

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Budget Bureau No. 1004-0135  
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

NM 40646

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Fisher Federal 2

9. WELL NO.

FNL 1

10. FIELD AND POOL, OR WILDCAT

Basin Dakota-Undes. Gallup

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

Sec. 2, T25N, R2W

12. COUNTY OR PARISH 13. STATE

Rio Arriba

NM

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 ☐

2. NAME OF OPERATOR

Mallon Oil Company

3. ADDRESS OF OPERATOR

2750 Security Life Building, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

790' FNL & 790' FEL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

7648' G.L.

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF ☐

PULL OR ALTER CASING ☐

WATER SHUT-OFF ☐

REPAIRING WELL ☐

FRACTURE TREAT ☐

MULTIPLE COMPLETE ☐

FRACTURE TREATMENT ☐

ALTERING CASING ☐

SHOOT OR ACIDIZE ☐

ABANDON\* ☐

SHOOTING OR ACIDIZING ☐

ABANDONMENT\* ☐

REPAIR WELL ☐

CHANGE PLANS ☐

(Other) ☐

(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.)\*

SEE ATTACHED SHEETS

RECEIVED  
JUN 17 1985  
OIL CON. DIV.  
DIST. 3

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

SIGNED

*William H. McLeod*

TITLE

Agent

DATE

6-12-85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

- 5-22-85 Drilling @ 5606'. Mud wt. 9.0, Visc. 47, W.L. 8.0. 1-3/4° @ 5521.
- 5-23-85 Drilling @ 6028'. Mud wt. 9.0, Visc. 46, W.L. 8.0.
- 5-24-85 Drilling @ 6405'. Mud wt. 8.9, Visc. 45, W.L. 7.6. 3/4° @ 6023'.
- 5-25-85 Drilling @ 6640'. Mud wt. 8.9, Visc. 43, W.L. 8.4. 3/4° @ 6521'.
- 5-26-85 Drilling @ 7246'. Mud wt 8.8, Visc 54, W.L. 6.8. 3/4° @ 7022'.
- 5-27-85 Drilling @ 7630'. Mud wt 8.9, Visc. 74, W.L. 6.6. 1° @ 7548'.
- 5-28-85 Drilling @ 7816'. Mud wt 8.9, Visc 61, W.L. 6.4. 1/2° @ 7674'.
- 5-29-85 Drilling @ 8091'. Mud wt 9.0, Visc 57, W.L. 5.8.
- 5-30-85 Drilling @ 8237'. Mud wt 9.0+, Visc. 74, W.L. 6.4. 3/4° @ 8143'.
- 5-31-85 Drilling @ 8415'. Mud wt 8.9+, Visc. 78, W.L. 7.2.
- 6-1-85 T.D. well @ 7:15 a.m. 5/31/85. Circulate for 1 1/2 hours. Short trip 15 stands. Circulate for 3 hours. Trip out of hole. Rig up Gearhart. Ran Induction and Neutron-Density logs. Loggers T.D. @ 8417'. Trip in hole with collars and drillpipe. Circulate 1 1/2 hours on bottom. Lay down drillpipe. 3/4° @ 8397'.
- 6-2-85 Finished laying down drillpipe & collars. Ran 208 jts 5 1/2" 17#/ft J-55 casing as follows:

<u>DESCRIPTION</u>	<u>LENGTH</u>	<u>DEPTH</u>
KB to landing point	11.00	0-11
1 cutoff jt 5 1/2" 17#/ft J-55 LTC new csg	13.95	11-25
101 jts 5 1/2" 17#/ft J-55 LTC new csg	4072.35	25-4097
1 5 1/2" upper D.V. tool	3.10	4097-4100
56 jts 5 1/2" 17#/ft J-55 LTC new casing	2256.85	4100-6357
1 5 1/2" lower D.V. tool	3.10	6357-6360
50 jts 5 1/2" 17#/ft J-55 LTC new csg	2015.35	6360-8375
1 5 1/2" D.F.F.C.	1.63	8375-8377
1 jt 5 1/2" 17#/ft J-55 LTC new csg	40.27	8377-8418
1 5 1/2" cement filled guide shoe	1.40	8418-8419
	<u>8419.00</u>	

Upper D.V. tool @ 4097. Lower D.V. tool @ 6357. D.F.F.C. @ 8375.  
Centralizers @ 8399, 8296, 8215, 8135, 7893, 7772, 7651, 7530, 7409, 7288, 7167, 7046, 6398, 6318, 4138, & 4058.

Rigged up Halliburton. Tried to rotate pipe. Pipe would not rotate freely. Pumped 10 bbls spacer of water. Cemented 1st stage with 567 ft<sup>3</sup> (450 sx) 50-50 pozmix with 2% gel, 10% salt and 1/4# flocele/sx. Had good circulation throughout job. Bumped plug to 1000 psi. Held OK. Plug down @ 2:30 p.m. 6/1/85. Dropped bomb to open lower D.V. tool. Opened tool with 1600 psi.

