efficiently and economically drained by one well from the proposed spaced interval in the subject lands is 640 acres.

15. The establishment of drilling units on the spaced interval will prevent waste, avoid the drilling of unnecessary

wells, provide for the operation and development of the spaced interval in such a manner that a greater ultimate recovery of oil may be obtained, and provide for the protection of correlative rights of all parties owning an interest in the proposed drilling unit.

#### CONCLUSIONS OF LAW

1. Due and regular notice of the time, place and purpose of the October 26, 1989 hearing was given to all interested parties in the form and manner and within the time required by law.

2. The Board has jurisdiction over all matters covered by the Request for Agency Action and over all parties interested therein and has power and authority to make and promulgate the order herein set forth.

3. The establishment of drilling units on the spaced interval will prevent waste, avoid the drilling of unnecessary wells, provide for the operation and development of the spaced interval in such a manner that a greater ultimate recovery of oil may be maintained, and provide for the protection of correlative rights of all parties owning an interest in the proposed drilling unit.

#### ORDER

IT IS THEREFORE ORDERED THAT:

1. The drilling units be and are hereby established for the development and production of ~~oil~~ gas and associated hydrocarbons from the Wasatch-Mesa Verde formations as defined in paragraph 11 of the Findings of Fact, in its aerial extent as follows:

Township 10 South, Range 20 East, S.L.M.

Section 27: All  
Section 29: All  
Section 30: All  
Section 31: All  
Section 32: All  
Section 33: All

(containing 3,840.0 acres, more or less).

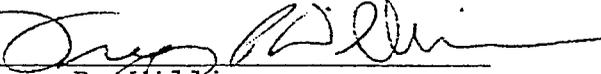
2. The unit wells shall be sited in the W $\frac{1}{2}$  of each section with tolerances for topographic, geological, and other reasons, as allowed by applicable law, said tolerances or exceptions to be granted by administrative action without notice or hearing.

3. The Santa Fe Energy Federal 1-27, 1-29, 1-30, and 1-32 wells situated in the W $\frac{1}{2}$  of Sections 27, 29, 30, and 32, respectively, are to be the unit wells for their respective drilling units.

4. The Board retains continuing jurisdictions of all matters covered by this order and over all parties affected thereby.

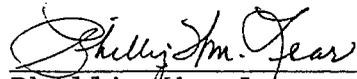
DATED this 30<sup>th</sup> day of November, 1989; but  
effective as of October 26, 1989.

STATE OF UTAH  
BOARD OF OIL, GAS AND MINING

By   
Gregory P. Williams  
Chairman

APPROVED AS TO FORM:

Barbara W. Roberts

  
Phillip Wm. Lear

8429L  
110689

CNG

APPLICATION TO APPROPRIATE WATER  
STATE OF UTAH

49-361

Note: The information given in the following blanks should be free from explanatory matter, but when necessary a complete explanatory statement should be made on the following page under the heading "Explanatory."

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, for uses indicated by (X) in the proper box or boxes, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

1. Irrigation  Domestic  Stockwatering  Municipal  Power  Mining  Other Uses

2. The name of the applicant is MAPCO, Inc. Production Co.

3. The Post Office address of the applicant is P.O. Box 1360 Roosevelt, Utah 84066

4. The quantity of water to be appropriated, .015 second-feet and/or \_\_\_\_\_ acre-feet

5. The water is to be used for Oil Well Drilling from January 1 to December 1  
(Major Purpose) (Month) (Day) (Month) (Day)

other use period \_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_\_  
(Minor Purpose) (Month) (Day) (Month) (Day)

and stored each year (if stored) from January 1 to December 1  
(Month) (Day) (Month) (Day)

6. The drainage area to which the direct source of supply belongs is \_\_\_\_\_  
(Leave Blank)

7. The direct source of supply is\* Underground water from Green River Formation  
(Name of stream or other source)

which is tributary to \_\_\_\_\_, tributary to \_\_\_\_\_

\*Note.—Where water is to be diverted from a well, a tunnel, or drain, the source should be designated as "Underground Water" in the first space and the remaining spaces should be left blank. If the source is a stream, a spring, a spring area, or a drain, so indicate in the first space, giving its name, if named, and in the remaining spaces, designate the stream channels to which it is tributary, even though the water may sink, evaporate, or be diverted before reaching said channels. If water from a spring flows in a natural surface channel before being diverted, the direct source should be designated as a stream and not a spring.

