District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 S. 1st Street, Artesia, NM 88210-2834
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-101
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

[x] AMENDED REPORT

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

1 Operator name and Address	2 OGRID Number
Marathon Oil Company P.O. Box 552 Midland Tx. 79702	14021 3 API Number 30-0 25-06599

4 Property Code	5 Property Name	6 Well No. # 8
6482	L.G. WARLICK	# 8

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
" I "	15	21-S	37-E		1650'	SOUTH	990'	EAST	LEA

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	10 Proposed Pool 2
PENROSE SKELLY GRAYBURG	

11 Work Type Code	12 Well Type Code	13 Cable/Rotary	14 Lease Type Code	15 Ground Level Elevation
ADD ZONE	OIL		FEE	3416
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
	7520	GRAYBURG		

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
SURFACE	13-3/8	48#	316'	300	SURFACE
INTERMEDIATE	8-5/8	32#	2803	1500	495'
PRODUCTION	5-1/2	17#	7570'	800	2875

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

PROPOSE TO ABANDON ABO PERFS,SET CIBP @ 6790'.ABANDON BLINEBRY PERFS,SET CIBP@ 5450'.
PERFORATE GRAYBURG AND STIMULATE AS PER ATTACHED RECOMPLETION PROCEDURE INDICATES.

* CASING CEMENTED IN PLACE.

Permit Expires 1 Year From Approval Date Unless ~~Drilling~~ Adding Underway

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

Signature: Jerry Fletcher
Printed name: JERRY FLETCHER
Title: DRILLING ENG. TECH.

OIL CONSERVATION DIVISION

Approved by: ORIGINAL SIGNED BY TIM W. GUM
Title: DISTRICT II SUPERVISOR
Approval Date: APR 25 2000 Expiration Date:

3 C 5

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PO Box 2088, Santa Fe, NM 87504-2088

Energy, Minerals & Natural Resources Department

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

Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

[X] AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-06599	50350	Penrose-Skelly - Grayburg

4 Property Code	5 Property Name	6 Well Number
6482	L.G. Warlick "C"	#8

7 OGRID No.	8 Operator Name	9 Elevation
14021	Marathon Oil Company	

10 Surface Location

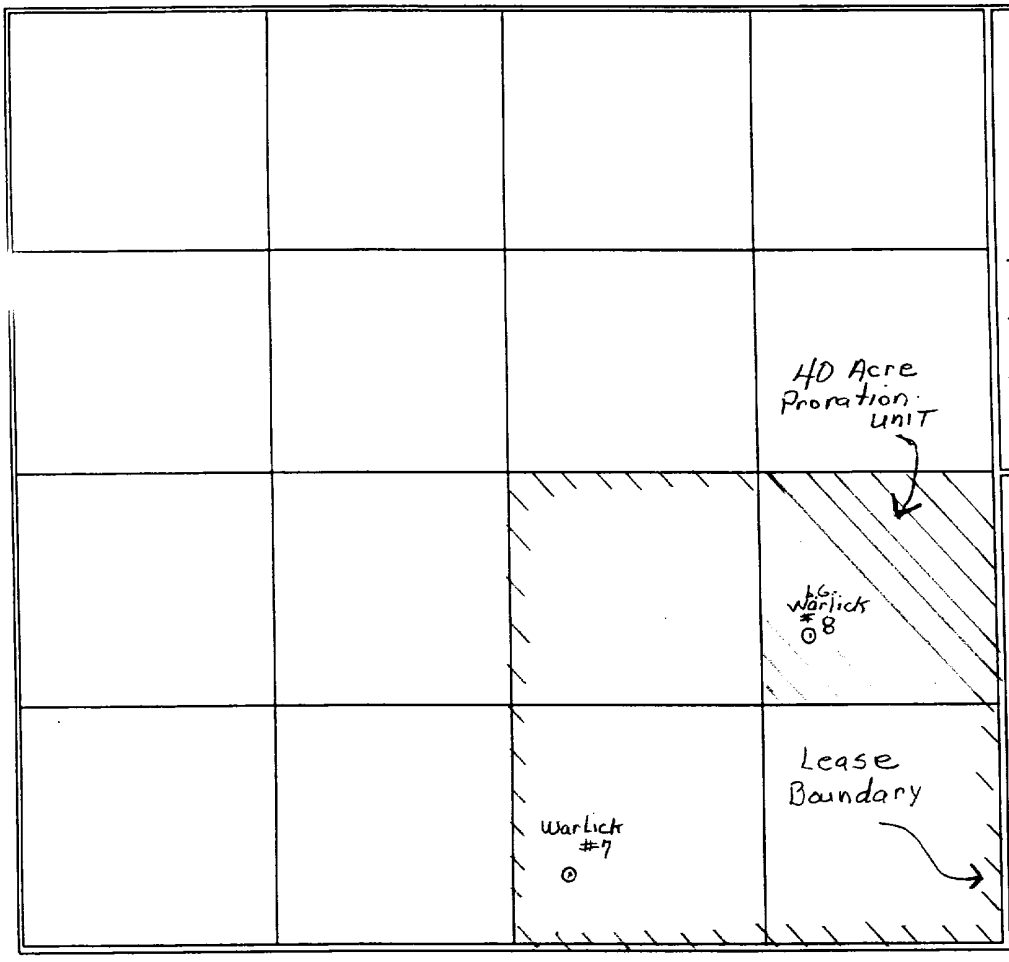
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
"I"	15	21-S	37-E		1650'	South	990'	East	Lea

