

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE
(See other instructions
on reverse side)

FORM APPROVED
OMB NO. 1004-0137

Expires: February 28, 1995

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
Mallon Oil Company

3. ADDRESS AND TELEPHONE NO.
P. O. Box 2797, Durango, CO 81302

4. LOCATION OF WELL
At Surface
2066' FSL and 2018' FEL (NW/SW) Unit J
At top prod. interval reported below 0
At total depth
2066' FSL and 2018' FEL Unit J

15. Spud Date 5/7/01
16. DATE TO REACHED 5/14/01
17. DATE COMP (Ready to Prod.) 7/12/01
18. ELEVATION OF RKB, RT, GR, ET 7259' BL 7271' KB
20. TOTAL DEPTH, MD & TVD 3978'
21. PLUGBACK TD, MD & TVD 3937'
22. IF MULTIPLE COMPLEMENTS, HOW MANY* NA
23. DRILLED BY

24. PRODUCING INTERVAL (S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD*)
2647'-2667', 3186'-3178', 3224'-3234'

26. TYPE ELECTRIC AND OTHER LOGS RUN
GR-HRI, GR-SDL-DSN

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

CASING SIZE/GRADE	WEIGHT LB/FT	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24 lbs	256.6'	12-1/4"	150 sxs Type III	none
5-1/2"	15.5 lbs	3978'	7-7/8"	950 sxs STD poz 2% gel	none

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)
N/A				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	3203.81'	NA

31. PERFORATION RECORD (Interval, size, and number)
3186'-3178', 3224'-3234' 2 JSPF
2647'-2667' 2 JSPF

32. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.
DEPTH INTERVAL (MD)
2647'-3234'
AMOUNT AND KIND OF MATERIAL USED
72,000 lbs 20/40 Brown Sand

33. PRODUCTION
DATE FIRST PRODUCTION 7/12/01
PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) Flowing
WELL STAT (Producing or Shut In) Producing

DATE OF TEST 6/29/01
HOURS TESTED 24
CHOKE SIZE 1/2"
PROD'N FOR TEST PERIOD
OIL - BBL 0
GAS - MCF 550
WATER - BBL 120
GAS-OIL RATIO 0
FLOW TBG PRESS 225
CASING PRESSURE NA
CALCULATED 24-HOUR RATE
OIL - BBL 0
GAS - MCF 550
WATER - BBL 120
OIL GRAVITY - API (CORR.) N/A

34. DISPOSITION OF GAS Sold
TEST WITNESSED BY Raymond Key

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED Robert Blaylock District Manager DATE 8/30/01

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

Replace w/
BLM
Approve.

Form 3160-4
(July 1982)UNITED STATES
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WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

