

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 04077

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Davis Fed Com 3

9. WELL NO.

#15

10. FIELD AND POOL, OR WILDCAT

Gavilan Mancos/Gavilan

11. SEC., T., R., OR SECT. AND
SURVEY OR AREA
Greenhorn Graneros-Dakota

Sec. 3, T25N, R2W

12. COUNTY OR PARISH 13. STATE

Rio Arriba

NM

1.

OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Mallon Oil Company

3. ADDRESS OF OPERATOR

2850 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

795' GSL & 2145' FEL

RECEIVED

OCT 31 1986

14. PERMIT NO.

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

7458' GL

BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA

13.

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 COMPLETION

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)

(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

NOV 06 1986

OIL CON. DIV.
DIST. 3

ACCEPTED FOR RECORD

NOV 07 1986

FARMINGTON RESOURCE AREA

BY

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

SIGNED

TITLE Agent

DATE 10/29/86

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

NMOCC

- 9-23-86 Move in and rig up Bayless Rig 4. Nipple up wellhead. Nipple up BOP. Pick up bit, casing scraper, and 2-7/8" tubing. SDFN.
- 9-24-86 Pick up 2-7/8" tubing. Tag cement on top of upper D.V. tool at 3858' RKB. Drill 6 feet of cement and upper D.V. tool at 3864' RKB. Pressure test casing and wellhead to 4000 psi. Held OK. Pick up tubing. Tag cement on top of lower D.V. tool at 6147' RKB. Drill 4 feet of cement and lower D.V. tool at 6151' RKB. Pressure test casing to 4000 psi. Held OK. Pick up tubing. Tag cement on top of D.F.F.C. at 7800' RKB. SDFN.
- 9-25-86 Drill 432 feet of cement and D.F.F.C at 8232' RKB. Drilled 37' of cement to PBTD of 8270' RKB. Pressure tested casing to 4000 psi. Held OK. SDFN.
- 9-26-86 Rigged up Western Company. Pressure tested casing to 4000 psi, held OK for 10 minutes. Circulated hole clean with 1% KCL water. Moved tubing to 8246' RKB. Spotted 100 gallons of 7 1/2% D.I. HCL acid. Trip tubing scraper and bit out of hole. Rig up Blue Jet. Ran GR-CLL from PBTD of 8253 to 6500. Perforated first lower Dakota zone of interest with 4" perforation gun as follows:

8238-8244 6' 24 holes (.50" diameter)

Broke down perforations at 2200 psi. Established flow rate into perforations. Pumped 10 bbls of fluid into perforations. ISIP = 850 psi. Tripped in the hole with packer, seating nipple, and 2-7/8" tubing. Tripped 60 stands of tubing in hole. SDFN.

- 9-27-86 Overnight shut-in pressures 0 psi. Finish tripped in the hole with packer and tubing. Set packer at 7895'. Pressure test packer to 1000 psi. Held OK. Rigged to swab. Swabbed well as follows:

Swabbed total of 57.5 bbls of fluid into frac tank (total load 63.7 bbls -- 10.0 bbls in formation, 45.7 bbls in tubing, and 8.0 bbls in casing). Need 6.2 bbls to recover all load fluid. Final fluid entry rate into wellbore was 1.9 bbl/hour, or 47 bbls/day. A small gas show was seen on the last swab run. The fluid recovered was dirty water with some mud and/or cement fines. Fluid had an acid smell. SDFN.

- 9-28-86 Shut down - Sunday.

- 9-29-86 Overnight shut-in tubing pressure was 150 psi. Blew well down in 3 minutes, well made 0.8 bbl of water. Swabbed well as follows:

Made a total of 20 bbls of water swabbing on the day. Final fluid entry rate into wellbore was 0.8 bbls/hour on 20 bbls/day. Well is not making any burnable gas or any oil show. Shut well in. SDFN.

9-30-86 Overnight shut-in tubing pressure was 75 psi. Well blew down immediately. Gas was flammable. Released packer. Tripped tubing and packer out of hole. rigged up Blue Jet. Set drillable bridge plug at 8235'. Rigged up the Western Company. Pressure tested bridge plug to 4000 psi. Held OK. Perforated second lower Dakota zone of interest with 4" perforation guns and 4 JSPF as follows:

8220-8226	6'	24 holes
8229-8233	4'	16 holes
	<u>10'</u>	<u>40 holes (.50" diameter)</u>

Broke down perforations at 2000 psi. Established rate down casing of 7.8 BPM @ 1350 psi, ISIP = 800 (pumped 10 bbls into formation). Tripped in hole with packer on 2-7/8" tubing. Set packer at 7895. Spotted 250 gallons acid within 10 bbls of packer. Set packer. Pumped fluid and acid into formation - 4.8 to 4.6 BPM @ 1900 psi, ISIP 950 psi. Decreasing to 600 psi after 5 minutes. Did not see any pressure change when acid hit formation. Total fluid pumped in formation was 40 bbls, total fluid to recover before formation fluid is 93 bbls. Pressure tested packer to 1500 psi, held OK. Rigged to swab. Swabbed well as follows:

Swabbed back total of 58.4 bbls of load fluid. SDFN.

