

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

5. LEASE DESIGNATION AND SERIAL NO.

NM 43752

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Johnson Fed

9. WELL NO.

#12-5

10. FIELD AND POOL, OR WILDCAT

Undes. Gallup

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

Sec. 12, T25N, R2W

12. COUNTY OR PARISH

Rio Arriba

13. STATE

NM

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

1650' FNL & 960' FWL

14. PERMIT NO.

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

7418' GL

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(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.)*

8-23-85 Spud well @ 9:00 p.m. 8-22-85. Drilled 265 feet of 12 1/4" surface hole. Tried to run 249' of 9-5/8" surface casing. Casing would not go to bottom. Pulled 9-5/8" casing.

8-24-85 Finished pulling 9-5/8" casing. Trip in and ream out hole to bottom. Trip out of hole. Run 6 jts (249') of 9-5/8" 36#/ft J-55 new surface casing. Rigged up Dowell. Cemented surface casing with 288 ft³ Class B cement w/2% CaCl₂. Good circulation throughout job. Circulated cement to the surface. Plug down @ 9:15 a.m. 8-23-85. WOC 12 hours.

8-25-85 Drilling @ 2280'. Mud wt 9.0+, Visc. 45, W.L. 6.8. 3/4° @ 1680, 3/4° @ 1876, 3/4° @ 2140.

8-26-85 Drilling @ 3150'. Mud Wt 8.9, Visc. 39, W.L. 6.0. 3/4° @ 2510', 2 1/2° @ 3029'.

8-27-85 Drilling @ 3654'. Mud wt 9.0+, Visc. 40, W.L. 6.0. 2° @ 3243', 1-3/4° @ 3460.

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

SIGNED

TITLE Agent

DATE

9-5-85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

- 8-23-85 Spud well @ 9:00 p.m. 8-22-85. Drilled 265 feet of 12½" surface hole. Tried to run 249' of 9-5/8" surface casing. Casing would not go to bottom. Pulled 9-5/8" casing.
- 8-24-85 Finished pulling 9-5/8" casing. Trip in and ream out hole to bottom. Trip out of hole. Run 6 jts (249') of 9-5/8" 36#/ft J-55 new surface casing. Rigged up Dowell. Cemented surface casing with 288 ft³ Class B cement w/2% CaCl₂. Good circulation throughout job. Circulated cement to the surface. Plug down @ 9:15 a.m. 8-23-85. WOC 12 hours.
- 8-25-85 Drilling @ 2280'. Mud wt 9.0+, Visc. 45, W.L. 6.8. 3/4° @ 1680, 3/4° @ 1876, 3/4° @ 2140.
- 8-26-85 Drilling @ 3150'. Mud Wt 8.9, Visc. 39, W.L. 6.0. 3/4° @ 2510', 2½° @ 3029'.
- 8-27-85 Drilling @ 3654'. Mud wt 9.0+, Visc. 40, W.L. 6.0. 2° @ 3243', 1-3/4° @ 3460.

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(Other instructions on re-
verse side)

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Expires August 31, 1985

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 <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	NOV 06 1985	5. LEASE DESIGNATION AND SERIAL NO. NM 43752
2. NAME OF OPERATOR Mallon Oil Company	BUREAU OF LAND MANAGEMENT FARMINGTON RESOURCE AREA	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR 2750 Security Life Building, Denver, CO 80202		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1650' FNL & 960' FWL		8. FARM OR LEASE NAME Johnson Fed
		9. WELL NO. #12-5
		10. FIELD AND POOL, OR WILDCAT Unders. Gallup
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 12, T25N, R2W
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 7418' GL	12. COUNTY OR PARISH Rio Arriba
		13. STATE NM

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input checked="" type="checkbox"/>	ABANDONMENT** <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) Run tbg & rods	
(Other) <input type="checkbox"/>		(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.)*

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

SIGNED Wm A. McLean

TITLE Agent

DATE 11-5-85

(This space for Federal or State office use)