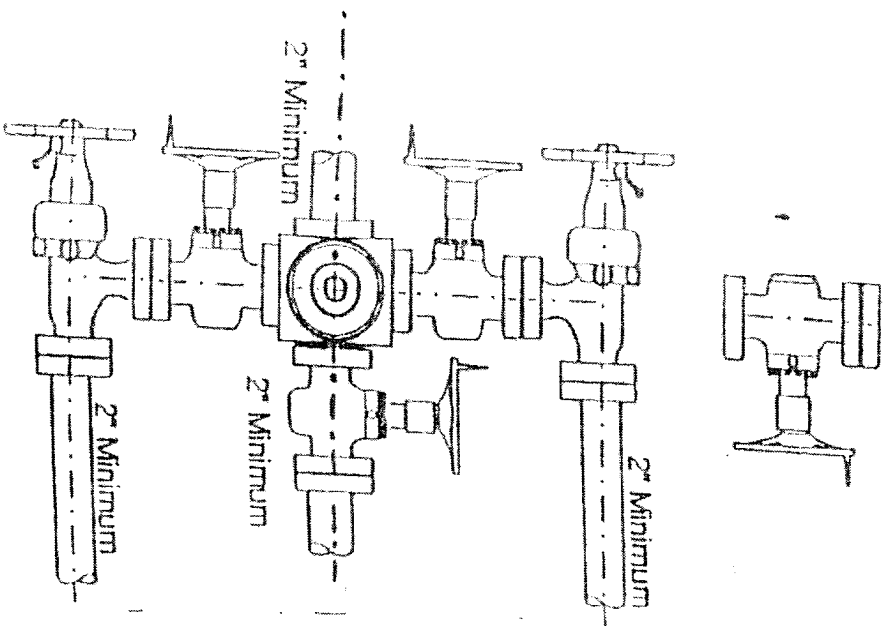
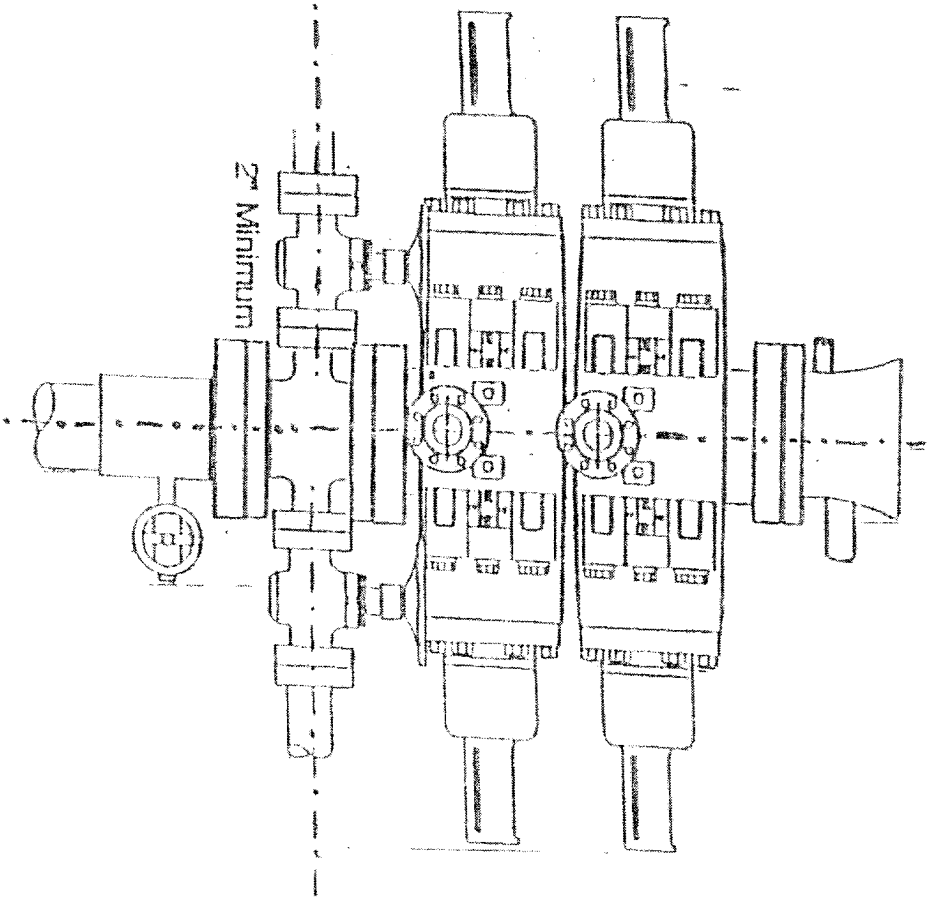
1. TYPE OF WELL OIL ☐ GAS ☐ WELL ☐ WELL ☒ DRY ☐ OTHER ☐		5. LEASE DESIGNATION AND SERIAL NO. MDA 701-98-0013	
2. TYPE OF COMPLETION NEW WELL ☒ WORK OVER ☐ OCEP-EN ☐ PLUG BACK ☐ DIRT-RESVR ☐		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla Apache Tribe	
3. NAME OF OPERATOR Mallon Oil Company		7. UNIT AGREEMENT NAME N/A	
4. ADDRESS AND TELEPHONE NO. P. O. Box 2797, Durango, CO 81302 (970) 382-9100		8. FARM OR LEASE NAME, WELL NO. Jicarilla 30-03-34 No. 4	
5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At Surface 2066' FSL and 2018' FEL (NW/SW) Unit J At top prod. interval reported below 0 At total depth 2066' FSL and 2018' FEL Unit J		9. API WELL NO. 30-039-26733	
14. PERMIT NO. N/A		12. COUNTY OR PARISH Rio Arriba	
DATE ISSUED N/A		13. STATE NM	
15. Spud Date 5/7/01		10. FIELD AND POOL, OR WILDCAT Cabresio Canyon - Tertiary	
16. DATE TO REACHED 5/14/01		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 34 T30-R03	
17. DATE COMB. (Ready to Prod) 7/12/01		18. ELEVATION (DF, RKB, RT, GR, ET) 7259' GL, 7271' KB	
19. ELEV. CASING HEAD 7260'		20. TOTAL DEPTH, MD & TVD 3978'	
21. PLUGBACK TO, MD & TVD 3937'		22. IF MULTIPLE COMPLETIONS, HOW MANY? NA	
23. INTERVALS DRILLED BY Rotary Tools		24. PRODUCING INTERVAL (S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD) 2047'-2667', 3106'-3178', 3224'-3234'	
25. WAS DIRECTIONAL SURVEY MADE Yes		26. TYPE OF LOGS AND OTHER LOGS RUN GRI-HRI, GR-SDL-DSN	
27. WAS WELL CORED N/A		28. Casing Record (Report all strings set in well)	
29. Liner Record		30. Tubing Record	
31. Perforation Record		32. Acid, Shot, Fracture, Cement, Squeeze, Etc.	
33. Production		34. Disposition of Gas	
35. List of Attachments		36. Test Witnessed By	

