

District I
PO Box 1988, Hobbs, NM 88241-1988
District II
PO Drawer DD, Artesia, NM 88211-8719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
I | y, Minerals & Natural Resources Department

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

c/s
Form C-101
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator name and Address Marathon Oil Company P.O. Box 552 Midland, Texas 79702		² OGRID Number 014021
		³ API Number 30-0 30-015-27465
⁴ Property Code E-10083	⁵ Property Name INDIAN HILLS STATE COMM	⁶ Well Number 7

⁷ Surface Location									
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
F	36	20S	24E		1650	NORTH	1980	WEST	EDDY

⁸ Proposed Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
⁹ Proposed Pool 1 SILURO-DEVONIAN SWB 96101					¹⁰ Proposed Pool 2				

¹¹ Work Type Code E-D	¹² Well Type Code I	¹³ Cable/Rotary ROTARY	¹⁴ Lease Type Code STATE	¹⁵ Ground Level Elevation 3625
¹⁶ Multiple NO	¹⁷ Proposed Depth 11000'	¹⁸ Formations DEVONIAN	¹⁹ Contractor UNKNOWN	²⁰ Spud Date ASAP

²¹ Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
*14 3/4"	10 3/4"	40.5#	1040'	1350	SURFACE
*9 7/8"	7 5/8"	33.7, 29.7, 26.4	9650'	2635	SURFACE
	LINER				
6 1/2"	4 1/2" (F.J.)	11.6	9000'-10000'		1000'

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary

MARATHON PROPOSES TO CONVERT THIS CEMETARY MORROW GAS WELL TO A DEVONIAN SALT WATER DISPOSAL WELL PURSUANT TO ADMINISTRATIVE ORDER SWD-570, DATED 9/20/94. PROPOSED BOP EQUIP .11" ON DUAL RAM, ANNULAR AND CHOKE MANIFOLD. ALL CEMENT SHALL BE RUN AND CMT IN ACCORDANCE TO NMOC RULE #107, ALL BOP EQUIP SHALL BE INSTALLED AND OPERATED IN ACCORDANCE TO NMOC RULES #109, #114.

SEE ATTACHED WORKOVER PROCEDURE FOR SPECIFIC DETAIL

*EXISTING CASING STRINGS

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *T.B. Arnold* FOR T.B. ARNOLD

Printed name: **T. B. ARNOLD**

Title: **DRILLING SUPERINTENDENT**

Date:
3/21/95

Phone:
915/682-1626

OIL CONSERVATION DIVISION

Approved by:

ORIGINAL SIGNED BY TIM W. GUM

Title:

DISTRICT II SUPERVISOR

Approval Date: **APR 11 1995**

Expiration Date: **10-11-95**

Conditions of Approval:

Attached ☐

Notify N.M.O.C.C. in sufficient time to replace cementing

the casing

OIL CONSERVATION DIVISION

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

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

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DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

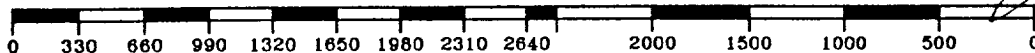
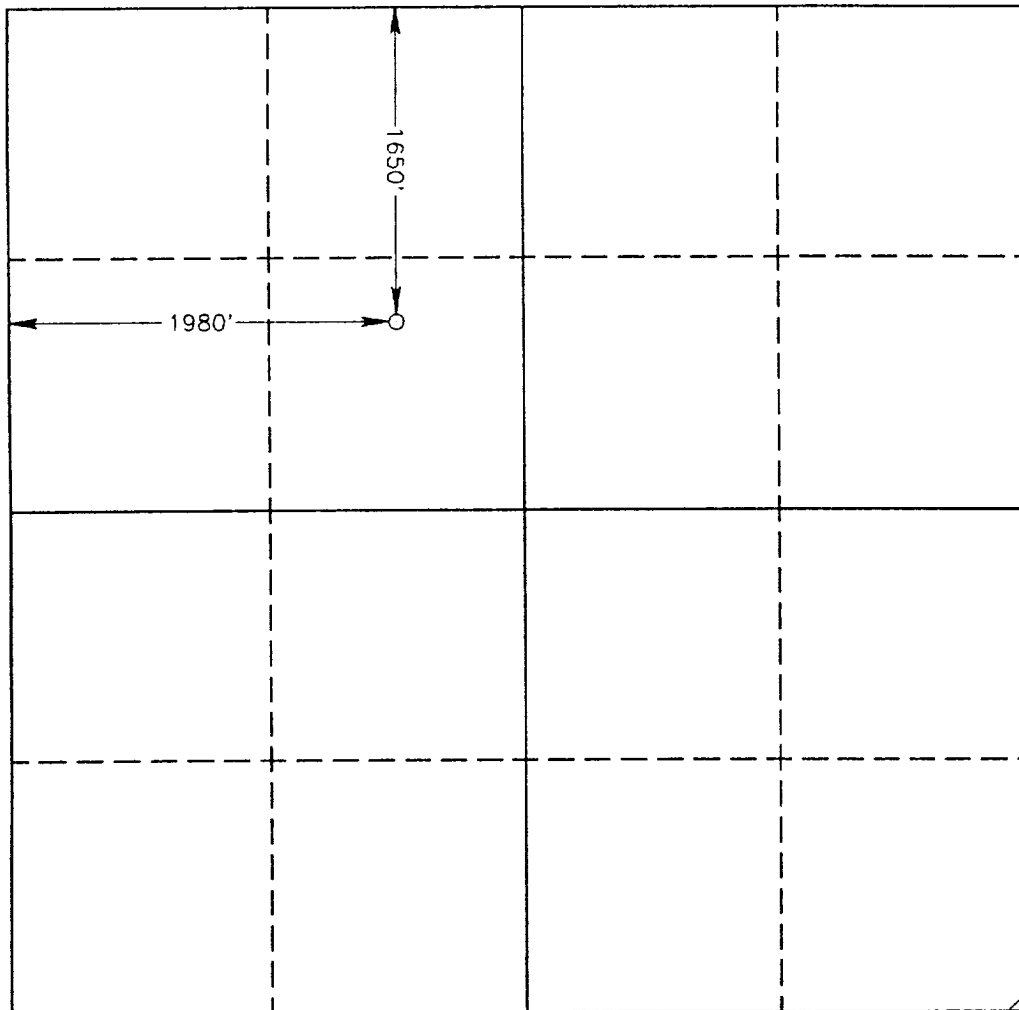
All Distances must be from the outer boundaries of the section