APPROVED BY _____

TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

NMOCC

- 10/14/85 Move in and rig up Bayless Rig 3. Nipple up wellhead and BOP. Pickup 4-3/4" bit, casing scraper, and 2-7/8" tubing. Trip 30 jts of tubing in the hole. SDFN.
- 10/15/85 Pickup 2-7/8" tubing. Tag cement at 3766'. Drilled 3' of cement and upper D.V. tool. Pressure tested casing and wellhead to 3000 psi. Held OK. (could not test to 4000 psi due to ring leak in BOP). Picked up 2-7/8" tubing. Tagged cement on top of lower D.V. tool. SDFN
- 10/16/85 Drilled 4' on top of lower D.V. tool and drilled lower D.V. tool at 6082'. Pressure tested casing and wellhead to 3000 psi. Held OK. Picked up 2-7/8" tubing. Tagged D.F.F.C. @ 8104'. No cement on top of D.F.F.C. Drilled D.F.F.C. Tubing hit no cement below D.F.F.C. Tagged shoe at 8148'. Attempted pressure test. Formation broke down at 1000 psi. Pumped at 3½ BPM with pressure rising up to 4000 psi. ISIP = 4000 psi decreasing to 3650 psi after 10 minutes. Pull 3 stands of tubing. SDFN.
- 10/17/85 Trip out of hole. Rigged up Four Corners Wireline. Ran GR, CLL and cement bond log from 8154 to 7700'. Had problems with gamma ray tool. Bond was OK across Dakota interval with 0 and 1000 psi. Trip bond tool out of hole. Run new GR-CLL from 8154 to 6700. Set cast iron bridge plug at 8140. Pressure tested casing to 4000 psi. Held OK. Tripped in the hole with tubing. SDFN.
- 10/18/85 Rigged up Smith Energy Services. Circulated hole clean with 1½ KCL water, ½ gal/1000 clay stabilization agent, and 1 gal/1000 surfactant. Moved tubing to 7592. Spotted 1000 gallons of 7½% D.I. HCL acid over Gallup perforation interval. Trip tubing out of hole. Perforated Gallup interval with 4" select fire casing gun as follows:

10/18/85	6777'	6873'	6982'	7056'	7177'	7286'	7518'
(cont.)	6787'	6883'	6994'	7063'	7182'	7295'	7534'
	6807'	6894'	6997'	7068'	7188'	7308'	7568'
	6815'	6908'	7001'	7079'	7212'	7324'	7579'
	6826'	6921'	7005'	7096'	7220'	7345'	7592'
	6835'	6927'	7017'	7112'	7225'	7387'	
	6843'	6934'	7026'	7129'	7235'	7400'	
	6851'	6950'	7032'	7142'	7241'	7407'	
	6862'	6966'	7036'	7160'	7257'	7474'	
	6868'	6974'	7049'	7166'	7267'	7495'	

Total 65 perforations (.50" diameter)

Broke down perforations @ 1200 psi. Established rate of 20 BPM @ 1100 psi. ISIP = 550 psi. Acidized the Gallup interval down casing with 750 gallons of 7½% D.I. weighted HCl acid containing 98 l.l s.g. RCN ball sealers. Pumped acid and flush at 21 BPM @ 900 psi. Had good ball action. Did not balloff completely. Final injection rate 16 BPM @ 3200 psi. ISIP = 600 psi. Ran junk basket to recover ball sealers. Recovered 45 ball sealers. Fracture stimulated Gallup interval with 135,000 gallons 25#/1000 gallon crosslinked gelled water containing 180,000 lbs 20-40 sand and 90 MC of radioactive tracer material as follows:

35,000 gallons of pad	60 BPM @ 1200 psi
40,000 gal w/1ppg 20-40 sand	60 BPM @ 1050 psi
40,000 gal w/2 ppg 20-40 sand	60 BPM @ 1150 psi
20,000 gal w/3 ppg 20-40 sand	60 BPM @ 1200 psi
6,604 gal uncrosslinked gel flush	60 BPM @ 1200-1900 psi

ISIP = 800 psi, 5 min = 650 psi, 10 min = 600 psi, 15 min = 550 psi. Average rate 60 BPM. Average pressure 1150 psi. Maximum pressure 2400 psi. Minimum pressure 1000 psi. Load to recover 3910 bbls. Shut well in overnight to allow gel to break.

10/19/85 Overnight shut-in casing pressure was 0 psi. Tripped in the hole with sawtooth collar, seating nipple, and 2-7/8" tubing. Tagged sand at 7298' (842 feet of sand fill, 11,750 lbs of sand in casing). Attempted to circulate sand out of hole. Could not get full circulation to the surface. Fluid going into perforations. Pumped 210 bbls of fluid into formation trying to circulate sand. Pulled tubing 300 feet above perforations. SDFN.

