

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on
reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

| | | | | |
|--|-----------------------|---|---------------|----------------------|
| 1a. TYPE OF WORK Drill <input checked="" type="checkbox"/> Deepen <input type="checkbox"/> | | 5. LEASE DESIGNATION AND SERIAL NO. JIC 460 | | |
| b. TYPE OF WELL Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/> | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla Apache | | |
| 2. NAME OF OPERATOR Mallon Oil Company | | 7. UNIT AGREEMENT NAME N/A | | |
| 3. ADDRESS AND TELEPHONE NO. P.O. Box 3256 Carlsbad, NM 88220 (505) 885-4596 | | 8. FARM OR LEASE NAME, WELL NO. Jicarilla 460-21 No. 3 | | |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements *) At surface 1835' FSL and 1440' FEL (NW/SE) Unit J | | 9. API WELL NO. 30-039-26022 | | |
| At proposed prod. zone 1835' FSL and 1440' FEL (NW/SE) Unit J | | 10. FIELD AND POOL, OR WILDCAT Blanco, Pictured Cliffs | | |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE * 54 miles east of Bloomfield, New Mexico | | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 21, T30N-R03W | | |
| 15. DISTANCE FROM PROPOSED * LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1440' | | 12. COUNTY OR PARISH Rio Arriba | | |
| 16. NO. OF ACRES IN LEASE 1920 | | 13. STATE NM | | |
| 17. NO. OF ACRES ASSIGNED TO THIS WELL 160 | | 20. ROTARY OR CABLE TOOLS Rotary | | |
| 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1900' | | 21. ELEVATIONS (SHOW WHETHER DF, RT, GR, Etc.) 7244' GR | | |
| 22. APPROX. DATE WORK WILL START 08/25/98 | | 23. PROPOSED CASING AND CEMENTING PROGRAM | | |
| SIZE OF HOLE | GRADE, SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
| 12-1/4" | 8-5/8" | 24# | 500' | Circulate to surface |
| 7-7/8" | 5-1/2" | 15.5# | 4500' | 570 sks |

Mallon Oil Company proposes to drill to a depth sufficient to test the Pictured Cliffs formation. If productive, 5-1/2" casing will be cemented at TD. If non-productive, the well will be plugged and abandoned in a manner consistent with Federal regulations. Specific programs as per on-shore Oil and Gas Order No. 1 are outlined in the following attachments:

Drilling Program

Exhibit 1: Blow Out Preventor Equipment/Plan
Exhibit A: Location and Elevation Plat
Exhibit B: Roads and Pipelines
Exhibit C: One Mile Radius Map

Exhibit D: Drilling Site Layout
Exhibit E: Production Facilities
Exhibit F: H2S Contingency Plan
Exhibit G: Environmental Assessment

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

SIGNED: Terry Lindeman TITLE: Operations Superintendent DATE: 08/11/98

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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

CONDITIONS OF APPROVAL, IF ANY:
(Original Signed) HECTOR A. VILLALOBOS

APPROVED BY _____ TITLE: Asst Field Mgr DATE: NOV 10 1998

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

CONFIDENTIAL

DRILLING PROGRAM

Attached to Form 3160-3

Mallon Oil Company

Jicarilla 460-21 No. 3

1835' FSL and 1440' FEL (NW/SE) Unit J

Sec. 21, T30N-R3W

Rio Arriba County, New Mexico

LEASE NUMBER: JIC460

1. Geologic name of surface formation: San Jose

2. Estimated tops of important geologic markers:

| | |
|-----------------|---------|
| San Jose | Surface |
| Nacimiento | 2600' |
| Ojo Alamo | 3230' |
| Kirtland | 3458' |
| Fruitland | 3478' |
| Pictured Cliffs | 3468' |
| Lower P.C. | 4017' |
| Total Depth | 4500' |

3. Estimated depths of anticipated fresh water, oil, or gas:

| | | |
|-----------------|-------|-----|
| San Jose | 1500' | Gas |
| Nacimiento | 2600' | Gas |
| Ojo Alamo | 3230' | Gas |
| Fruitland | 3478' | Gas |
| Pictured Cliffs | 3768' | Gas |

No other formations are expected to give up oil, gas, or fresh water in measurable quantities.

The surface fresh water sands will be protected by setting 8-5/8" casing at 500' and circulating cement back to surface.

4. Proposed casing program:

| <u>Hole Size</u> | <u>Interval</u> | <u>Casing OD</u> | <u>Casing weight, grade, thread</u> |
|------------------|-----------------|------------------|-------------------------------------|
| 12-1/4" | 0-500' | 8-5/8" | 24 lb/ft, K55, ST&C |
| 7-7/8" | 0-4500' | 5-1/2" | 15.5 lb/ft, K55, LT&C |

Cement program:

8-5/8" surface casing: Cemented to surface with 350 sks Class B containing 2% CaCl₂, 0.25 lb/sk Cello Seal, slurry to be mixed at 15.6 lb/gal, yield 1.18 cu ft/sk. Circulate cement to surface.

5-1/2" production casing: Lead slurry 300 sks 65/35 mixed at 13.4 lb/gal, 1.62 cu ft/sk, 30% excess. Tail with 270 sks 50/50 POZ, containing 1/4 lb/sk Cello Seal mixed at 14.15 lb/gal, 1.26 cu ft/sk, 30% excess.