8. The point of diversion from the source is in Uintah County, situated at a point\*

Center SE of NW Section 17, T10 S. ~~R20 E~~ R20 E

S. 1980' W. 460' N. 1/4 Cor.

8 miles S. Cumy

\*Note.—The point of diversion must be located definitely by course and distance or by giving the distances north or south, and east or west with reference to a United States land survey corner or United States mineral monument, if within a distance of six miles of either, or if at a greater distance, to some prominent and permanent natural object. No application will be received for filing in which the point of diversion is not defined definitely.

9. The diverting and carrying works will consist of A 7 5/8' well and 2500' deep

10. If water is to be stored, give capacity of reservoir in acre-feet 1 height of dam 5

area inundated in acres 1/4 legal subdivision of area inundated SE of NW  
Sec 17 T10 S R20 E

11. If application is for irrigation purposes, the legal subdivisions of the area irrigated are as follows:

43-047-20308 - WSW OSC #1

Total \_\_\_\_\_ Acres

12. Is the land owned by the applicant? Yes \_\_\_\_\_ No X If "No," explain on page 2.

13. Is this water to be used supplementally with other water rights? Yes \_\_\_\_\_ No X

If "yes," identify other water rights on page 2.

14. If application is for power purposes, describe type of plant, size and rated capacity.

15. If application is for mining, the water will be used in \_\_\_\_\_ Mining District at the \_\_\_\_\_ mine, where the following ores are mined \_\_\_\_\_

16. If application is for stockwatering purposes, number and kind of stock watered 1000  
head of sheep.

17. If application is for domestic purposes, number of persons \_\_\_\_\_, or families \_\_\_\_\_

18. If application is for municipal purposes, name of municipality \_\_\_\_\_

19. If application is for other uses, include general description of proposed uses Drilling Riverbend  
Unit well by MAPCO. T9 + 10 S R19 + 20 E

20. Give place of use by legal subdivision of the United States Land Survey for all uses described in paragraphs 14 to 19, incl. \_\_\_\_\_

21. The use of water as set forth in this application will consume .015 second-feet and/or acre-feet of water and not second feet and/ or acre feet will be returned to the natural stream or source at a point described as follows: \_\_\_\_\_

\* Does not expire. Good for all wells 19 + 20 E. T9 + 10 S

EXPLANATORY

The following additional facts are set forth in order to define more clearly the full purpose of the proposed application:

The land is leased from the Federal Government and administrated by the Bureau of Land Management and has their approval

The B.L.M. will use the excess water for wild life + stock watering

(Use page 4 if additional explanatory is needed.)

The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purpose herein described

Darwin Kulland For Mafce
Signature of Applicant\*

\*If applicant is a corporation or other organization, signature must be the name of such corporation or organization by its proper officer, or in the name of the partnership by one of the partners, and the names of the other partners shall be listed. If a corporation or partnership, the affidavit below need not be filled in. If there is more than one applicant, a power of attorney, authorizing one to act for all, should accompany the Application.

DECLARATION OF CITIZENSHIP

STATE OF UTAH,
County of Duchesne } ss

On the 16 day of June, 1980, personally appeared before me, a Notary Public for the State of Utah, the above applicant who, on oath, declared that he is a citizen of the United States, and declared his intention to become such a citizen.