11 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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
40			

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



17 OPERATOR CERTIFICATION

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

R.J. Longmire
Signature
R. J. Longmire
Printed Name
Drilling Superintendent
Title
4-10-00
Date

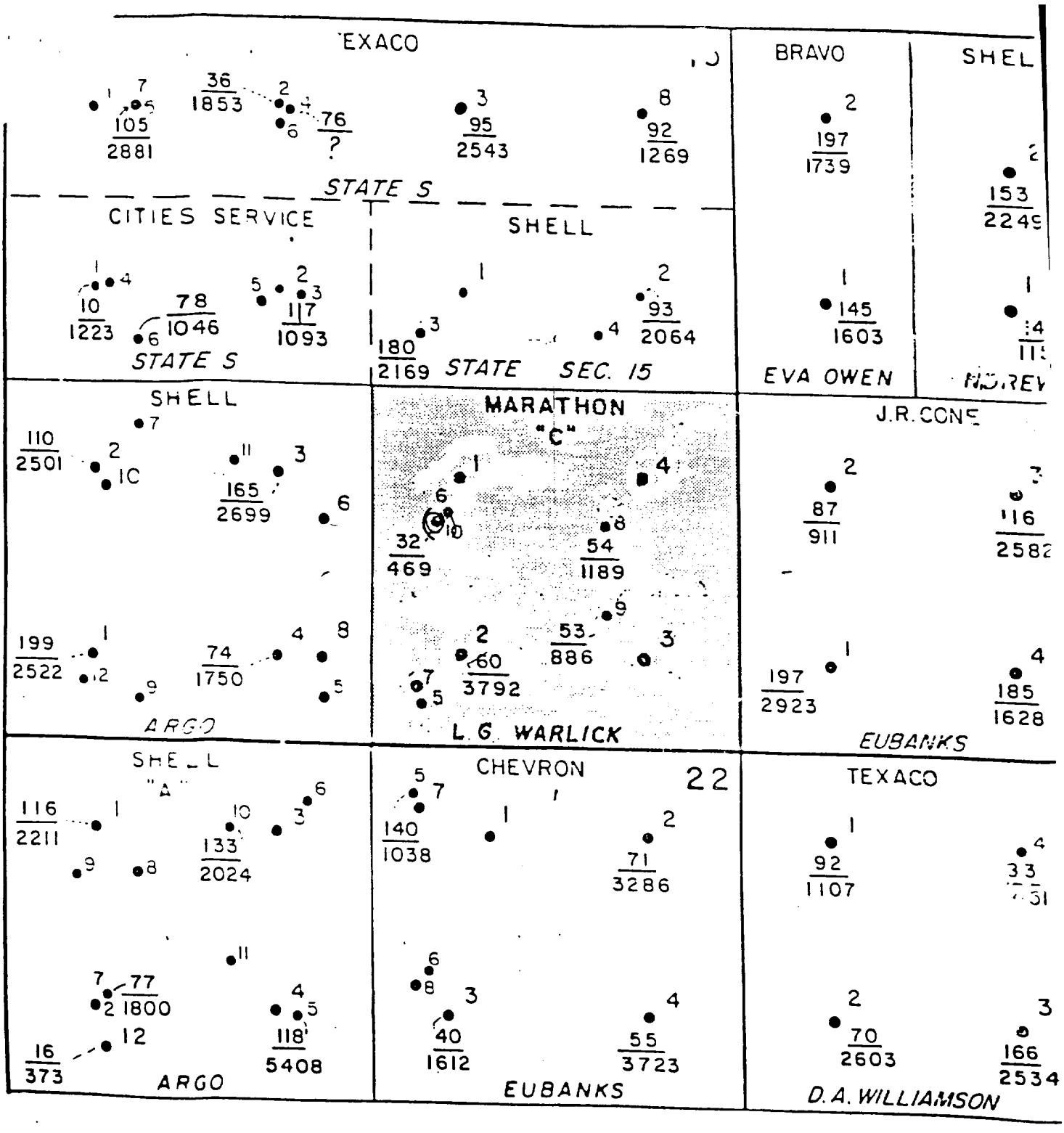
18 SURVEYOR CERTIFICATION

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 Surveyer:

