

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

Budget Bureau No. 1001  
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.)

OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Merrion Oil & Gas Corporation

3. ADDRESS OF OPERATOR

P. O. Box 840, Farmington, NM 87499

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

990' FSL & 660' FWL

14. PERMIT NO.

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

6,837' GL

5. LEASE DESIGNATION AND SERIAL NO.

NM 058122

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal Medio

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Undesignated Mesaverde

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

Sec 14, T19N, R3W

12. COUNTY OR PARISH 13. STATE

Sandoval

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 ☐

PULL OR ALTER CASING ☐

WATER SHUT-OFF ☐

REPAIRING WELL ☐

FRACTURE TREAT ☐

MULTIPLE COMPLETE ☐

FRACTURE TREATMENT ☐

ALTERING CASING ☐

SHOOT OR ACIDIZE ☐

ABANDON\* ☐

SHOOTING OR ACIDIZING ☐

ABANDONMENT\* ☐

REPAIR WELL ☐

CHANGE PLANS ☐

(Other) ☐

(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)

(Other) NTL-2B for Inj of Produced Wtr ☒

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.)\*

Pursuant to your letter dated March 29, 1991, attached is the 9 point NTL-2B information for injection of the produced water from the subject well. We received verbal approval from Mr. Ernie Bush of the NMOCD on 11/1/90 for said injection. Mr. Bush said that no additional paperwork was necessary for the NMOCD. Also attached for your information is the previously approved NTL-2B for the Media Entrada Unit #3, the target injection well.

*Original in Fed. Medio #1*

If you have any questions, please contact George Sharpe at 327-9801.

RECEIVED

OCT 15 1991

OIL CON. DIV. 1  
DIST. 3

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

SIGNED

*George F. Sharpe*  
George F. Sharpe

TITLE Engineer

DATE 4/17/91

(This space for Federal or State office use)

AREA MANAGER

RIO PUERCO RESOURCE AREA

APPROVED BY *Shirley Mondy*  
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

OCT 10 1991

cc: 5 BLM  
2 Well Files

\*See Instructions on Reverse Side

NMOCD

**MERRION OIL & GAS CORPORATION**

**FEDERAL MEDIO # 1**

**NTL-2B APPLICATION FOR APPROVAL  
TO INJECT PRODUCED WATER**

PREPARED BY: George F. Sharpe

DATE: 4/16/91

- 1) Injection Well  
Media Entrada Unit #3  
1980' FSL & 330' FWL  
Sec 14, T19N, R3W  
Lease: NM12012  
NMOCD Permit PMX-158, Order R-5017
- 2) Proposed Injection Rate:  $\pm$  2500 BPD  
Source: Entrada Produced Water and Menefee Produced  
Water (Analyses attached)

<u>Production Wells</u>	<u>Location</u>	<u>Lease</u>	<u>Formation</u>
Media Entrada Unit #6	SESE Sec 15 19N3W	NMO-58122	Entrada
Federal Medio #1	SWSW Sec 14 19N3W	NMO-58122	Menefee

- 3) Injection Formation = Entrada 5220'-30'
- 4) Entrada water analysis attached (TDS = 15132)
- 5) The Morrison Formation at a depth of  $\pm$  4450' and the Mesaverde Formation at a depth of  $\pm$  390' both contain water with a TDS of less than 10,000 ppm. Mesaverde water is produced from one well and is used for ranching in the area. However, neither formation is used as a drinking water source.
- 6) Attached is a wellbore schematic showing the casing and cementing detail for the MEU #3.
- 7) TD = 5351'  
Current PBTD = 5300'
- 8) The well is completed with 2-3/8" plastic lined tubing and a Baker Lok-set Retrievable packer set @  $\pm$  5160'. The annulus is protected with inhibited fluid. The anticipated operating conditions are:

	<u>Average</u>	<u>Maximum</u>
Injection Rate (BPD)	2000	3000

9) Rates and pressures will be monitored daily. The tubing casing annulus and packer were pressure tested prior to commencing injection and will be tested again at least once every 5 years thereafter.

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



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George F. Sharpe  
Petroleum Engineer

4-17-91

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Date

# WELL: MEDIA ENTRADA UNIT #3

## WELLBORE SCHEMATIC

MERRION OIL AND GAS CORP.

