

OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

Form C-103  
Revised 10-1-78

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DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease	
State <input type="checkbox"/>	Fee <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.	
None	

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 - II" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL ☒ GAS WELL ☐ OTHER ☐

Name of Operator  
Mallon Oil Company

Address of Operator  
2850 Security Life Building, Denver, CO 80202

Location of Well

UNIT LETTER H 1650 FEET FROM THE North LINE AND 870 FEET FROM  
THE East LINE, SECTION 1 TOWNSHIP 25 North RANGE 2 West N.M.P.M.

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

7. Unit Agreement Name

8. Farm or Lease Name

Howard 8

9. Well No.

1411

10. Field and Pool, or Wildcat

Basin Dakota-Undes. Gal.

12. County

Rio Arriba

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data  
NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐  
TEMPORARILY ABANDON ☐  
PULL OR ALTER CASING ☐  
OTHER ☐

PLUG AND ABANDON ☐  
CHANGE PLANS ☐

REMEDIAL WORK ☐  
COMMENCE DRILLING OPNS. ☐  
CASING TEST AND CEMENT JOBS ☒  
OTHER T.D., Run csq, acidize, perf, frac ☐

ALTERING CASING ☐  
PLUG AND ABANDONMENT ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

See Attached Sheets.

RECEIVED  
JUL 10 1985  
OIL CON. DIV.  
DIST. 3

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED

Kevin H. McCloud

TITLE

Agent

DATE

7-9-85

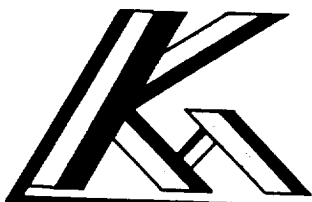
Original Signed by FRANK T. CHAVEZ

TITLE

SUPERVISOR DISTRICT #3

DATE

JUL 10 1985



KM PRODUCTION COMPANY  
P.O. Box 2406  
Farmington, NM 87401  
(505) 325-6900

MALLON OIL COMPANY  
HOWARD 1-8  
Section 1, T25N, R2W  
Rio Arriba County, New Mexico

DAILY REPORT

6-4-85 Drilling @ 1638'. Mud wt 8.6, Visc. 36, W.L. 6.8. 2-3/4° @ 372', 2 1/4° @ 497', 1 1/2° @ 660', 1 1/4° @ 909', 1-3/4° @ 1158', 2 1/4° @ 1322', 2 1/4° @ 1503'.

6-5-85 Drilling @ 2668'. Mud wt 8.9, Visc. 34, W.L. 6.0, 2 1/4° @ 1661', 1-3/4° @ 1908', 1-3/4° @ 2156', 1-3/4° @ 2407'.

6-6-85 Drilling @ 3415'. Mud wt 9.1+, Visc. 39, W.L. 6.0. 1 1/2° @ 2662', 3/4° @ 3165'.

6-7-85 Drilling @ 4050'. Mud wt. 9.0+, Visc. 60, W.L. 6.2. 1 1/4° @ 3654.

6-8-85 Drilling @ 4525'. Lost 175 bbls @ 4075'. Mud wt 8.7+, Visc. 53, W.L. 7.6. 1° @ 4186'.

6-9-85 Drilling @ 4891. Mud wt 8.9+, Visc. 50, W.L. 7.2. Lost circulation @ 7:30, 4920'. Pull 10 stand, mix 20% pill, if regain break out naturally. 1 1/4° @ 4558'.

6-10-85 Drilling @ 5202'. Mud wt 8.7, Visc. 53, W.L. 7.6. Lost returns @ 4920'. Pumped 80 bbls, full returns. 4770-4920' bridges. 1° @ 5061'.

6-11-85 Drilling @ 5447'. Lost 350 bbls on trip @ 5416'. Regain immediately. Mud wt 8.9+, Visc. 53, W.L. 7.0. 1° @ 5406'.

6-12-85 Drilling @ 5754'. Lost circulation @ 5524-5610'. Mud wt 8.6, Visc. 55, W.L. 7.6. 1 1/4° @ 5406'.

6-13-85 Drilling @ 6147'. Mud wt. 8.7+, Visc. 62, W.L. 7.8. 1° @ 5904'.

6-14-85 Drilling @ 6232'. Mud wt 8.7, Visc. 56, W.L. 8.0. 1½° @ 6186'.

6-15-85 Drilling @ 6545'. Mud wt 8.7, Visc. 58, W.L. 6.8.

6-16-85 Drilling @ 6792'. Lost 200 bbls on trip. Made a trip for jet, due to suction of shale. Mud wt 8.7, Visc. 60, W.L. 7.2. 1½° @ 6561'.

6-17-85 Drilling @ 7200'. Mud wt 8.8+, Visc. 62, W.L. 7.8. ¾° @ 7055'.