Certificate Number



BLINEBRY PRODUCTION

CUM OIL THRU 12/31/85 (MBO)

CUM GAS THRU 12/31/85 (MMCF)

(FROM NMOCC ANNUAL REPORTS)

N

MARATHON OIL COMPANY
MID-CONTINENT REGION

L. G. WARLICK "C" LEAS

SEC. 15, T-21-S, R-37-E
LEA COUNTY, NEW M[illegible]

0 SCALE 1000'

Recompletion Procedure

L.G. Warlick "C" #8

1650' FSL, 990' FEL
Section 15, T21S & R37E, U/L "I"
Penrose-Skelly (Grayburg) Field
Lea County, New Mexico
API # 30-025-06599-~~0000~~

Date: March 29, 2000

Purpose: **Complete SI well in Grayburg**

AFE #301800	Cost:	$130,000	Est Time:	10 Days
Before Payout:	WI:	100.000 %	NRI:	87.5000 %
After Payout:	WI:	70.5078 %	NRI:	61.6943 %

Perforations:

Ellenberger	7546-7554', 7560-7568 (4 SPF) 7570-7626' OH
Connell	7368, 81, 84, 95, 7402, 15, 20, 28, 46, 52, 58, 70 (25 Holes @ 2SPF)
Abo	6848, 59, 66, 71, 77, 6910, 16, 25, 28, 31, 40, 43, 47, 61, 68, 75, 86, 97, 7012, 30, 35, 57, 62, 65, 94, 97, 7104, 15, 25, 53, 57, 74, 80, 93, 97, 7203, 17, 25, 7233, 38, 46, 55 (42 Holes @ 1SPF)
Blinebry	5546-5699', 64, 75, 98 1 JSPF

Elevation: TD: 7,626' PBTD: 7,520' ~~7,580'~~ KB: 3,427' GL: 3,416'

Surface Casing: 13 3/8" 48# H-40 ST&C set @ 316 ft. Cement w/300 sx Portland. Circulated unknown amt to surf.

Intermediate: 8 5/8" 32# J-55 LTC set @ 2803 ft. Cement w/1300 sx Portland + 4% Gel as lead followed by 200 sx Portland neat as tail. Did not circulate. Est TOC @ 495' based upon temp log.

Production: 5 1/2" 17# J-55 set @ 7,570'. Cemented w/ 800 sx Portland + 4% Gel. Did not circulate. Est TOC 2,875 ft based upon temp log. (18ft inside intermediate)

Casing	Grade & Wt.	I.D.	Drift I.D.	Burst	Collapse
5 ½"	J-55 17.0#	4.892"	4.767"	5,320 psi	4,910 psi

Tubing	Grade & Wt.	I.D.	Drift I.D.	Burst	Collapse
2 3/8"	J-55 4.7#	1.995"	1.901"	7,700 psi	8,100 psi
2 7/8"	L-80 6.5#	2.441"	2.347"	10,570 psi	11,160 psi

Wellhead: Unknown

Safety: Run killstring when needed, Install H2S monitoring alarm and rescue equipment.

PROCEDURE:

1. Notify Hobbs personnel of impending workover.
2. Inspect surface location and improve if necessary. Test mast anchors to 22,500 lbs.
3. MIRU PU. Kill well as needed. POOH w/ rods & pump laying down. (Have rods inspected, replace as needed to obtain 3,900 usable feet)
4. ND Wellhead.
5. Install 7 1/16" 3M BOP stack w/ 2 3/8" pipe rams on top and blind rams on bottom. Install (2) 2 1/16" 3M gate valves on BOP outlets below the blind rams. Pressure test BOP equipment to 2,000 psi as per MCR Drilling Department's specifications.


Received

6. TOOH w/ 2 3/8" production tbg, laying down. (Have 2 3/8" tbg inspected, replace as needed to obtain 3,900 usable feet). Load hole w/ KCl water.

7. Flange full opening valve to top of the BOPE. MIRU Halliburton Wireline w/ pack-off. RIH w/ "TMD" type CNL/GR. Log from the base of the Paddock @ 5,250 ft to the top of the Grayburg @ 3,650 ft. Have results sent immediately to Midland for processing and perforation selection. RDMO Halliburton

8. MIRU Wedge w/ packoff. RIH w/ 5 ½" 17# Gauge Ring to approximately 6,800 ft. Set 5 ½" 17# CIBP above the Abo @ 6,790'. Dump bail 3 sx of cement on top of CIBP. Test plug & casing to 500 psi. Set 5 ½" CIBP @ 5,450 ft. Dump 2 sx of sand on plug. RDMO Wedge

9. Change out pipe rams to 2 7/8" and trip in hole w/ 5 ½" 17# packer on 2 7/8" 6.5# L-80 rental string. Drop SV & test tubing to 1,000 psi, fish SV. Test CIBP located @ ± 5,450' to 1,000 psi.

