

Submit to Appropriate District Office
 State ~~2~~ - 6 copies
 Fee Lease - 5 copies

State of New Mexico
 Energy, Minerals and Natural Resources Department

Form C-101
 Revised 1-1-89

OIL CONSERVATION DIVISION

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

DISTRICT I
 P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
 P.O. Drawer DD, Artesia, NM 88210

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

OCT 29 '90

API NO. (assigned by OCD on New Wells)

30-005-6227

5. Indicate Type of Lease
 STATE FEE

6. State Oil & Gas Lease No.
 LG-5555

7. Lease Name or Unit Agreement Name

West Fork Fed. Unit

8. Well No.

3

9. Pool name or Wildcat
 West Pecos Abo

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work: ARTESIA, OFFICE

DRILL RE-ENTER DEEPEN PLUG BACK

b. Type of Well:
 OIL WELL GAS WELL OTHER
 SINGLE ZONE MULTIPLE ZONE

2. Name of Operator

McKay Oil Corporation

3. Address of Operator

P.O. Box 2014, Roswell, NM 88202

4. Well Location
 Unit Letter J : 1980 Feet From The South Line and 1980 Feet From The East Line

Section 32 Township 4S Range 22E NMPM Chaves County

10. Proposed Depth
 3100'

11. Formation
 Abo

12. Rotary or C.T.
 Rotary

13. Elevations (Show whether DF, RT, GR, etc.)
 4406' GR

14. Kind & Status Plug. Bood
 Blanket

15. Drilling Contractor

16. Approx. Date Work will start
 10-31-90

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
9 1/2" 9 1/8"	7.0"	20.0 #	900± 700'	500 SX	CIRC
6 1/2"	4 1/2"	10.5 #	TD	525 SX	600' above
					T/pay

- Drill 9 1/2" hole to 900± and run 7.0" casing and cement to surface.
- Wait on cement for 18 hours.
- Nipple up on 7.0" casing using a double ram type B.O.P. and pressure test casing to 1000 psi for 30 minutes. CLEARED W/ MIKE ON ROTATING HEAD
- Drill 6 1/4" hole to 3,100' to adequately test the Abo formation.
- Run 4 1/2" casing if warranted and cement to 600' above top of pay section and/or to isolate all oil, gas and water zones.

APPROVAL VALID FOR 180 DAYS
 PERMIT EXPIRES 4/30/91

UNLESS DRILLING UNDERWAY

CLEARED W/ MIKE ON ROTATING HEAD

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. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

SIGNATURE [Signature] TITLE V.P. Land & Legal DATE 10-26-90

TYPE OR PRINT NAME _____ TELEPHONE NO. _____

(This space for State Use) ORIGINAL SIGNED BY
 MIKE WILLIAMS
 SUPERVISOR, DISTRICT II

APPROVED BY _____ TITLE _____ DATE **OCT 30 1990**

CONDITIONS OF APPROVAL, IF ANY:

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 07501

Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

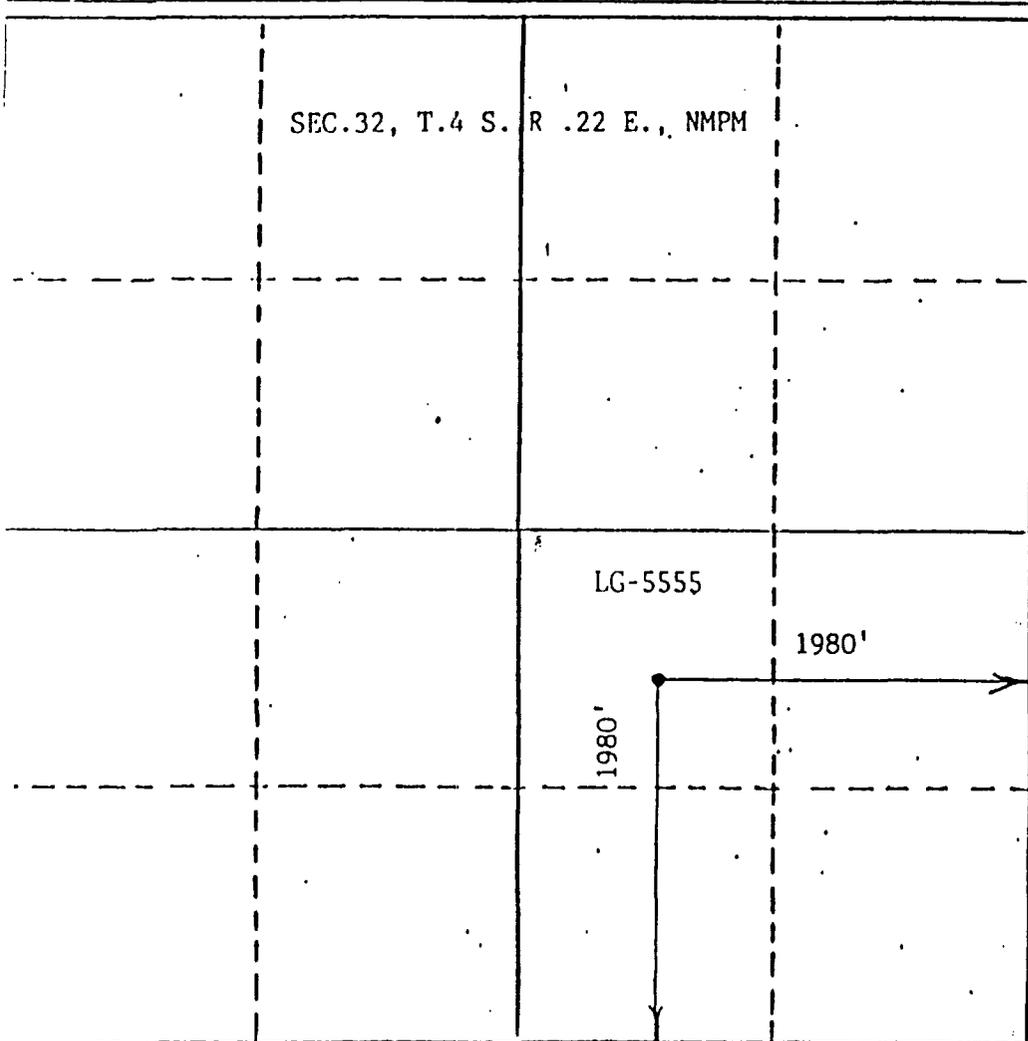
Operator McKAY OIL CORP.		Lease WESTFORK FEDERAL UNIT			Well No. 5
Well Letter J	Section 32	Township 4 SOUTH	Range 22 EAST	County CHAVES	
Actual Pastage Location of Wells 1980 feet from the SOUTH line and 1980 feet from the EAST line					
Ground Level Elev. 4406	Producing Formation Abo	Pool West Pecos Abo		Dedicated Acreages 160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



CERTIFICATION

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

James L. Schultz
Name
James L. Schultz
Position
VP Land & Legal
Company
McKay Oil Corp.
Date
10-26-90

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 knowledge and belief.

John D. Jacques
Date Surveyed
FEBRUARY 14, 1989
Registered Professional Engineer
in the State of New Mexico
John D. Jacques
John D. Jacques, P.E. & L.S.
Certificate No. 6290



STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 10205
Order No. R-9422

APPLICATION OF MCKAY OIL CORPORATION
FOR A HORIZONTAL DIRECTIONAL DRILLING
PROJECT AND SPECIAL OPERATING RULES
THEREFOR, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on January 10, 1991, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 25th day of January, 1991, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) Division Case Nos. 10190, 10205, 10206, 10207 and 10208 were consolidated at the time of the hearing for the purpose of testimony.

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(3) The applicant, McKay Oil Corporation, seeks authority to initiate a horizontal directional drilling project in the SE/4 of Section 32, Township 4 South, Range 22 East, NMPM, Chaves County, New Mexico, being a standard 160-acre gas spacing and proration unit in the Undesignated North Pecos Slope-Abo Gas Pool. The applicant proposes to drill its West Fork Federal Unit Well No. 3 located at a standard surface location 1980 feet from the South and East lines (Unit J) of said Section 32 in the following manner:

Drill vertically to a depth of approximately 3400 feet through the Abo formation, log well, plug back and set production casing, kick off from vertical at a depth of approximately 2950 feet and commence a short radius curve in an undetermined direction building angle to approximately 90 degrees, commence drilling horizontally at a depth of approximately 3010 feet a distance of approximately 500 feet.

(4) The applicant further seeks special rules and provisions within the project area including the designation of a prescribed area limiting the horizontal displacement of the wellbore such that the well can be no closer than 660 feet to the outer boundary of its assigned spacing and proration unit.

