

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

Budget Bureau No. 1004-013
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL

NM 5980

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal 21

9. WELL NO.

4

10. FIELD AND POOL OR WILDCAT

Ojo Encino

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

Sec. 21, T20N, R5W

12. COUNTY OR PARISH

McKinley

13. STATE

New Mexico

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 ☒ GAS ☐ OTHER ☐
WELL WELL

2. NAME OF OPERATOR

Merrion Oil & Gas Corp.

3. ADDRESS OF OPERATOR

P. O. Box 840, Farmington, New Mexico 87499

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

330' FSL and 2310' FWL

14. PERMIT NO.

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

6,785' GR

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* ☐

Drilling history and logs ☒

(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 perti-
nent to this work.)*

Drilling history and logs (Sandcal, Induction Guard,
and Spectral Density) are enclosed.

RECEIVED
OIL MAIL ROOM
88 APR 25 PM 1:52
FARMINGTON RESOURCE AREA
FARMINGTON, NEW MEXICO

RECEIVED
APR 26 1988
OIL CON. DIV.
DIST. 3

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

SIGNED

TITLE

Operations Manager

DATE

4/21/88

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

NMOCO

FEDERAL NO. 21-4

April 6, 1988

Building location and access road. (CCM)

April 8, 1988

Building location. (CCM)

April 9, 1988 Day No. 1

TD: 243' KB

Current operation: drilling.

MIRU, drill rat hole, mouse hole, spud 12-1/4" surface hole to 243' KB. TO. Run 6 jts. (218.69') 9-5/8" 36 lb/ft J-55 surface casing to 243' and cement with 75 sx Class B cement + 2% CaCl₂ - 15.6 lb/gal - yield 1.18 cu.ft/sx. (88.5 cu.ft.) Plug down at 6:45 p.m. Mud weight 8.6, viscosity 32, water loss 10. TIH with 8-3/4" bit no. 2. Surveys run as follows: 217' - 1/4 - N85W; 590' - 1/2 - N65E; 838' - 1/4; (Four Corners Drilling)

April 10, 1988 Day No. 2

TD: 2400' KB

Current operation: drilling.

Mud weight 8.9, viscosity 33, water loss 8. TOH with bit no. 2 at 1,992' KB. TIH with 8-3/4" bit no. 3. Surveys run as follows: 1334' - 3/4 - S31E; 1825' - 3/4 - S50E; 2321' - 1 - S45E; 2827' - 3/4 - S40E. (Four Corners Drilling)

April 11, 1988 Day No. 3

TD: 3530' KB

Current operation: drilling.

Mud weight 8.9, viscosity 39, water loss 9. Continuing to drill with bit no. 3. Surveys run as follows: 2827' - 3/4 - S40E; 3331' - 1/2 - S15E. (Four Corners Drilling)

April 12, 1988 Day No. 4

TD: 3815' KB.

Current operation: drilling.

Mud weight 9.0 ppg, viscosity 40 sec., water loss 9cc. TOH with bit no. 3 at 3629' KB. TIH with 8-3/4" bit no. 4. Survey run as follows: 3629' - 1/2 - S13E. (Four Corners Drilling)

April 13, 1988 Day No. 5

TD: 4300' KB.

Current Operation: drilling.

Mud weight 8.9 ppg, viscosity 42 sec, water loss 8 cc. Continuing to drill with bit no. 4. Lost circulation at 4150' for 3 hours. 200 Bbls lost. Survey run as follows: 4172' - 3/4 - S7E. (Four Corners Drilling)

April 14, 1988 Day No. 6

TD: 4940' KB.

Current Operation: drilling.

Mud weight 8.8 ppg, viscosity 40 sec, water loss 8 cc. Continuing to drill with bit no. 4. Survey run as follows: 4675' - 1 - N50W. (Four Corners Drilling)

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April 15, 1988 Day No. 7

TD: 5210' KB.

Current Operation: drilling.

Mud weight 8.8 ppg, viscosity 40 sec, water loss 8 cc. TOH with bit no. 4 at 4943'. TIH with 8-3/4" bit no. 5. Survey run as follows: 4931' - 1-1/2 - N82W. (Four Corners Drilling)

April 16, 1988 Day No. 8

TD: 5535' KB.

Current Operation: drilling.

Mud weight 8.8 ppg, viscosity 39 sec, water loss 10 cc. Survey run as follows: 5430' - 1. Continuing to drill with bit no. 5. (Four Corners Drilling)

April 17, 1988 Day No. 9

TD: 5859' KB.

Current Operation: drilling.

Mud weight 8.8 ppg, viscosity 45 sec, water loss 8 cc. Continuing to drill with bit no. 5. Lost 350 Bbls at 5,831'. (Four Corners Drilling)

April 18, 1988 Day No. 10

TD: 5912' KB.

Current Operation: laying down DST tools.