10. PU to ± 3,850'. MIRU acid co, pickle tubing w/ 300 gals 15% Nefe acid. Spot 250 gals 15% Nefe across Grayburg from 3,600 to 3,850'. TOOH w/ tbg & pkr.

11. MIRU Wedge w/ full lubricator. Test lubricator to 1,000 psi. Correlate depth w/ Halliburton "TMD" GR/CNL. Perforate the Grayburg from the top down based upon the perforations picked by Midland. All shots w/ 23 gram charges @ 2 SPF & 120° phasing. RDMO Wedge

12. MIRU Hydrotesters. Test in hole w/ 5 ½" 17# packer on 2 7/8" workstring to 7,500 psi. Set packer at ± 3,650'. Load backside & test to ± 500 psi. RDMO Hydrotesters

13. MIRU acid co. Breakdown perfs w/ 3,000 gals of 15% HCl w/ additives at 4 - 6 bpm. Drop 140 7/8" 1.3 SG ballsealers evenly for diversion. Surge balls and flow/swab back load, report entry & cut to Midland.

14. Release packer and run past bottom perforation at ± 3,850' to knock any remaining ballsealers off of the perforations. PU to ± 3,650 and set packer.

15. Spot and visually inspect (2) clean manifolded frac tanks. Add biocide prior to filling w/ 850 bbls 2% KCl water.

16. MIRU Halliburton. Prepare to fracture stimulate the Grayburg w/ 28,500 gals Delta-Frac 20 carrying 750 sacks of 16/30 Ottawa sand. The treatment is designed to be pumped at 18 bpm w/ an estimated surface treating pressure of ± 5,000 psi. The proposed pumping schedule and material requirements are as follows:

Stage	Fluid	Volume (gals)	Conc. (lbs/gal)	Amount (lbs)	Proppant	Rate (bpm)	Press (psi)
Pad	Delta-Frac	11,000				18	4,157
Prop-laden	Delta-Frac	1,000	1	1,000	16/30 Ottawa	18	4,252
Prop-laden	Delta-Frac	1,500	2	3,000	16/30 Ottawa	18	4,355
Prop-laden	Delta-Frac	2,000	3	6,000	16/30 Ottawa	18	4,468
Prop-laden	Delta-Frac	4,000	4	16,000	16/30 Ottawa	18	4,587
Prop-laden	Delta-Frac	5,000	5	25,000	16/30 Ottawa	18	4,713
Prop-laden	Delta-Frac	4,000	6	24,000	16/30 Ottawa	18	4,789
Flush	Linear Gel	900				18	4,157
		29,400		**75,000**			

Frac Fluid: Delta-Frac 140 35,700 gals

Containing Per 1,000 gals

5.00	gpt	LGC-IV	Gellant
167.	ppt	KCl	Provided by MOC
1.00	gpt	Lo-Surf 300	Non-emulsifier
1.50	gpt	BC-140	Crosslinker/Buffer
0.50	ppt	GBW-30	Breaker
0.25	ppt	Opti-Flo HTE	Breaker
0.30	ppt	BE-5	Biocide

Proppant: 16/30 Ottawa 75,000 lbs

17. Once the main treatment has been flushed, obtain an ISIP then immediately initiate flowback at ± 2 bpm via a Guardian choke manifold to an open topped flowback tank. Flow well until it dies, or closure is reached. SION. RDMO alliburton

18. MIRU Slickline co. Tag sand fill w/ 1¼" sinker bar. If an insufficient amount of rathole is available for optimal placement of production equipment then cleanout to PBTD, else proceed as follows.

19. Swab back frac load to determine entry & cut. Report results to Midland.

20. Release packer and TOOH w/ workstring laying down.

19. Change out pipe rams to 2 3/8" and TIH w/ production tubing. Space out tubing such that the SN is located at approximately 3,900 ft.

20. ND BOPE & NU Wellhead. RIH w/ rod string & pump. Space out plunger and hang well on. Test for pump action. Connect surface equipment.

21. Turn well over to Hobbs for extended production testing.

Approvals: _____

D.P. Nordt
Permian Basin Engineering Supervisor

Distr:
M. Wiskofske
A. Schwandt
T. Kacir
D. Arnst
T. Hallum
K. Cook
B. Longmire
W. Tank
Well File