10/20/85 Shut down, Sunday.

10/21/85 Rig up Allied Services and the Western Company. Cleaned out 842 feet of sand in wellbore from 7298' to 8140' T.D. with foam. Well was making oil on each connection. Moved tubing to 6749'. SDFN.

10/22/85 Overnight shut-in casing pressure was 250 psi, tubing pressure was 525 psi. Well flowed for 30 minutes. Fluid had slight oil cut. Rigged to swab. Initial fluid level at 2500'. Swabbed 5 bbls of fluid with slight oil cut. Pulled swab mandrel into lubricator and pulled out of rope socket. Swab mandrel fell to bottom. Trip tubing out of hole. Recovered swab mandrel. Trip tubing in hole. Rigged to swab. Swabbed well as follows:

Swab No.	Time	Fluid Level	Depth Pulled From	Inches In Tank	Prev. Inches In Tank	Inches Pulled	Bbls Pulled	Total Bbls Swabbed	Remarks
1		2500	3500				5	5	Slight oil cut
Round trip tubing to retrieve swab mandrel									
2	3:00	2500	3500				3	8	100% oil-making sand
3	3:30	2700	3700				5	13	50% oil-making sand
4	4:00	2900	3700				3	16	1% oil-making heavy sand
5	4:30	3100	4000				5	21	
6	5:00	3100	4000				5	26	
7	5:30	3100	4000				5	31	
8	6:00	3100	4000				5	36	1% oil-sand cleaning up

3 hours total

36 bbls

Swabbed a total of 36 bbls of fluid in 3 hours (12 bbls/hour). Final fluid level at 3100 feet. Final oil cut 1%. Shut well in overnight to build pressure.

10/23/85 Overnight shut-in casing pressure was 1000 psi, tubing pressure was 250 psi. Pressure blew down immediately. Rigged to swab. Swabbed well as follows:

Swab No.	Time	Fluid Level	Depth Pulled From	Inches In Tank	Prev. Inches In Tank	Inches Pulled	Bbls Pulled	Total Bbls Swabbed	Remarks
1	8:00	3000	4000				4	4	1% oil cut-very little sand
2	8:25	3000	4000				4	8	1% oil cut-after run gas blow
3	8:50	3200	4200				4	12	
4	9:15	3500	4500				4	16	
5	9:40	3500	4500				4	20	
6	10:30	3800	4800				4	24	5% oil cut-gassing
7	10:55	4000	5200	2'0"	1'9"	3"	5	29	5% oil cut-gassing
8	11:20	4500	5500	2'3"	2'0"	3"	5	34	10% oil cut-gassing heavily
9	11:45	4800	6000	2'6"	2'3"	3"	5	39	
10	12:30	5000	6000	2'9"	2'6"	3"	5	44	
11	12:55	5500	SN	3'0"	2'9"	3"	5	49	
12	1:20	5400-5600 gas cut	SN	3'3"	3'0"	3"	5	54	

10-23-85 (cont.)

Swab No.	Time	Fluid Level	Depth Pulled From	Inches In Tank	Prev. Inches In Tank	Inches Pulled	Bbls Pulled	Total Bbls Swabbed	Remarks
13	1:45		SN	3'6"	3'3"	3"	5	59	10% oil cut-gassing
14	2:10		SN	3'9"	3'6"	3"	5	64	Heavily
15	2:25		SN	4'0"	3'9"	3"	5	69	
16	3:00		SN	4'3"	4'0"	3"	5	74	
17	3:30		SN	4'6"	4'3"	3"	5	79	
18	4:00	5400-5600	SN	4'9"	4'6"	3"	5	84	10% oil cut-gassing heavily
19	4:30		SN	5'0"	4'9"	3"	5	89	
20	5:00		SN	5'3"	5'0"	3"	5	94	
21	5:30		SN	5'6"	5'3"	3"	5	99	
22	6:00		SN	5'9"	5'6"	3"	5	104	
23	6:30		SN	6'0"	5'9"	3"	5	109	
Total 109 bbls/10½ hours, 10.4 bbls per hour								109	

Swabbed a total of 109 bbls of fluid in 10½ hours (10.4 bbl/hr). Final gas cut fluid level at 5400-5600'. Final oil cut was 10%, with the well gassing heavily. Shut well in overnight to build pressure.

