

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ Other ☐
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. CESVR. ☐ Other ☐

2. NAME OF OPERATOR

Marathon Oil Company

3. ADDRESS OF OPERATOR

P. O. Box 552, Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 1980' FNL & 1980' FEL

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

08-20-85

15. DATE SPUDDED

09-24-85

16. DATE T.D. REACHED

11-12-85

17. DATE COMPL. (Ready to prod.)

05-27-86

18. ELEVATIONS (DF, REB, BT, OR, ETC.)*

GR 3669'

KB 3683'

19. ELEV. CASING HEAD

3683'

20. TOTAL DEPTH, MD & TVD

13,500'

21. PLUG BACK T.D., MD & TVD

10,600'

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

9560-10,376'

South Lea Bone Springs

25. WAS DIRECTIONAL SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

GR-DLL-MSFL; GR-CNL-FDC; GR-CBL-CCL

27. WAS WELL CORED

No

28.

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	94#	685'	26"	1025 SX	
13-3/8"	54.5# & 68#	3524'	17-1/2"	2700 SX	
8-5/8"	32#	5464'	12-1/4"	800 SX	
5-1/2"	17# & 20#	13,494'	7-7/8"	1775 SX	

29.

LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD
					SIZE DEPTH SET (MD) PACKER SET (MD)
					2-3/8" 9480' 9480'

31. PERFORATION RECORD (Interval, size and number)

9560-10,376' (total 66 holes)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
DEPTH INTERVAL (MD)
9560-10,376'
AMOUNT AND KIND OF MATERIAL USED
9,000 gals gelled and total of all fracs - 139,000 Gals. gelled 2% KCl w/286,000# sand.

33.*

PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
May 31, 1986	Flowing	Producing
DATE OF TEST	HOURS TESTED	CHOKE SIZE
06-14-86	24	32/64"
FLOW. TUBING PRESS.	CASING PRESSURE	PROD'N. FOR TEST PERIOD
50 psi	0 psi	OIL—BBL. 101
		GAS—MCF. 200
		WATER—BBL. 19
		OIL GRAVITY-API (CORR.) 1980
		397

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Sold

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

Inclination survey; GR-CNL-LDT; GR-BHC

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

TITLE

Production Engineer

DATE June 30, 1986

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formations and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROSITY ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Bone Springs	8320'	11,135'	Sand and Dolomite
Strawn	12,056'	12,554'	Sand
Morrow	12,760'	13,440'	Sand

38. GEOLOGIC MARKERS

NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH
Yates	3700'		
Queen	4710'		
Bone Springs	8320'		
Wolfcamp	11,135'		
Strawn	12,056'		
Atoka	12,554'		
Morrow	12,760'		
Miss	13,440'		

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JUL 7 1986
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRI
(Other instruction
reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985
LEASE DESIGNATION AND SERIAL NO

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐	7. UNIT AGREEMENT NAME Lea Unit
2. NAME OF OPERATOR Marathon Oil Company	8. FARM OR LEASE NAME Lea Unit
3. ADDRESS OF OPERATOR P. O. Box 552, Midland, Texas 79701	9. WELL NO. 13
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1980' FNL & 1980' FEL	10. FIELD AND POOL, OR WILDCAT Lea (Bone Springs)
14. PERMIT NO.	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 24, T-20S, R-34E
15. ELEVATIONS (Show whether DF, RT, GR, etc.) GR 3669' KB 3683'	12. COUNTY OR PARISH Lea
	13. STATE N.M.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐	PULL OR ALTER CASING ☐
FRACTURE TREAT ☐	MULTIPLE COMPLETE ☐
SHOOT OR ACIDIZE ☐	ABANDON* ☐
REPAIR WELL ☐	CHANGE PLANS ☐
(Other) ☐	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐	REPAIRING WELL ☐
FRACTURE TREATMENT ☐	ALTERING CASING ☐
SHOOTING OR ACIDIZING ☐	ABANDONMENT* ☐
(Other) ☒ Recompletion	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

PURPOSE: ABANDON STRAWN GAS AND RECOMPLETE IN BONE SPRINGS

On May 13, 1986 a CIBP with 2 sx of cement was set at 10,600'. The Bone Springs was perforated at 10,343-48', 52', 56-58', 60-62', 70', 74-76' with 1 JSPF (17 holes). This zone was treated with 1200 gallons 7 1/2% NEFE and fraced with 35,000 gallons EZ Frac 60 containing 65,000# of 20/40 sand. A wireline RBP was then set at 10,250'.