10-1-86 Overnight shut-in tubing pressure was 120 psi. Blew down immediately. Rigged to swab. Swabbed well as follows:

(SEE ATTACHED SWAB REPORT)

Swabbed a total of 57.5 bbls of water. Approximately 23 bbls of formation fluid. Water was very brown to black (fines). Well was making 4.6 bbls/hr (110 bbls/day). Well was making a little gas TSTM on orifice tester. Shut well in. SDFN.

10-2-86 Overnight shut-in tubing pressure was 230 psi. Rigged to swab. Swabbed well as follows

Swabbed total of 22.4 bbls of fluid (45.3 bbls over load). Made approximate 2 bbls of oil on first swab run. Trace of oil after that. Final fluid entry rate into wellbore was 0.8 bbl/hr (19.2 bbls/day). Shut well overnight.

10-3-86 Overnight shutin tubing pressure was 230 psi. Rigged to swab. Swabbed well as follows:

Swabbed total of 17.1 bbls of fluid (62.4 bbls over load). Made trace of oil on all swab runs. Shut well in. SDFN.

10-4-86 Overnight shut-in tubing pressure was 120 psi. Rigged to swab. Swabbed well as follows:

Swabbed 14.1 bbls of fluid. 90% oil on 1st run, trace of oil and gas with remainder of fluid being formation water on all remaining runs. Recovered total of 76½ bbls of formation water after load water recovered. Approximate fluid entry rate into wellbore is 0.8 to 1.2 bbls/hr (19 to 29 bbls/day). Shut well in. Shut down for weekend.

10-5-86 Shut down - Sunday.

10-6-86 Shut down - Monday.

10-7-86 Shut-in tubing pressure was 330 psi. Blew down well. Released packer. Trip tubing and packer out of hole. Rigged up Blue Jet. Ran baseline temperature survey from 6600' to 8224'. Set drillable bridge plug at 8200' RKB. Rigged up the Western Company. Pressure tested bridge plug to 4000 psi. Held OK for 5 minutes. Tripped in hole with tubing to 7390'. Spotted 1000 gallons of 7½% D.I. HCL acid. Tripped tubing out of hole. SDFN.

10-8-86 Rigged up Blue Jet. Perforated Gallup interval with 4" select-fire perforation gun from GR-CLL. Connected perforations from Density-Neutron log as follows:

7195	7219	7249	7278	7318	7347
7198	7223	7252	7283	7321	7354
7201	7225	7254	7288	7325	7357
7203	7228	7258	7292	7331	7361
7206	7231	7263	7296	7333	7370
7209	7237	7267	7303	7339	7376
7211	7241	7272	7307	7342	7381
7217	7244	7274	7316	7345	7390

Total 48 perforations (.50" diameter)

Rigged up the Western Company. Broke down perforations at 1400 psi. Established an injection rate into the perforations of 20 BPM @ 1050 psi, ISIP = 550 psi. Acidized the Gallup interval with 750 gallons of 7½% D.I. weighted HCL acid containing 72 l.l. s.g. RCN ball sealers. 20 BPM at 1000 psi. Balled off casing to 4000 psi. Ran junk basket to recover ball sealers. Recovered 72 ball sealers. Fracture stimulated Gallup interval with 73,000 gallons of 25#/1000 gal crosslinked gelled water containing 100,000 lbs of 20-40 sand and 50 MCI of radioactive sand as follows:

18,000 gallons pad	61 BPM @ 2050 psi
20,000 gallons of 1ppg 20-40 sand	61 BPM @ 1900 psi
25,000 gallons of 2ppg 20-40 sand	62 BPM @ 1900 psi
10,000 gallons of 3 ppg 20-40 sand	62 BPM @ 1900-1950 psi
7,010 gallons of uncrosslinked gel flush	62 BPM @ 1950-2150 psi

All water contained 1% KCL, ½ gal/1000 clay stabilizer, and 1 gal/1000 surfactant.

ISIP = 950 psi, 5 min = 800 psi, 10 min = 750 psi and 15 min = 700 psi. Average rate 62 BPM. Average pressure 1900 psi. Maximum pressure 2950 psi. Minimum pressure 1850 psi. Load to recover 2029 bbls. Ran GR-temperature logs after frac, 2 hours after frac, and 4 hours after frac. Shut well in overnight to allow gel to break. SDFN.