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

Title 18 U.S.C. 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

2-M SYSTEM

MALLON OIL COMPANY



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).

GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT DEPTH
				San Jose	2600'	
				Nacimiento	3030'	
				Ojo Alamo	3358'	
				Fruitland	3468'	
				Pictured Cliffs	3660'	
				Lewis	3800'	

Jicarilla 29-2-33 #2
 770' FNL 725' FWL NW/4 NW /4
 Sec. 33 T 29N R 2W
 Rio Arriba County, New Mexico
 MDA 701-98-0013

SURFACE CASING AND CENTRALIZER DESIGN

Proposed Total Depth: 4,500 '
 Proposed Depth of Surface Casing: 250 '
 Estimated Pressure Gradient: 0.31 psi/ft
 Bottom Hole Pressure at 4,500 ' = 1,395 psi
 Hydrostatic Head of gas/oil mud: 0.22 psi/ft
 0.22 psi/ft x 4,500 ' = 990 psi

Maximum Design Surface Pressure

Bottom Hole Pressure	–	Hydrostatic Head	=	
(0.31 psi/ft x 4,500 ')	–	(0.22 psi/ft x 4,500 ')	=	
1,395 psi	–	990 psi	=	405 psi

Casing Strengths 8-5/8" 24# K-55 ST&C

<u>Wt.</u>	<u>Tension (lbs)</u>	<u>Burst (psi)</u>	<u>Collapse (psi)</u>
24 #	263,000	2,950	1370
32 #	402,000	3,930	2,530

Safety Factors

Tension (Dry): 1.8 Burst: 1.0 Collapse: 1.125

Tension (Dry): 28 # / ft x 250 ' = 7,000 #
 Safety Factor = $\frac{402,000 \text{ #}}{7,000 \text{ #}}$ = 57.43 ok

Burst: Safety Factor = $\frac{3,930 \text{ psi}}{405 \text{ psi}}$ = 9.70 ok

Collapse: Hydrostatic = 0.052 x 9.0 ppg x 250 ' = 117 psi
 Safety Factor = $\frac{2,530 \text{ psi}}{117 \text{ psi}}$ = 21.62 ok

Use 250 ' 8-5/8" 24# K-55 ST&C

Use 2,000 psi minimum casinghead and BOP's

Centralizers

4 Total
 1 near surface at 80'
 1 10' up on bottom joint
 2 on the first, second, and third collar from bottom.

Note that field experience indicates that additional centralizers greatly increase the chance of "sticking" the surface casing prior to reaching surface casing total depth.