ENG:GFS

DRFT:MEG

DATE:4-15-91

### LOCATION:

1980' FSL & 330' FWL  
SEC 14, T19N, R3W  
SANDOVAL COUNTY, N.M.

### ELEVATION

GL: 6825'  
KB: 6842'

### FORMATION TOPS:

MESAVERDE 380'  
GALLUP 2790'  
DAKOTA 4202'  
MORRISON 4456'  
ENTRADA 5218'

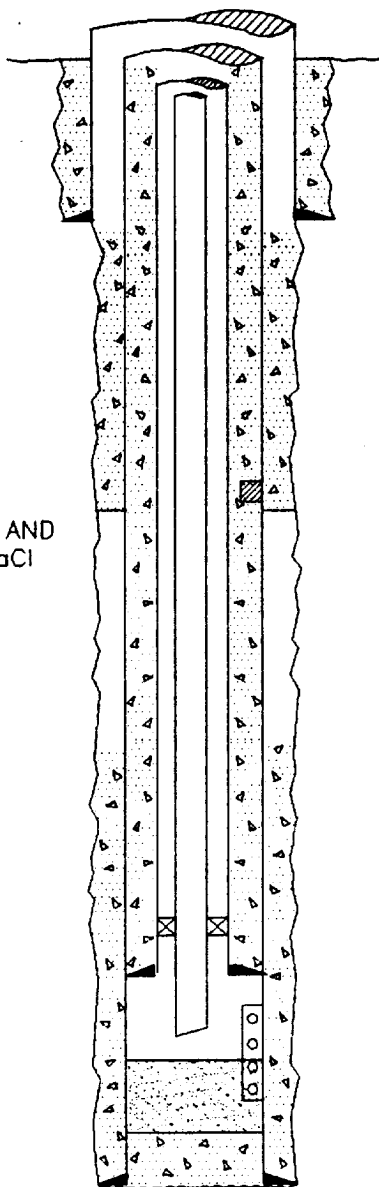
### SQUEEZED PERFORATIONS:

2240' - 2 HOLES  
SQZ. W/150 SX G W/6% GEL AND  
150 SX G W/1% D65 & 1% CaCl

### OPEN PERFORATIONS:

ENTRADA:  
5206 - 54' @ 25PF

SAND FROM PBTD TO 5230'



### INJECTION STRING:

TBG: 2 3/8", 4.6 #/FT, P.L.  
DEPTH: 5225'  
4 1/2" BAKER LOCKSET  
PKR @ 5160'

### SURFACE CASING:

HOLE SIZE: 15 "  
CSG SIZE: 10 3/4", 40 #/FT  
DEPTH: 217'  
CMT DETAILS: 140 SX  
TOC: SURFACE  
BY: CIRCULATE

### PRODUCTION CASING:

HOLE SIZE: 8 3/4"  
CSG SIZE: 7", 20#/FT  
DEPTH: 5340'  
CMT DETAILS: 300 SX

TOC: 3340'  
BY: CALCULATED

### LINER

LNR SIZE: 4 1/2" 9.5 #/FT  
DEPTH: 5200'  
CMT DETAILS: 462 SX G  
W/50/50 Poz, 2% GEL,  
5#/SK GILS., 0.2% D-65 AND  
100 SX G W/5#SK GILS., 0.75%  
D-65, SQZ 100 SX G W/3% CaCl  
DOWN CASING ANNULUS.

TOC: SURFACE  
BY: ANNULUS SQUEEZE

### DEPTHS

PBTD: 5300'  
TD: 5351'