- 10-9-86 Overnight shut-in casing pressure was 150 psi. Tripped in hole with sawtooth collar on 2-7/8" tubing. Tagged sand fill at 8180'. Cleanout 20' of sand fill. Moved tubing to 7218'. Rigged to swab. Swabbed well as follows:
- Swabbed a total of 84.2 bbls of fluid. Well was making 100% frac water with no trace of oil or gas. Shut well in. SDFN.
- 10-10-86 Overnight shut-in pressures: tubing 130 psi, annulus 0 psi. Rigged to swab. Swabbed well as follows:
- Swabbed 149 bbls of frac water. Recovered approximately 1-1½ bbls of oil on 1st run. Small blow of gas. Shut well in to build pressure. SDFN.
- 10-11-86 Overnight shut-in pressures: tubing 450 psi, annulus 260 psi. Blew down tubing. Well flowed 4.2 bbls of oil. Rigged to swab,
- Swabbed 169 bbls of fluid. Well making 1-5% oil cut, gas cut fluid level, and slight gas blow after each swab run. Well has approximate 23.3 bbl/hr (559.2 bbls/day) fluid entry rate into the wellbore. Total fluid swabbed since frac is 402.2 bbls. Shut well in. SD for weekend.
- 10-12-86 Shut down Sunday.
- 10-13-86 Overnight shut-in pressures: tubing 250 psi, annulus 730 psi. Blew down tubing. Rigged to swab. made 19 swab runs. Oil cut increased from 10% to 205. Gas cut fluid level and small gas flow after each run. Swabbed 126.6 bbls of fluid on the day. Fluid entry rate into wellbore swabbing was 19.2 bbl/m (459.6 bbl/day). Well kicked off flowing at 4:00 p.m. Well made 6.7 bbls in 1st 30 minutes, and 1.7 bbls in 2nd 30 minutes. Left well flowing to frac tank overnight. SDFN.
- 10-14-86 Well dead. Shut in well to build pressure. SDFN.
- 10-15-86 Well shut-in.
- 10-16-86 Well shut-in.
- 10-17-86 Ran pressure bomb in well. Well shut-in.
- 10-18-86 Well shut-in.
- 10-19-86 Well shut-in.
- 10-20-86 Shut-in tubing pressure was 1250 psi. Recovered pressure bomb from well. Blew down tubing. Rigged to swab. made 4 swab runs and well kicked off. Swab and flowing record as follows:
- Recovered 71.7 bbls on the day with the well still flowing. Well is flowing approximate 25% oil cut with considerable gas. Flowing rate at end of day was 7.5 bbl/hr (180 bbl/day). Left well flowing to frac tank. SDFN.

10-21-86 Well died. Well made 9.2 bbls of fluid overnight. Annulus pressure 960 psi. Shut in well.

10-22-86 Shut-in tubing pressure was 500 psi, annulus pressure 1050 psi. Blew well down. Rigged to swab. Swab and flowing report as follows:

Well flowed 37.6 bbls in 75 minutes. Final flow rate was 13.3 bbl/hr (320 bbls/day). Well was making 25% oil cut with considerable gas. Left well flowing to frac tank. SDFN.

10-23-86 Well died. Overnight annulus pressure was 850 psi. Blew down annulus pressure. Tagged fill at 8198' RKB (2' fill). Tripped out of hole with tubing. Tripped in the hole with tubing and landed well as follows:

<u>Description</u>	<u>Length</u>	<u>Depth</u>
KB to landing point	9.00	0-9
222 jts 2-7/8" 6.5#/ft N-80 EUE used tbg	7058.20	9-7067
1 5½ X 2-7/8" tubing anchor	2.70	7067-7070
11 jts 2-7/8" 6.5#/ft N-80 EUE used tbg	350.48	7070-7420
1 seating nipple	1.00	7420-7421
1 perforated sub	3.10	7421-7424
1 jt 2-7/8" mud anchor	31.85	7424-7456
1 bullplug	.50	7456-7457
	<u>7456.85</u>	

Nipple down BOP. Nipple up wellhead. Rigged to swab. Swabbed well as follows:

Made 3 swab runs. Recovered 12.5 bbls of fluid (25-40% oil cut). Shut well in. SDFN.

10-24-86 Overnight shut-in pressures: tubing 50 psi, annulus 700 psi. Blew down tubing, no fluid recovery. Rigged to swab. Swabbed well as follows:

Made 60.1 bbls swabbing and flowing on the day. Recovery fluid has approximate 25% oil cut with a heavy gas flow. Could not get well to continue flowing. Shut well in to build pressure over weekend. SDFN.

10-25-86 Well shut-in.

10-26-86 Well shut-in.

10-27-86 Shut-in tubing pressure was 800 psi, annulus pressure 1100 psi. Blew down tubing pressure, well made 6.7 bbls of 100% oil with strong gas flow. Well died. Rigged to swab. Swabbed well as follows:

Swabbed 7.5 bbls of 25% oil cut fluid in 4 runs. Well seems to now be making considerable gas and smaller amounts of fluid. Total fluid recovered from Gallup interval after frac is 727.4 bbls. Load from frac was 2029 bbls, 36% of load fluid recovered. Rigged down rig. Released rig. Wait on tank battery construction.