6-2-85 (cont.) Circulated mud for 3 hours. Pumped 7 bbls water spacer. Cemented 2nd stage with 258 ft<sup>3</sup> (125 sx) Class B with 2% econolite and ¼# flocele/sx tailed by 284 ft<sup>3</sup> (225 sx) 50-50 pozmix with 2% gel, 10% salt, ¼# flocele/sx. Good circulation throughout job. Bumped plug to 2400 psi. Held OK. Plug down @ 6:15 p.m. 6/1/85. Dropped bomb to open upper D.V. tool. Opened tool with 1600 psi. Circulated 3 hours. Pumped 5 bbls spacer of water. Cemented 3rd stage with 567 ft<sup>3</sup> (275 sx) Class B cement with 2% econofil and ¼# flocele/sx tailed by 126 ft<sup>3</sup> (100 sx) 50-50 pozmix, 2% gel, 10% salt, ¼# flocele/sx. Good circulation throughout job. Bumped plug to 2500 psi. Held OK. Plug down @ 10:00 p.m. 6/1/85. Released rig @ 11:30 p.m. 6/1/85. WOCT.

6-10-85 Move in and rig up Bayless Rig 4. Nipple up BOP. Pick up 4-3/4" bit, casing scraper, and 2-7/8" 6.5#/ft N80 EUE used tubing. Tagged cement above upper D.V. tool @ 4034'. Pressure tested casing and wellhead to 4000 psi. Held OK. Drilled 17 feet of cement. SDFN.

6-11-85 Drilled 47 feet of cement and D.V. tool @ 4098' RKB. Pressure test casing to 4000 psi. Held OK. Picked up 2-7/8" tubing. Tagged cement above lower D.V. tool @ 6273'. Drilled 86 feet of cement and D.V. tool @ 6359' RKB. Pressure tested casing to 4000 psi. Held OK. Picked up 2-7/8" tubing. Tagged D.F.F.C. (PBSD) @ 8375' RKB. SDFN.

6-12-85 Rigged up Smith Energy Services. Circulated hole clean with 1% KCL water, ½ gal/1000 clay stabilization agent, and 1 gal/1000 surfactant. Moved tubing to 7872'. Spotted 1000 gallons 7½% D.I. HCL acid over Gallup perforation interval. Trip tubing out of hole. Rigged up Petro Wireline. Ran Gamma Ray-collar locator log from PBSD of 8359' to 6900'. Perforated Gallup interval with 4" select fire perforation gun as per open hole Gamma Ray log as follows:

7066'	7164'	7275'	7316'	7406'	7487'	7568'	7792'
7078'	7175'	7278'	7329'	7423'	7495'	7575'	7805'
7112'	7185'	7282'	7336'	7435'	7507'	7580'	7828'
7122'	7203'	7291'	7345'	7439'	7521'	7595'	7845'
7125'	7221'	7295'	7351'	7454'	7533'	7613'	7855'
7136'	7254'	7302'	7357'	7459'	7538'	7671'	7866'
7153'	7272'	7311'	7372'	7467'	7543'	7682'	7872'
			7388'	7483'	7550'	7744'	
					7555'	7768'	

Total 62 perfs (.50" diameter)

Break down perforations @ 1300 psi. Established rate of 20 BPM @ 1200 psi down the casing, ISIP = 600 psi. Acidized the Gallup interval with 750 gallons of 7½% D.I. weighted HCL acid containing 93 l.l s.g. RCN ball sealers. Pumped acid @ 20 BPM @ 1050 psi. Saw 600 psi pressure increase when balls hit the perforations. Did not ball off casing. Final injection rate was 20 BPM @ 1600 psi. ISIP = 950 psi. Ran junk basket on wireline to retrieve balls. Recovered 92 balls. Fracture stimulated Gallup interval with 135,000 gallons of 25#/1000 gallon crosslinked gelled water with 1% KCL, ½ gal/1000 clay stabilizer and 1 gal/1000 surfactant carrying 180,000 lbs of 20-40 sand with radioactive tracer material as follows:

35,000 gallons pad	65 BPM @ 1800-1900 psi
40,000 gallons 1 ppg 20-40 sand	65 BPM @ 1900 psi
40,000 gallons 2 ppg 20-40 sand	65 BPM @ 1900-2200 psi
20,000 gallons 3 ppg 20-40 sand	60 BPM @ 2400-2700-2400 psi
6,885 gallons flush with KCL water	37-26 BPM* @ 1600-2800 psi

(6-12-85)  
cont.

\*blender suction couldn't get any more rate.

ISIP = 1100 psi, 5 min = 1000 psi, 10 min = 950 psi, 15 min = 950 psi.