My commission expires: 12/31/82

(SEAL)

[Signature]
Notary Public

OPERATOR Apache Corporation 1-5040 DATE 1-16-91

WELL NAME Nelson #1 dual 10-31

SEC S11W 31 T 10S R 00E COUNTY Mintah

43 047 31937  
API NUMBER

dual (1)  
TYPE OF LEASE

CHECK OFF:

PLAT.

BOND

NEAREST WELL

LEASE

FIELD SLBM

POTASH OR OIL SHALE

PROCESSING COMMENTS:

no other well in Sec 31

Water Permit 49-367

Oil shale area

APPROVAL LETTER:

SPACING:  R615-2-3

N/A  
UNIT

R615-3-2

197-14(A)  
11-30-89  
CAUSE NO. & DATE

R615-3-3

STIPULATIONS:

Oil shale stipulation



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter  
Governor

Dee C. Hansen  
Executive Director

Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

January 16, 1991

Apache Corporation  
1700 Lincoln, Suite 1900  
Denver, Colorado 80203-4519

Gentlemen:

Re: Nelson Federal #12-31 - SW NW Sec. 31, T. 10S, R. 20E - Uintah County, Utah  
1891' FNL, 1009' FWL

Approval to drill the referenced well is hereby granted in accordance with the Order of Cause No. 197-4 (A) dated November 30, 1989 subject to the following stipulation:

1. Special attention is directed to compliance with R615-3-31, Oil and Gas Conservation General Rules, which prescribes drilling procedures for designated oil shale areas.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification if it is necessary to plug and abandon the well. Notify R. J. Firth, Associate Director, (Office) (801) 538-5340, (Home) 571-6068, or Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of R615-3-20, Gas Flaring or Venting, Oil and Gas Conservation General Rules.

Page 2  
Apache Corporation  
Nelson Federal #12-31  
January 16, 1991

6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.
7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-047-31937.

Sincerely,



R. J. Firth  
Associate Director, Oil & Gas

tas  
Enclosures  
cc: Bureau of Land Management  
J. L. Thompson  
we14/1-2

RECEIVED

JUL 03 1991

DIVISION OF  
OIL GAS & MINING

June 24, 1991

3162.35  
UT08438

Apache Corporation  
Attn: Carolyn D. Hepp  
1700 Lincoln, Suite 1900  
Denver, CO 80203-4519

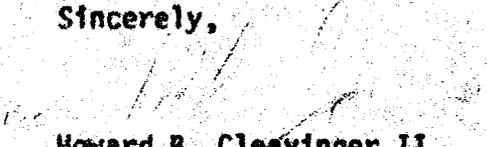
RE: Application for Permit to Drill  
Well No. 12-31  
Sec. 31, T10S, R20E 43-047-31937  
Lease No. U-30693

Dear Ms. Hepp:

We are returning the referenced Application for Permit to Drill without prejudice as per your request. If you intend to drill at this location at a future date, a new Application for Permit to Drill must be submitted.

If you have any questions, please contact Margie Herrmann of this office at (801) 789-1362.

Sincerely,

  
Howard B. Cleavinger II  
Assistant District Manager  
for Minerals

Enclosure

bcc: well file            BIA-Ft. Duchesne  
         3162.35            Ute Tribe  
         Div. OG&M        Realty-UDO  
         reading file  
MHerrmann:lds:0488H:6.18.91



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter  
Governor

Dee C. Hansen  
Executive Director

Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

July 9, 1991

Carolyn D. Hepp  
Apache Corporation  
1700 Lincoln, Suite 1900  
Denver, Colorado 80203-4519

Dear Ms. Hepp:

Re: Well No. Federal #12-31, Sec. 31, T. 10S, R. 20E, Uintah County, Utah  
API No. 43-047-31937

In concert with action taken by the U.S. Bureau of Land Management, approval to drill the above referenced well is hereby rescinded. A new Application for Permit to Drill must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Sincerely,

Don Staley  
Administrative Supervisor

DME/lde

cc: R.J. Firth  
Bureau of Land Management - Vernal  
Well file

WO1196