Mud weight 8.8 ppg, viscosity 60 sec, water loss 7.5 cc, LCM - 2%. Bit no. 5 out at 5912'. Survey run as follows: 5895' - 1. (Four Corners Drilling)
Top of Todilto @ 5891' KB, top of Entrada @ 5904' KB - 4' high to prognosis. Drilled 8' into Entrada to 5912' KB. Ran DST w/ packer set in Todilto. ISIP - 2170 psi. FFP - 241 psig. FSIP - 2166 psig. Recovered 12.7 Bbls total fluid, 69% oil, or 8.8 bbls, and 3.9 Bbls salt water. (TGM)

April 19, 1988 Day No. 11

TD: 6000' KB.

Current Operation: circulating.

Mud weight 9.0 ppg, viscosity 6.4 sec, water loss 8 cc. TIH with 8-3/4" bit no. 6. Drill to TD @ 6,000' KB. Circulate for logs. TOH w/ drill pipe. Rig up Welox. Ran induction guard, spectral density, and sandcal logs. TIH w/ drill pipe. Circulate to condition hole for casing. Preparing to lay down drill string at report time. (Four Corners Drilling)

April 20, 1988 Day No. 12

Circulate 11 pm to 6 am. Lay down drill pipe and collars 6:00-9:30 am. 7" csg. arrived @ 9:30 am. Unloaded, rabbitted, and tallied csg. Started running csg. @ 2 pm. Stopped @ 2900' KB. Pipe not displacing fluid, fluid at surface. Filled pipe and established circulation. Finished running csg. to 5960' KB. Mixed mud while filling csg. to circulate. Got circulation and continued to mix mud to build volume. Circulate casing to bottom @ 6000' KB. Laid down 1 jt. of csg. and rigged up Western to cement as follows: 9 pm, 4/19/88:

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April 20, 1988 Day No. 12 (continued)

1st Stage: Pumped 10 Bbls water ahead of 200 sx Class 'H' cement w/ 2% gel and 2 #/sk Hi-seal (LCM) 15.4 #/gal. 1.22 cu.ft./sk. Shut down. Wash pump and lines. Dropped plug and displaced with 30 Bbls water and 211 Bbls mud, 3 Bbls over calculated displacement. Plug did not bump. Shut down, bleed back. Float held good. Dropped bomb, let fall 25 min. Opened stage tool and let rig circulate. Lost all circulation 15 min. after started circulation. Shut down and mixed all remaining gel and built volume w/ 20% LCM. Water trucks pulled 3 loads of mud from reserve pit and put in rig pit. Regained circulation @ 2 am, 4/20/88. Rig up Western to cement @ 2:30 am getting returns.

Cement 2nd Stage as follows: Pump 10 Bbls water ahead of 375 sx Class 'B' cement w/ 2% chemical extender @ 12.5 #/gal 2.06 cu.ft./sk. Tried to switch to Class 'H' cement. Could not get Class 'H' out of bulk truck. 10 min. delay, switched back to Class 'B' and pumped 37 sx of 'B' w/ 2% chemical extender, 14 #/gal, 1.53 cu.ft./sk. Shut down. Wash pump and lines. Drop plug and displace w/ 208.5 Bbls. Bumped plug. Bled pressure off. Tool closed. 4 am dropped opening bomb. Wait 25 min., opened tool, let rig circulate between stages. Good circulation between stages.

9:30 am Western Cemented 3rd Stage as follows: Pump 10 Bbls water ahead of 215 sx Class 'B' cement w/ 2% chemical extender @ 2.06 cu.ft./sk, 12.5 #/gal. Tail in w/ 175 sx Class 'H' w/ 2% gel and 2#/sk Hi-seal (LCM), 15.4 #/gal, 1.22 cu.ft./sk. Shut down.

Wash pump and lines. Dropped plug and displaced w/ 122 Bbls water. Bled pressure off. Tool closed. Plug down @ 10:30 am, 4/20/88. Circulated 10 Bbls cement to surface. Rigged down Western Co. Set csg. in slips as cemented. Cut-off csg. Rigged down Four Corners Rig No. 14. Move off. SDON. (CCM)

Casing string description as run:

<u>ITEM</u>	<u>LENGTH</u>	<u>DEPTH 'KB</u>
Guideshoe - Baker	.50	5995.15
Shoe jt-1 jt 23 #/ft 7" csg	40.36	
Float collar - Baker	.96	5953.83
20 jts 23 #/ft 7" csg	806.94	
Stage tool - Baker	1.70	5145.19
52 jt 23 #/ft 7" csg	2096.73	
1 jt 20 #/ft 7" csg.	39.90	
Stage tool	1.70	3006.86
71 jts. 20 #/ft 7" csg	2930.10	
2 jts 23 #/ft 7" csg	<u>80.71</u>	
	5999.60	3.95' above KB.
Total - 75 jts. 23 #/ft 7" csg., new		3,024.74' threads off
Total - 72 jts. 20 #/ft 7" csg., new		<u>2,970.00'</u> threads off
Total pipe:		5,994.74 threads off

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April 21, 1988 Day No. 13
Waiting on completion. (CCM)