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | | | |
|-----------------------------|--|--------------------------------------|--|---|---------------------|
| *API Number 30-039-26022 | | *Pool Code 72400 | | *Pool Name E. Blanco; Pictued Cliffs | |
| *Property Code 23336 | | *Property Name JICARILLA 460-21 | | | *Well Number 3 |
| *GRID No. 013925 | | *Operator Name MALLON OIL COMPANY | | | *Elevation 7244' |

¹⁰ Surface Location

| UL or lot no. | Section | Township | Range | Lot ldr. | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|----------|---------------|------------------|---------------|----------------|------------|
| J | 21 | 30-N | 3-W | | 1835 | SOUTH | 1440 | EAST | RIO ARRIBA |

¹¹ Bottom Hole Location If Different From Surface

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

| | | | |
|--------------------------------|------------------|---------------------|------------|
| *Dedicated Acres 160, 88.66 | *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

18

| | | | | | | |
|---|---------|------|------|--------------|---|------|
| <div>RECEIVED NOV 13 1998 OIL CON. DIV. FIST. 3</div> | | | | (CALC. COR.) | ¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief | |
| | | | | | Signature Terry Lindeman Printed Name Operations Superintendent Title August 11, 1998 Date | |
| 21 | | | | | ¹⁸ 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. | |
| | | | | | Date of Survey Signature and Seal of Professional Surveyor 8894 Certificate Number | |
| (CALC. COR.) | 2611.47 | 1306 | 1306 | 1440' | 1318 | 1318 |

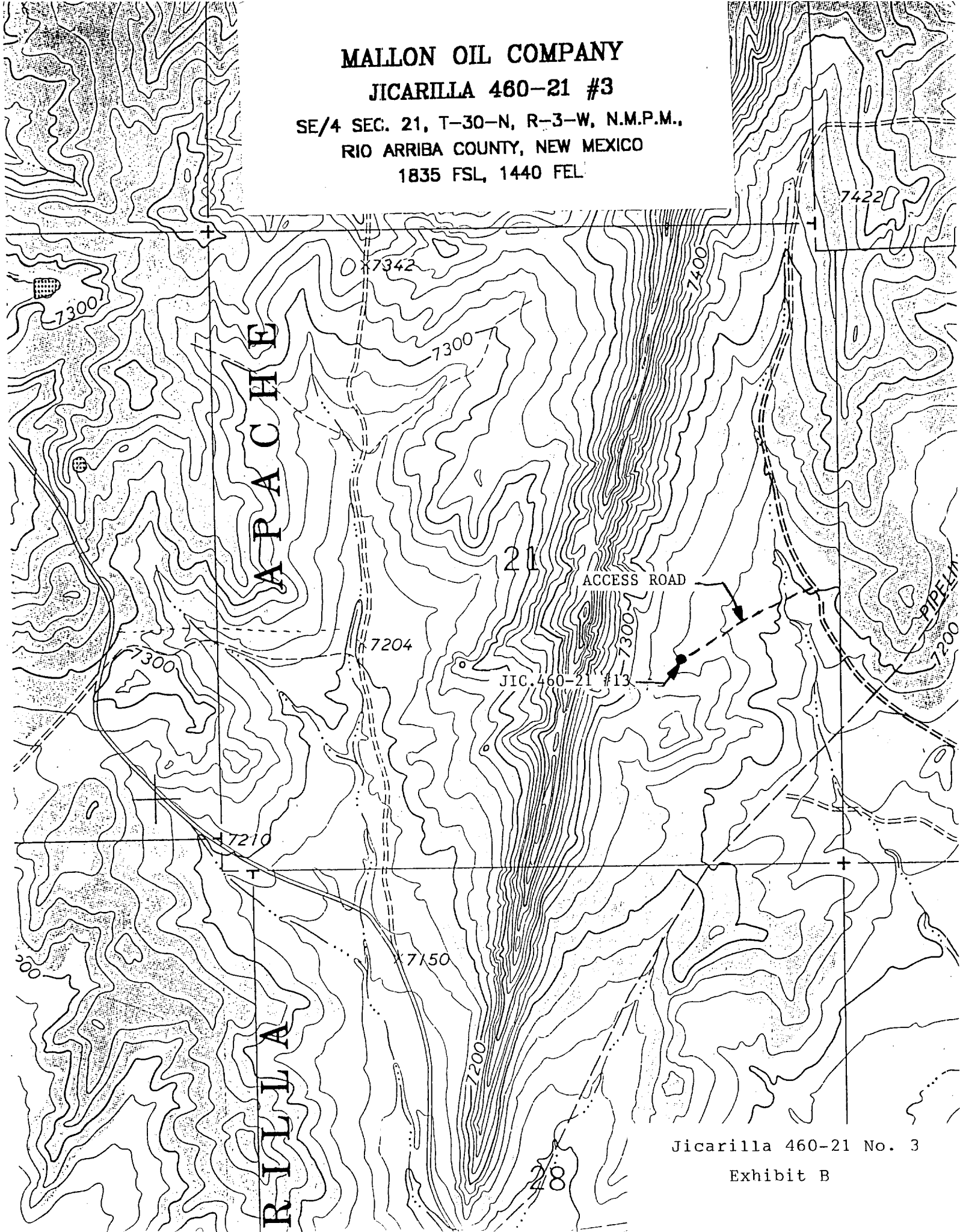
MALLON OIL COMPANY

JICARILLA 460-21 #3

SE/4 SEC. 21, T-30-N, R-3-W, N.M.P.M.,

RIO ARriba COUNTY, NEW MEXICO

1835 FSL, 1440 FEL



Jicarilla 460-21 No. 3

Exhibit B