

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved,
Budget Bureau No. 42-R355.6.

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. RESVR. ☐

2. NAME OF OPERATOR

Marathon Oil Company

3. ADDRESS OF OPERATOR

P. O. Box 97, McFadden, Wyoming

4. LOCATION OF WELL (Report location clearly and in accordance with any State or Federal laws.)

At surface 1190' FSL, 1190' FAL, Sec 33, T26N, R5W

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED

2/24/67

16. DATE T.D. REACHED

3/11/67

17. DATE COMPL. (Ready to prod.)

3/21/67

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*

6598 GR, 6611 AB

19. ELEV. CASINGHEAD

All measurements from KB

20. TOTAL DEPTH, MD & TVD

7395 MD

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

7348 MD

22. IF MULTIPLE COMPL., HOW MANY*

2

23. INTERVALS, CABLE TOOLS

CABLE TOOLS

None

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

Graneros Sand top

7092

Base

7188

Dakota Sand top

7188

Base

7332

25. WAS DIRECTIONAL SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

Gamma Ray - Compensated Formation Density log - Caliper

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8	32.30 #	400' KB	13 3/4	450 sacks - surface	None
* 5 1/2	17# & 15.50#	7375' KB	7 7/8	775 sacks - surface	None
* See attachment for details of casing and cement					

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
None					2 3/8	7050	7050 KB

31. PERFORATION RECORD (Interval, size and number)

Graneros 7094-7100, 7116-20, 7122-24 (12' by Schlumberger Hyper jets.
Dakota 7230-36, 7238-42, 7245-47, 7264-66, 7271-76, 7286-88, 7312-22 (31', 2 Hyper Jets per foot (62)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7094 - 7247	500 gal Mud acid, 35000# 40-60 and 20-40 Sand.
7264 - 7322	500 gal Mud acid, 60000# 20-40 sand sand water frac treatment.

33.*

PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
4/8/67		Flowing				Shut in after test until pipeline connection is made.	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
4/8/67	3	3/4	→	not measured	4686 MCFD	- - -	- - -
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
368 psig	Packer	→	- - -	4686	- - -	- - -	

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

Vented during test

TEST WITNESSED BY

A. Iefteller of Iefteller, Inc.

35. LIST OF ATTACHMENTS Casing and cement data (Marathon Form 154); MDOCC Form C122; MDOCC Packer Leakage Test data; Gamma Ray-Density-Caliper log; Gamma Ray Perforating Depth Control log.

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

SIGNED

TITLE

Area Superintendent

DATE

May 2, 1967

*(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.), formation 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 33.

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.)

No cores or drill stem tests taken

37. SUMMARY OF POROUS 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				38. GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Pictured Cliffs	2898	2964	Sandstone - gas producing	Pictured Cliffs	2898	
Graneros Sand	7092	7188	Sandstone - gas producing	Lewis Shale	2964	
Dakota Sand	7188	7332	Sandstone - gas producing	Chacra	3774	
				Cliff House	4578	
				Mancos Shale	5284	
				Niobrara	6230	
				Basal Niobrara	6464	
				Sanastee	6702	
				Greenhorn	7010	
				Graneros Formation	7068	
				Graneros Sand	7092	
				Dakota Sand	7188	
				Morrison	7332	

DATE 1967

MARATHON OIL COMPANY HISTORY OF OIL OR GAS WELL

 Jicarilla
Basin Dakota
FIELD
WELL NO. 13 LEASE Jicarilla Apache~~BOOK~~SEC. 33 TWP. 26N R. 5WSTATE New Mexico COUNTY Rio Arriba1190' FSL
1190' FWLELEV. 6611 KBMEASUREMENTS
TAKEN FROM

TOP OF OIL STRING _____ ELEV. _____

HISTORY PREPARED BY P. F. Patterson

TOP OF ROTARY TABLE _____ ELEV. _____

TITLE Area EngineerGRD. OR MAT. _____ ELEV. 6598

All measurements from KB.

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, including size of hole, size and number of bits, complete description of casing, cementing, fishing or drilling difficulties, surveys, all tests, all completion operations and procedure, etc.

DATE
3/12/67

Ran casing shown below. Broke circulation with mud. Dropped ball to convert fillup collar and shoe to float valve. Cemented 1st stage thru shoe, by BJ, with 85 units HYSC 400 filler cement and 120 units quality cement; 500 gals. Mud Sweep ahead of cement. (1 unit quality cement = 1 sack class C cement, 1 sack Diamix, 5 lbs. salt, and 1% D30 friction reducer, yields 2.49 cu. ft. of slurry per unit; 1 unit filler cement = 1 sack class C cement, 2 sacks Diamix, 10% gel by weight of cement. 4% A2 strength activator by weight of cement, yields 6 cu. ft. slurry per unit). Displaced with 47 bbls. water and 128 bbls. mud at final pressure of 1300 psi, bumped plug with 2000 psi, released pressure, float held OK. Plug down at 4:00 AM. Dropped bomb to open lower stage collar, open at 4:30 AM with pressure. Circulated mud until 6:00 AM with rig pump, no cement circulated. Cemented 2nd stage with 200 units HYSC-400 filler cement, 20 bbls. water ahead of cement. Displaced with 51 bbls. water and 77 bbls. mud at final pressure of 1000 psi, closed tool with 2500 psi at 6:35 PM. Dropped bomb and opened upper stage collar, circulated. Cement from first stage circulated to surface after BJ started mixing cement for second stage. Good mud returns at all times.