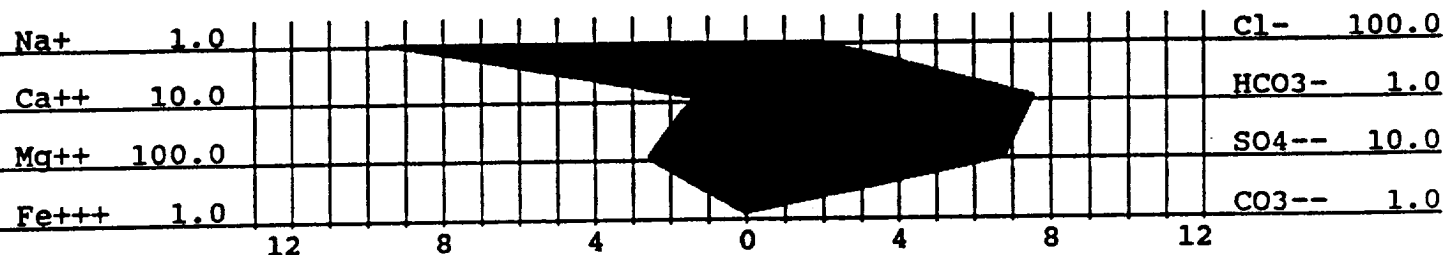


# WATER ANALYSIS for Merrion Oil

Date of Analysis:	NOVEMBER 13, 1990	Analysis #:	3
Company:	Merrion Oil	Company Address:	Farmington
State:	New Mexico	Field:	N/D
Lease:	Media Entrada	Well #:	6
Oil (bbl/day):	N/D	Water (bbl/day):	N/D
Type of Water:	produced	Temp., C:	21
Sample Source:	wellhead	Date of Sampling:	NOVEMBER 13, 1990
Representative:	Mike Jones	Analysis By:	Ken Hake

## WATER ANALYSIS PATTERN

(number beside ion symbol indicates me/l scale unit)



## DISSOLVED SOLIDS

CATIONS	me/l	mg/l
Total Hardness :	280.00	
Calcium, (Ca++) :	15.00	300.72
Magnesium, (Mg++) :	265.00	3220.12
Iron, (Fe+++):	0.06	1.10
Barium, (Ba++) :	0.00	0.00
Sodium, Na+(calc):	9.79	225.28
Manganese, (Mn++):	0.00	0.00

ANIONS	me/l	mg/l
Chloride, Cl- :	211.30	7500.89
Sulfate, SO4-- :	70.75	3400.00
Carbonate, CO3-- :	0.00	0.00
Bicarbonate, HCO3--:	7.80	475.90
Hydroxyl, OH- :	0.00	0.00
Sulfide, S-- :	0.00	0.00
TOTAL SOLIDS (quant. ):		0.00

## DISSOLVED GASES

Hydrogen sulfide:	45.20	mg/l
Carbon dioxide :	3.28	mg/l
Oxygen :	N/D	mg/l

## PHYSICAL PROPERTIES

pH :	7.30
Spec Grav. :	1.015
TDS (calc.) :	15131.81

## SCALE STABILITIES

Temp., C	CaCO3	CaSO4	BaSO4
18.0	-0.25	2986	0
21.0	-0.20	3033	0
24.0	-0.14	3072	0
Max entity, (calc.)	1025		0
RESIDUAL HYDROCARBONS:		N/D	

N/D = not determined



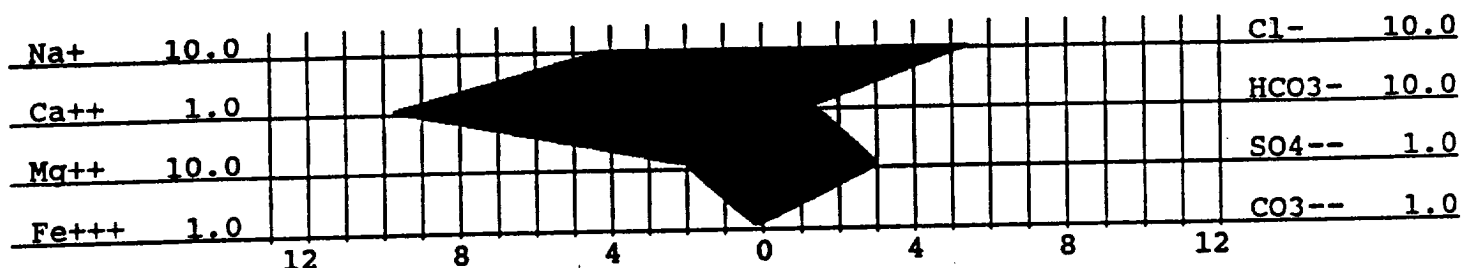
# WATER ANALYSIS for Merrion Oil

Date of Analysis: NOVEMBER 13, 1990  
Company: Merrion Oil  
State: New Mexico  
Lease: Media Mesa Verde  
Oil (bbl/day): N/D  
Type of Water: produced  
Sample Source: wellhead  
Representative: Mike Jones