Operator MARATHON OIL CO.			Lease INDIAN HILLS STATE COM.		Well No. 7
Unit Letter F	Section 36	Township 20 SOUTH	Range 24 EAST	County NMPM	EDDY
Actual Footage Location of Well: 1650 feet from the NORTH line and 1980 feet from the WEST line					
Ground Level Elev. 3625.3'	Producing Formation Devorian		Pool SWD; DEVONIAN 96101		Dedicated Acreage: 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 interest of all owners been consolidated by communization, unitization, force-pooling, etc.?
☐ Yes ☐ No If answer is "yes" type of consolidation _____

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

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



OPERATOR CERTIFICATION

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

Signature
T. B. Arncl

Printed Name
T. B. Arncl

Position
Drilling Superintendent

Company
Marathon Oil Company

Date
3/22/95

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 knowledge and
belief.

Date Surveyed
JUNE 9, 1993

Signature & Seal of
Professional Surveyor

JOHN W. WEST
DONALD J. GIBSON
JOHN W. WEST
95

DRILLING SUMMARY

1. Prepare location for McVay Rig No. 4. Open reserve pit as a single dike 50' x 50' (2000 bbls)
2. MIRU drilling rig. Check for pressure. Make sure wellbore is loaded with water. Remove tree. Install 5M dual hydraulic and annular BOPE, rotating head, and choke manifold. Test pipe/blind rams and choke manifold to 300/3000 psi and annular 300/2000 psi.
3. Pickup 3-1/2" drillpipe (13.3#/ft grade E and S-135 with 3-1/2" IF connections). Retrieve RBP at 7500' and POOH.
4. Pickup 6-1/2" bit, thirty 4-3/4" x 2" drill collars on 3-1/2" drillpipe. Drill out of 7-5/8" casing. Drill to 11,000'. Use fresh water mud and prehydrated gel sweeps to clean hole. RU short lubricator with pump-in sub and test to 500 psi. Run logs per geological summary
5. Run 4-1/2", L-80, 11.6#/ft, FL-4S production liner equipment from 9,000' to 10,000' on 3-1/2" drillpipe. Set liner hanger at 9,000' and release drillpipe from hanger. Cement with ____ sacks of Class "H" with 5 pps CSE, 1.0% CF-14, and 0.3% WL-1P. Pull 5 stands and reverse circulate drillpipe clean. WOC ____ hours. POOH.
6. Continue with "Section 4.0 Pulling Unit"

CLEANOUT AND SQUEEZE SUMMARY

1. Notify OCD prior to beginning work.
2. MIRU pulling unit. Bleed pressure off well. Load annulus with water. Pump water down tubing to kill well.
3. Install two-way back-pressure valve. Remove tree. Install 5M psi dual hydraulic (blind and pipe rams) with valved side outlets below blind rams and annular BOPE. Pressure test BOPE to 2500 psi. Retrieve two-way back-pressure valve.
4. Release Perma-Lach packer at 7,470'. POOH with 2-7/8" tubing and production equipment.
5. Pickup 6-1/2" bit and six 4-1/8" drill collars. RIH on 2-7/8" tubing. Tag top of CIBP at 7,660' and drillout. Tag top of CIBP at 7745' and drillout. Continue in wellbore to 7800'. Circulate wellbore clean. Pull up to 7550'. Establish injection rate. POOH.

Note:

If necessary spot a 20 barrel 20 ppb Magma Fiber LCM pill to establish returns. Mix over at the McVay rig premix pit. After spotting LCM and drilling out it may be necessary to spot 500 gals of 15% HCl acid to establish an injection rate.

6. Pickup cement retainer. RIH on 2-7/8" tubing. Set cement retainer at 7500'. Establish injection rate. Squeeze perforations from 7,582' to 7,765' (272 holes) with 250 sacks Class "H" cement with 0.5% CF-20 and 100 sacks Class "H" cement. Pull out of cement retainer and leave 3 sacks cement on top of retainer. Pull up one stand and reverse circulate tubing clean. POOH.
7. RIH with 6-1/2" bit and six 4-1/8" drill collars on 2-7/8" tubing to 7000' (WOC overnight). Tag top of cement. Drillout cement, retainer and squeezed perforations. Pull up to 7550'.
8. Positive pressure test squeezed perforations to 1000 psi and hold 30 minutes. Differential pressure test squeezed perforations by swabbing fluid level to 5500' and hold 30 minutes. Fill wellbore with water.
9. Continue in wellbore and tag top of cement at 8,992'. Drillout cement and CIBP at 9,050'. Continue in wellbore and tag top of 7-5/8" casing float collar at 9,600'. Drillout float collar and cement in float joint to 9620'. Circulate wellbore clean. POOH. and laydown excess 2-7/8" tubing.
10. Pickup RPB and RIH. Set at 7500' (above perforations) and test to 1000 psi. POOH and laydown 2-7/8" tubing. Remove BOPE. Install dry-hole tree.
11. RDMO pulling unit.