	Overall Length	Effective Length	From	To
1 jt 5 $\frac{1}{2}$ " OD, 17#, 8rd, J55, LT&C, R2, Cond 1	17.53	17.24	13.00 KB	30.24
19 jts 5 $\frac{1}{2}$ " OD, 15.5#, 8rd, J55, LT&C, R2, Cond 1	611.60	605.48	30.24	635.72
80 jts 5 $\frac{1}{2}$ " OD, 15.5#, 8rd, J55, ST&C, R2, Cond 1	2611.89	2593.46	635.72	3229.18
Baker Model J1 Stage Cementing Collar	2.07	1.83	3229.18	3231.01
69 jts 5 $\frac{1}{2}$ " OD, 15.5#, 8rd, J55, ST&C, R2, Cond 1	2190.82	2174.91	3231.01	5405.92
Baker Model JB Stage Cementing Collar	2.07	1.83	5405.92	5407.75
45 jts 5 $\frac{1}{2}$ " OD, 15.5#, 8rd, J55, ST&C, R2, Cond 1	1468.81	1458.43	5407.75	6866.18
15 jts 5 $\frac{1}{2}$ " OD, 17#, 8rd, J55, LT&C, R2, Cond 1	490.40	486.33	6866.18	7352.51
Baker Model G Circ. Diff. Fillup Collar	1.91	1.67	7352.51	7354.18
1 jt 5 $\frac{1}{2}$ " OD, 17#, 8rd, J55, LT&C, R2, Cond 1	28.11	27.82	7354.18	7382.00
Baker Model G Circ. Diff. Fillup Shoe	2.00	2.00	7382.00	7384.00 KB
(Down Whirler)				
Net Casing		7371.00		

30 Baker Model M centralizers at 2780, 2812, 2844, 2877, 2908, 2942, 3006, 3070, 3134, 3197, 3264, 4446, 4542, 5111, 5210, 5373, 5441, 6932, 6965, 6997, 7030, 7063, 7128, 7162, 7194, 7223, 7256, 7289, 7319 and 7367.
2 Baker canvas insert metal petal baskets at 4510 and 5176.

Circulated mud with rig pump. Got cement returns from second stage. Circulated until 9:45 AM. Hauling water. Cemented third stage, by BJ, thru tools at 3229' with 210 units filler cement and 160 units quality cement (500 gals. Mud Sweep ahead of cement). Displaced with 74 bbls. water. Plug down at 10:30 AM. Circulated cement to surface. Set slips and landed casing in head. Nipped up.

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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 ☐		5. LEASE DESIGNATION AND SERIAL NO. Tract 241-Contract 000154	
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other ☐		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla Apache	
2. NAME OF OPERATOR Marathon Oil Company		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR P. O. Box 97, McFadden, Wyoming 82080		8. FARM OR LEASE NAME Jicarilla Apache	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface 1190' FSL, 1190' FWL, Sec 33, T26N, R5W At top prod. interval reported below At total depth		9. WELL NO. 13	
14. PERMIT NO.		10. FIELD AND POOL, OR WILDCAT South Blanco Pictured Cliffs	
DATE ISSUED		11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA Sec 33, T26N, R5W	
15. DATE SPUNDED 2/24/67		12. COUNTY OR PARISH Rio Arriba	
16. DATE T.D. REACHED 3/11/67		13. STATE New Mexico	
17. DATE COMPL. (Ready to prod.) 3/21/67		18. ELEVATIONS (DF, RKB, RT, GR, ETC.) 6598 GR, 6611 RKB	
19. ELEV. CASINGHEAD All measurements from RKB		20. TOTAL DEPTH, MD & TVD 7395	
21. PLUG, BACK T.D., MD & TVD 7348		22. IF MULTIPLE COMPL., HOW MANY? 2	
23. INTERVALS DRILLED BY 7395		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* Pictured Cliffs sand top 2898 Base 2964	
25. WAS DIRECTIONAL SURVEY MADE No		26. TYPE ELECTRIC AND OTHER LOGS RUN Gamma Ray - Compensated Formation Density log - Caliper	
27. WAS WELL CORED No		28. CASING RECORD (Report all strings set in well) Casing Size Weight, lb./ft. Depth Set (MD) Hole Size 9 5/8 32.30# 400 KB 13 3/4 * 5 1/2 17# & 15.50# 7384 KB 7 7/8 450 Sacks - Surface 775 Sacks - Surface None None * See attachment for details of casing and cement	
29. LINER RECORD Size Top (MD) Bottom (MD) Sacks Cement* Screen (MD) None None		30. TUBING RECORD Size Depth Set (MD) Packer Set (MD) 2.10# N80 Hydril "CS" Baker Model D 2848 7050 KB	
31. PERFORATION RECORD (Interval, size and number) 2907-22, 2928-30, 2933-36, 2940-44, 2949-54. Total of 29' - 2 holes per foot 58 Hyper Jets.		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. Depth Interval (MD) Amount and Kind of Material Used 2907 - 2954 50,000 lbs of 10-20 sand. Sand water-frac	
33. PRODUCTION Date First Production 4/5/67 Production Method (Flowing, gas lift, pumping—size and type of pump) Flowing Date of Test 4/5/67 Hours Tested 3 Choke Size 3/4 Prod'n. for Test Period 1978 MCFD Flow, Tubing Press. 152 psig Casing Pressure 551 psig Calculated 24-Hour Rate 1978 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Vented during test 35. LIST OF ATTACHMENTS Casing and cement data (Marathon Form 484); NMOCC Form C122; NMOCC Packer Leakage Test data; Gamma Ray-Density-Caliper log; Gamma Ray Perforating Depth Control log. 36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.			
SIGNED <u>Leslie Brown</u>		TITLE <u>Area Superintendent</u> DATE <u>May 2, 1967</u>	

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

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