10-24-85 Overnight shut-in casing pressure was 100 psi, tubing pressure was 250 psi. Pressure blew down immediately. Rigged to swab. Swabbed well as follows:

1	8:00	4000	5000	1'4½"	1'2"	2½"	4.2	4.2	Initial run all oil
2	8:30	4500	5700	1'6"	1'4½"	1½"	2.5	6.7	Oil cut 30%
3	9:00	5000	6200	1'8"	1'6"	2"	3.3	10.0	Oil cut 10%
4	9:30	5000	6200	1'10½"	1'8"	2½"	4.2	14.2	Oil cut 10%
5	10:00	5500	Seating Nipple	2'1"	1'10½"	2½"	4.2	18.4	Oil cut 8%
6	10:30	5500		2'3"	2'1"	2"	3.3	21.7	Oil cut 8% fluid has
7	11:00	5500		2'6"	2'3"	3"	5.0	26.7	Oil cut 7% emulsion
8	11:30	5500		2'8"	2'6"	2"	3.3	30.0	csg 350 psi
9	12:00	5500		2'11"	2'8"	3"	5.0	35.0	Oil cut 7%-good gas blow
10	12:30	5500		3'1½"	2'11"	2½"	4.2	39.2	Oil cut 7%-good gas blow
11	1:00	5500		3'3½"	3'1½"	2"	3.3	42.5	Oil cut 7%-good gas blow
12	1:30	5500		3'6½"	3'3½"	2½"	4.2	46.7	Oil cut 5%-good gas blow
13	2:00	5500		3'8"	3'6½"	1½"	2.5	49.2	Oil cut 3%-good gas blow
14	2:30	5500	Nipple	3'10"	3'8"	2"	3.3	52.5	Oil cut 2%-good gas blow

Total 52.5 bbls fluid/6½ hours (8.1 bbl/hour) Avg. - 5-10% oil cut.

Swabbed a total of 52½ bbls of fluid in 6½ hours (8.1 bbl/hr). Final gas cut fluid level was at 5500 feet. Final oil cut was less than 5%, with well gassing heavily. Average oil cut for the day was 5-10%. Moved tubing down hole and tagged sand at 8110' (30 feet of fill). Moved tubing to 6588'. SDFN.

10/25/85 Overnight shut-in casing pressure was 100 psi, tubing pressure was 250 psi. Well blew down immediately. Rigged up Four Corners Wireline. Ran GR log from 8119' to 6550'. Log indicated that all zones took frac fluid but the following perforations: 6950, 6982, 7112, and 7295. Trip tubing out of hole. Trip in the hole with tubing and land as follows:

<u>DESCRIPTION</u>	<u>LENGTH</u>	<u>DEPTH</u>
KB to landing point	9.25	0-9
Donut assembly	.50	9-10
212 jts 2-7/8" 6.5#/ft N-80 EUE used tubing	6597.75	10-6608
Tubing anchor	2.75	6608-6610
32 jts 2-7/8" 6.5#/ft N-80 EUE used tubing	1000.52	6610-7611
Seating nipple	.75	7611-7612
2-7/8" perforated sub	8.26	7612-7621
1 jt 2-7/8" for mud anchor	33.00	7620-7653
	<u>7652.75</u>	

Nipple down BOP. Nipple up wellhead. SDFN.

10/26/85 Trip in the hole with pump and rods and land as follows:

<u>DESCRIPTION</u>	<u>LENGTH</u>	<u>DEPTH</u>
KB to landing point	5.00	0-5
1½" X 22' polished rod with 1½" X 12' liner (8' out)	22.00	5-19
Rod stretch	7.00	19-26
7/8" Class D new pony rods	18.00	26-44
104 7/8" Class D new scraped rods	2600.00	44-2644
198 3/4" Class D new scraped rods	4950.00	2644-7594
2½" X 1-3/4" X 12 X 15 X 17' pump (bottom hold down)	17.00	7594-7611
	<u>7611.00</u>	

Released rig. Wait on pumping unit.

*Sent out
11-12
SB*