Average rate 60 BPM, average pressure 2000 psi, maximum pressure 2900 psi, minimum pressure 1800 psi. Total fluid to recover 3377 bbls. Shut in well to allow gel to break. SDFN.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ **W**

JUL 26 1985

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESRV. ☐ Other ☐

OIL CON. DIV.  
DIST. 3

2. NAME OF OPERATOR

Mallon Oil Company

3. ADDRESS OF OPERATOR

2750 Security Life Building, Denver, CO 80202

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

At surface 790' FNL & 790' FEL

At top prod. interval reported below

same

At total depth

same

BUREAU OF LAND MANAGEMENT  
FARMINGTON RESOURCE AREA

14. PERMIT NO.

DATE

5. LEASE DESIGNATION AND SERIAL NO.

NM 40646

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Fisher Federal 2

9. WELL NO.

#1

10. FIELD AND POOL, OR WILDCAT

Basin Dakota-Undes. Gallup

11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 2, T25N, R2W

12. COUNTY OR PARISH

13. STATE

Rio Arriba

NM

15. DATE SPUDDED

4-18-85

16. DATE T.D. REACHED

5-31-85

17. DATE COMPL. (Ready to prod.)

6-17-85

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

7648' G.L.

19. ELEV. CASINGHEAD

7659' KB

20. TOTAL DEPTH, MD & TVD

8427'

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

8359'

22. IF MULTIPLE COMPL., HOW MANY\*

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

0-TD

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

7066'-7872'

Gallup

25. WAS DIRECTIONAL SURVEY MADE

no

26. TYPE ELECTRIC AND OTHER LOGS RUN

Induction & Neutron-Density, Gamma ray-Collar locator logs

27. WAS WELL CORED

no

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"	36#/ft	271'	12 1/4"	171 ft <sup>3</sup> Class B w/2% CaCl <sub>2</sub>	
5 1/2"	17#/ft	8419'	7-7/8"	1st: 567 ft <sup>3</sup> 50-50 pozmix w/2% gel; 2nd: 258 ft <sup>3</sup> Class B w/2% econolite tailed by 284 ft <sup>3</sup> 50-50 pozmix w/2% gel; 3rd: 567 ft <sup>3</sup> Class B w/2% econolite tailed by 126 ft <sup>3</sup> 50-50 pozmix	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	7915'	

31. PERFORATION RECORD (Interval, size and number)

See back page

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7066'-7872'	1000 gals 7 1/2% D.I. HCL acid, 750 gals 7 1/2% D.I. weighted HCL acid w/93 ball sealers 135,000 gals 25#/1000 gals crosslinked gelled water w/1% KCL, 1/2 gal/1000 clay stabilizer;

33.\*

PRODUCTION 180,000 lbs 20-40 sand w/radioactive tracer

DATE FIRST PRODUCTION

6-17-85

PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

Swabbing

WELL STATUS (Producing or shut-in)

producing

DATE OF TEST

6-17-85

HOURS TESTED

24 hours

CHOKE SIZE

PROD'N. FOR TEST PERIOD

OIL—BBL.

220

GAS—MCF.

--

WATER—BBL.

220

GAS-OIL RATIO

--

FLOW, TUBING PRESS.

0

CASING PRESSURE

450

CALCULATED 24-HOUR RATE

OIL—BBL.

220

GAS—MCF.

--

WATER—BBL.

220

OIL GRAVITY-API (CORR.)

--

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

TEST WITNESSED BY

Kevin McCord

35. LIST OF ATTACHMENTS

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

335

SIGNED

Kevin H. McCord

TITLE

Agent

DATE

7-22-85

FARMINGTON RESOURCE AREA

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

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Ojo Alamo	3484	3704	Water	Ojo Alamo	3484	
Pictured Cliffs	3810	3934	Natural Gas, water	Pictured Cliffs	3810	
Lewis	3934	5632	Water	Lewis	3934	
Mesa Verde	5632	6231	Water	Mesa Verde	5632	
Mancos	6231	7070	Water	Mancos	6231	
Gallup	7060	7883	Oil, Natural Gas, water	Gallup	7060	
Greenhorn	8045	8153	Water	Greenhorn	8045	
Dakota	8153	8407	Oil, Natural Gas, water	Dakota	8153	
31. 7066, 7078, 7112, 7122, 7125, 7136, 7153, 7164, 7175, 7185, 7203, 7221, 7254, 7272, 7275, 7278, 7282, 7291, 7295, 7302, 7311, 7316, 7329, 7336, 7345, 7351, 7357, 7372, 7388, 7406, 7423, 7435, 7439, 7454, 7459, 7467, 7483, 7487, 7495, 7507, 7521, 7533, 7538, 7543, 7550, 7555, 7568, 7575, 7580, 7595, 7613, 7671, 7682, 7744, 7768, 7792, 7805, 7828, 7845, 7855, 7866, 7872						