The Bone Springs Carbonate was perforated on May 15 at 10,106-09' and 10,113-18' with 1 JSPF (10 holes). This zone was treated with 9,000 gallons stabilized gelled acid and swab tested for two days. A RBP was then set at 9850'.

On May 19 the Bone Springs was perforated at 9758-60', 62-64', 68-70', 80-82' with 1 JSPF (14 holes). It was treated with 1200 gallons 7 1/2% NEFE followed by 38,000 gallons EZ Frac 60 containing 83,000# 20/40 sand. Another RBP was set at 9690'.

The Bone Springs was perforated again at 9560-62', 66-68', 75-77', 92-96', 9599-9601', 03-05', 11-15' with 1 JSPF (25 holes). Then it was treated with 2700 gallons 7 1/2% NEFE followed by 66,000 gallons of EZ Frac 60 containing 136,000# of 20/40 sand.

All RBP will be taken out of the hole and the Bone Springs will be tested.

18. I hereby certify that the foregoing is true and correct

SIGNED Thomas F. Zaparka
(This space for Federal or State office use)

TITLE Production Engineer

DATE May 22, 1986

APPROVED BY ACCEPTED FOR RECORD
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

MAY 28 1986

JUN 4 1986

*See Instructions on Reverse Side HOBBS, NEW MEXICO

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-104
Revised 10-1-78

NO. OF COPIES DESIRED	
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LAND OFFICE	
TRANSPORTER	OIL
	GAS
OPERATOR	
PROMOTION OFFICE	

REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

1. Operator
Marathon Oil Company

Address
P. O. Box 552, Midland, Texas 79702

Reason(s) for filing (Check proper box)

New Well	☐	Change in Transporter of:		Other (Please explain)
Recompletion	☐	Oil	☐	Temporary test allowable of 1,000
Change in Ownership	☐	Casinghead Gas	☐	barrels of oil
		Dry Gas	☐	
		Condensate	☐	

If change of ownership give name and address of previous owner _____

2. DESCRIPTION OF WELL AND LEASE

Lease Name Lea Unit	Well No. 13	Payable, including Formation Lea (Bone Springs)	Kind of Lease State, Federal or Fee Federal	Lease NM 01747
Location Unit Letter <u>G</u> : <u>1980</u> Feet From The <u>North</u> Line and <u>1980</u> Feet From The <u>East</u>				
Line of Section <u>24</u> Township <u>20S</u> Range <u>34E</u> , NMPM, <u>Lea</u> Co.				

3. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☒ or Condensate ☐	Address (Give address to which approved copy of this form is to be sent)
Texas-New Mexico Pipeline Company	Box 1510, Midland, Texas 79702
Name of Authorized Transporter of Casinghead Gas ☐ or Dry Gas ☐	Address (Give address to which approved copy of this form is to be sent)
Phillips Petroleum Company <u>66 Natl. Gas Co.</u>	4001 Pennbrook Bldg., Odessa, Texas 79762
If well produces oil or liquids, give location of tanks.	Is gas actually connected? When
	No

If this production is commingled with that from any other lease or pool, give commingling order number: _____

4. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'tv.	Diff. F
	X		X					
Date Spudded September 24, 1986	Date Compl. Ready to Prod. May 27, 1986	Total Depth 13,500'	P.B.T.D. 10,600'					
Elevations (DF, RAB, RT, CR, etc.) GR 3669' KB 3683'	Name of Producing Formation Bone Springs	Top Oil/Gas Pay 9560'	Tubing Depth					
Perforations 9560-10,376' (total 66 holes)			Depth Casing Shoe 13,494'					
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT					
26"	20"	685'	1025					
17 1/2"	13 3/8"	3524'	2700					
12 1/4"	8 5/8"	5464'	800					
7 7/8"	5 1/2"	13,494'	1775					

5. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top, able for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-In)	Casing Pressure (Shut-In)	Choke Size

6. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

[Signature]
(Signature)
Production Engineer
(Title)
June 2, 1986
(Date)

OIL CONSERVATION DIVISION

APPROVED JUN 6 1986, 19BY Eddie W. Seay
TITLE Oil & Gas Inspector

This form is to be filed in compliance with RULE 1104.
If this is a request for allowable for a newly drilled or deep well, this form must be accompanied by a tabulation of the dev. tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for a able on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of oil well name or number, or transporter, or other such change of condi

Separate Forms C-104 must be filled for each pool in mul completed wells.

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