6-18-85 Tripping @ 7413'. Mud wt 8.9, Visc. 56, W.L. 7.8. ½° @ 7413

6-19-85 Drilling @ 7760'. Mud wt 8.8, Visc. 58, W.L. 8.0.

6-20-85 Drilling @ 8050'. Mud wt 8.8, Visc. 66, W.L. 6.8. Lost 175 bbls mud @ 8026'. Mix 15% pill regained circulation.

6-21-85 Drilling @ 8152'. Mud wt 8.8, Visc. 71, W.L. 6.8. 1-¾° @ 8024'. Lost 200 bbls @ 8060'. Mix pill, regained circulation.

6-22-85 Washing to bottom. 8231'. Mud wt 8.8+, Visc 78, W.L. 7.8. 1½° @ 8231'. Lost 220 bbls on trip. Had trouble getting circulation.

6-23-85 T.D. well at 8300' @ 7:15 p.m. 6/22/85. Circulate for 1½ hours. Short trip 15 stands (tight hole for 10 stands). Circulate 1½ hours. Short trip 12 stands. Circulate 1½ hours. Trip out of hole for logs. Mud wt 8.9, Vis 102, W.L. 6.2.

6-24-85 Trip out of hole for logs. Rigged up Gearhart. Ran Induction and CNL-FDC logs from loggers T.D. of 8286' RKB. Tripped in hole with drillpipe. Circulate for 1-¾ hours. Lay down drillpipe and collars. Run 5½" casing. 1½° @ 8274'.

6-25-85 Ran 5½" casing and landed as follows:

<u>DESCRIPTION</u>	<u>LENGTH</u>	<u>DEPTH</u>
KB to landing point	11.00	0-11
1 cutoff jt 5½" 17#/ft J-55 LTC new csg	21.73	11-33
98 jts 5½" 17#/ft J-55 LTC new csg	3919.54	33-3952
1 5½" upper D.V. tool	3.10	3952-3955
56 jts 5½" 17#/ft J-55 LTC new csg	2248.36	3955-6204
1 5½" lower D.V. tool	3.10	6204-6207
51 jts 5½" 17#/ft J-55 LTC new csg	2048.96	6207-8256
1 5½" differential fill float collar	1.63	8256-8257
1 jt 5½" 17#/ft J-55 LTC new csg	40.18	8257-8298
1 5½" guide shoe	1.40	8298-8299
	<u>8299.00</u>	

6-25-85 D.F.E.C. @ 8256' RKB. Lower D.V. @ 6204' RKB. Upper D.V. @ 3952' RKB.  
(cont.) Centralizer @ 3912', 3992', 6164', 6244', 6894', 7014', 7134', 7254',  
7374', 7493', 7614', 7734', 8056', 8136', 8216', and 8278'.

Rigged up Halliburton. Pumped 10 bbls water. Cemented 1st stage cement with 578 ft<sup>3</sup> (425 sx) 50-50 pozmix with 2% gel, 10% salt, 5# gilsonite/sx, ½# flocele/sx. Rotated casing during cement job. Good circulation throughout job. Bumped plug to 1000 psi. Held OK. Plug down @ 12:45 p.m. 6/24/85. Dropped bomb and opened lower D.V. tool @ 1600 psi. Circulated mud for 3 hours. Pumped 10 bbls water. Cemented 2nd stage with 276 ft<sup>3</sup> (100 sx) Class B cement with 2% econolite, 5# gilsonite/sx and ½# flocele/sx tailed by 306 ft<sup>3</sup> (225 sx) 50-50 pozmix with 2% gel, 10% salt, 5# gilsonite/sx and ½# flocele/sx. Good circulation throughout job. Bumped plug to 2500 psi. Held OK. Plug down @ 4:45 p.m. 6/24/85. Dropped bomb and opened upper D.V. tool @ 1500 psi. Circulated mud for 3 hours. Pumped 10 bbls water. Cemented 3rd stage with 690 ft<sup>3</sup> (250 sx) Class B with 2% econolite, 5# gilsonite/sx, ½# flocele/sx tailed by 170 ft<sup>3</sup> (125 sx) 50-50 pozmix with 2% gel, 10% salt, 5# gilsonite/sx and ½# flocele/sx. Good circulation throughout job (\*lost circulation with 12 bbls flush remaining, no returns after that). Bumped plug to 2200 psi. Held OK. Plug down @ 8:35 p.m. 6/24/85. Cut off casing and set slips. Rig released at 11:00 p.m. 6/24/85. WOCT.

6-29-85 Move in and rig up Bayless Rig 4. Nipple up BOP. Pick up 4-3/4" bit, casing scraper and 2-7/8" EUE N-80 used tubing. Tag cement above upper D.V. tool. Pressure test casing to 4000 psi. Held OK. SDFN.

6-30-85 Shut down for weekend.

7-1-85 Drilled out 45 feet of cement and D.V. tool at 3952' RKB. Pressure tested casing to 4000 psi. Held OK. Picked up 2-7/8" tubing. Tagged cement above lower D.V. tool. Drilled out 135 feet of cement to lower D.V. tool. SDFN.