(5) The evidence and testimony presented indicates that the proposed horizontal wellbore, which is experimental in nature, should encounter a greater amount of natural fractures within the Abo formation than would a conventional wellbore, which should ultimately result in the recovery of a greater amount of gas from the proposed proration unit, thereby preventing waste.

(6) According to evidence presented, the subject well is located within the applicant's West Fork Unit Area which contains therein all offset acreage surrounding the SE/4 of said Section 32.

(7) According to further evidence the proposed surface location is such that there is a possibility, depending on the kick off direction, that the horizontal portion of the wellbore may encroach upon the 660 foot setback requirement described in Finding No. (4) above.

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(8) Should the horizontal portion of the wellbore encroach upon the 660 foot setback requirement and commercial gas production is established within the well, the applicant should be required to reopen this case and appear and present evidence and testimony in order to demonstrate that correlative rights will be protected.

(9) No offset operator and/or interest owner appeared at the hearing in opposition to the application.

(10) Approval of the proposed horizontal directional drilling project should result in the recovery of an additional amount of gas from the proposed proration unit which may not otherwise be recovered, thereby preventing waste, and will not violate correlative rights provided that the proposed horizontal drainhole is in compliance with the setback requirements described in Finding No. (4) above.

(11) The applicant should be required to conduct a directional survey on the vertical portion of the wellbore prior to commencing directional drilling operations, and on the horizontal portion of the wellbore during or subsequent to completion of directional drilling operations in order that the direction, extent and terminus of said horizontal drainhole may be determined to be in compliance with the terms of this order.

(12) The applicant should further be required to submit copies of said directional surveys to the Santa Fe and Artesia offices of the Division.

(13) The applicant should notify the supervisor of the Artesia district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the proposed well in order that these operations may be witnessed.

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IT IS THEREFORE ORDERED THAT:

(1) The application of McKay Oil Corporation for a horizontal directional drilling project in the SE/4 of Section 32, Township 4 South, Range 22 East, NMPM, Undesignated North Pecos Slope-Abo Gas Pool, Chaves County, New Mexico, is hereby approved.

(2) The applicant is further authorized to drill its West Fork Federal Unit Well No. 3 located at a standard surface location 1980 feet from the South and East lines (Unit J) of said Section 32 in the following manner:

Drill vertically to a depth of approximately 3400 feet through the Abo formation, log well, plug back and set production casing, kick off from vertical at a depth of approximately 2950 feet and commence a short radius curve in an undetermined direction building angle to approximately 90 degrees, commence drilling horizontally at a depth of approximately 3010 feet a distance of approximately 500 feet.

(3) The SE/4 of said Section 32 shall be dedicated to the above-described well forming a standard 160-acre gas spacing and proration unit for the North Pecos Slope-Abo Gas Pool.

(4) No part of the horizontal wellbore shall be located closer than 660 feet from the outer boundary of the proration unit.

(5) Should the horizontal portion of the wellbore encroach upon the 660 foot setback requirement and commercial gas production is established within the well, the applicant shall be required to reopen this case and appear and present evidence and testimony in order to demonstrate that correlative rights will be protected.

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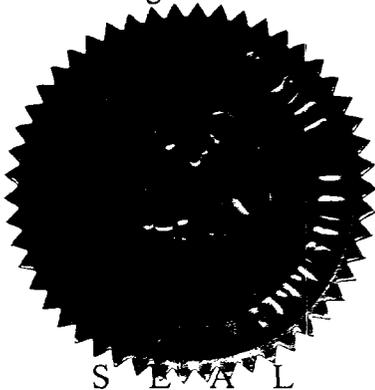
(6) The applicant shall be required to conduct a directional survey on the vertical portion of the wellbore prior to commencing directional drilling operations, and on the horizontal portion of the wellbore during or subsequent to completion of directional drilling operations in order that the direction, extent and terminus of said horizontal drainhole may be determined to be in compliance with the terms of this order.

(7) The applicant shall further be required to submit copies of said directional surveys to the Santa Fe and Artesia offices of the Division.

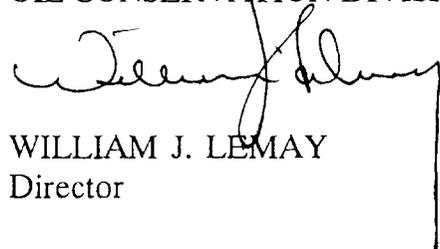
(8) The applicant shall notify the supervisor of the Artesia district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the proposed well in order that these operations may be witnessed.

(9) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director