Analysis #: 4  
Company Address: Farmington  
Field: N/D  
Well #: 7  
Water (bbl/day): N/D  
Temp., C: 21  
Date of Sampling: NOVEMBER 13, 1990  
Analysis By: Ken Hake

## WATER ANALYSIS PATTERN

(number beside ion symbol indicates me/l scale unit)



## DISSOLVED SOLIDS

CATIONS	me/l	mg/l
Total Hardness :	30.00	
Calcium, (Ca++) :	10.00	200.48
Magnesium, (Mg++) :	20.00	243.03
Iron, (Fe+++)	0.27	5.00
Barium, (Ba++) :	0.00	0.00
Sodium, Na+(calc):	43.95	1010.91
Manganese, (Mn++) :	0.00	0.00

ANIONS	me/l	mg/l
Chloride, Cl- :	56.30	1998.58
Sulfate, SO4-- :	3.12	150.00
Carbonate, CO3-- :	0.00	0.00
Bicarbonate, HCO3-- :	14.80	902.99
Hydroxyl, OH- :	0.00	0.00
Sulfide, S-- :	0.00	0.00
TOTAL SOLIDS (quant. ):		4510.48

## DISSOLVED GASES

Hydrogen sulfide:	0.00	mg/l
Carbon dioxide :	3.68	mg/l
Oxygen :	N/D	mg/l

## PHYSICAL PROPERTIES

pH :	7.70
Spec Grav. :	1.010
TDS (calc.) :	4525.79

## SCALE STABILITIES

Temp., C	CaCO3	CaSO4	BaSO4
18.0	1.00	2098	0
21.0	1.05	2122	0
24.0	1.11	2141	0
Max entity, (calc.)	213		0

RESIDUAL HYDROCARBONS: N/D

N/D = not determined

MERRION OIL & GAS CORPORATION

MEDIA ENTRADA UNIT NO. 3

NTL-2B APPLICATION FOR APPROVAL  
TO INJECT PRODUCED WATER

LOCATION: 1980' FSL & 330' FWL ELEVATION: 6842' KB  
Section 14, T19N, R3W 6825' GL  
Sandoval County, New Mexico

PREPARED BY: George F. Sharpe DATE: 5/25/90

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1) Injection Well  
Media Entrada Unit #3  
1980' FSL 330' FWL  
Sec. 14, T19N, R3W  
Lease: NM 12012

2) Proposed Injection Rate:  $\pm$  2500 BPD  
Source: Entrada Produced Water (Analysis Attached)

<u>Production Well</u>	<u>Location</u>	<u>Lease</u>	<u>Formation</u>
Media Entrada Unit #6	SESE Sec 15 19N3W	NM0-58122	Entrada

3) Injection Formation = Entrada 5220'-30'

4) Entrada water analysis attached

5) The Morrison Formation at a depth of  $\pm$  4450' and the Mesaverde Formation at a depth of  $\pm$  390' both contain water with a TDS of less than 10000 ppm. Mesaverde water is produced from one well and is used for ranching in the area. However, neither formation is used as a drinking water source.

6) Attached are wellbore schematics showing the current and proposed hole, casing and cementing detail for the subject well.

7) TD = 5351'  
Current PBTD = 5300'  
Proposed PBTD = 5260'

8) The well is to be completed with 2 3/8" plastic lined tubing and a Baker Lok-set Retrievable packer set @  $\pm$  5150'. The annulus will be protected with inhibited fluid. The anticipated operating conditions are:

	<u>Average</u>	<u>Maximum</u>
Injection Rate (BPD)	1500	3000
Tubing Pressure (psi)	500	1000

Media Entrada Unit #3  
Injection

-2-

Application for Water

9) Rates and pressures will be monitored daily. The tubing casing annulus and packer will be pressure tested prior to commencing injection and at least once every 5 years thereafter.

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



---

George F. Sharpe  
Petroleum Engineer

5-30-90

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Date