7-2-85 Drilled out lower D.V. tool at 6204' RKB. Picked up 2-7/8" tubing. Tagged cement above D.F.F.C. Drilled 32 feet of cement to D.F.F.C. at 8256' RKB. Rigged up Smith Energy Services. Pressure tested casing to 3500 psi. Held OK. Circulated hole clean with 1% KCL water, ½ gal/1000 clay stabilization agent, and 1 gal/1000 surfactant. Moved tubing to 7722'. Spotted 1000 gallons of 7½% D.I. HCL acid over perforation interval. TTOH. Rig up Petro Wireline. Ran GF-CLL from PBTD of 8240' RKB to 6750' RKB. SDFN.

7-3-85 Rigged up Petro Wireline. Perforated Gallup interval with 4" select fire perforation gun as follows:

6909'	6983'	7078'	7145'	7199'	7304'	7370'	7447'	7645'
6915'	6993'	7095'	7152'	7214'	7311'	7380'	7469'	7656'
6925'	7005'	7112'	7156'	7232'	7329'	7388'	7509'	7695'
6935'	7017'	7115'	7169'	7248'	7341'	7403'	7522'	7705'
6954'	7030'	7119'	7176'	7280'	7346'	7419'	7530'	7713'
6962'	7047'	7123'	7183'	7283'	7351'	7423'	7596'	7722'
6971'	7066'	7133'	7188'	7298'	7362'	7432'	7620'	

Total 62 perforations (.50" diameter)

Rigged up Smith Energy Services. Broke down perforations @ 1600 psi. Established injection rate into perforations of 22 BPM @ 1150 psi, 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. 20 BPM @ 850 psi. Saw a 600 psi pressure increase when balls hit the formation. Did not get a balloff. Final injection rate 20 BPM @ 1350 psi, ISIP = 700 psi. Ran junk basket to recover ball sealers. Could not get past lower D.V. tool. Put smaller gauge ring on junk basket. Recovered 22 ball sealers. Fracture stimulated Gallup interval with 115,000 gallons of 25#/1000 gallons crosslinked gelled water containing 1% KCL water, ½ gal/1000 clay stabilization agent, 1 gal/1000 surfactant, and 120,000 lbs of 20-40 sand containing radioactive tracer material as follows:

35,000 gallons pad	61 BPM @ 1500 psi
40,000 gallons of 1 ppg 20-40 sand	61 BPM @ 1400 psi
40,000 gallons of 2 ppg 20-40 sand	61 BPM @ 1400 psi
2,600 gallons of flush	BPM @ 300 psi*

\*had to flush well at start of 3ppg sand due to leak on the wellhead. Flushed approximately 30% of needed flush volume to the top perf.

ISIP = 200 psi. Average rate 61 BPM. Average pressure 1400 psi. Maximum pressure 1500 psi. Minimum pressure 300 psi. Load fluid to recover 3231 bbls. Fixed wellhead leak. Shut in well overnight to allow gel to break. SDFN.

7-4-85 Overnight shut in wellhead pressure was 0 psi. Changed out wellhead. Tripped in hole with 2-7/8" tubing. Tagged sand at 6474'. Tried to pull up on tubing, tubing was stuck. Work on stuck tubing remainder of day, could not get tubing free. Left pipe in tension. SDFN.

7-5-85 Overnight pressure on well was 0 psi. Worked pipe, pipe still stuck. Pulled weight of tubing string on tubing. Manually backed off 3 times until backed off deep enough. Trip tubing out of hole. Recovered 119 jts of tubing (3648 feet, 56% of pipe in hole). Top of fish @ 3648'. Trip in hole with screw in sub and jars on tubing. Jarred on fish for 2 hours. Moved fish approximately 2 feet. Manually backed off fish 2 more times until backed off deep enough. Trip tubing out of hole. Recovered 199 jts (6099 ft. 94% of pipe). Left 12 jts in hole, top of fish @ 6099'. Trip in hole with screw in sub, bumper jars, and tubing. Jarred on fish for 2 hours. Could not free fish. SDFN.

7-6-85 Shut down for weekend.

7-7-85 Shut down for weekend.

7-8-85 Shut in casing pressure was 0 psi. Jarred on tubing again. Tubing would not come free. Rigged up Homco Wireline. Ran freepoint induction. Could get down to 6463' RKB, bottom of tubing at 6474' RKB. Pipe free at 6458' RKB. Apparently 11 feet of pipe stuck. Backed off tubing at 6410' (2 jts of tubing left in hole). Trip tubing and jars out of hole. Trip in the hole with washover shoe, grapple sub, 2 jts of washover pipe, and tubing. Grapple sub would not go through lower D.V. tool. Trip out hole. Remove grapple sub. Trip in hole with washover tools. Leave tools 40 stands off bottom. SDFN.