

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS <small>(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.)</small>		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 BLM. AND SURVEY OR AREA Sec 14, T19N, R3W		
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6,837' GL	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 <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	

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

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.

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

RECEIVED
OCT 15 1991
OIL CON. DIV.
DIST. 3

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

SIGNED <u>George F. Sharpe</u>	TITLE <u>Engineer</u>	DATE <u>4/17/91</u>
<small>(This space for Federal or State office use)</small>		
APPROVED BY <u>Shirley Mondy</u>	TITLE <u>AREA MANAGER RIO PUERCO RESOURCE AREA</u>	DATE <u>OCT 10 1991</u>

CONDITIONS OF APPROVAL, IF ANY:

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.



George F. Sharpe
Petroleum Engineer

4-17-91

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'

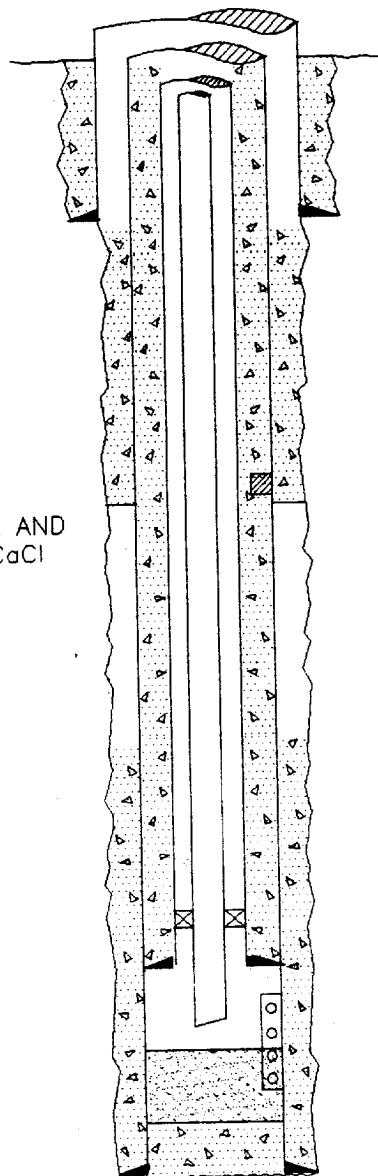
SQUEEZED PERFORATIONS:

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'



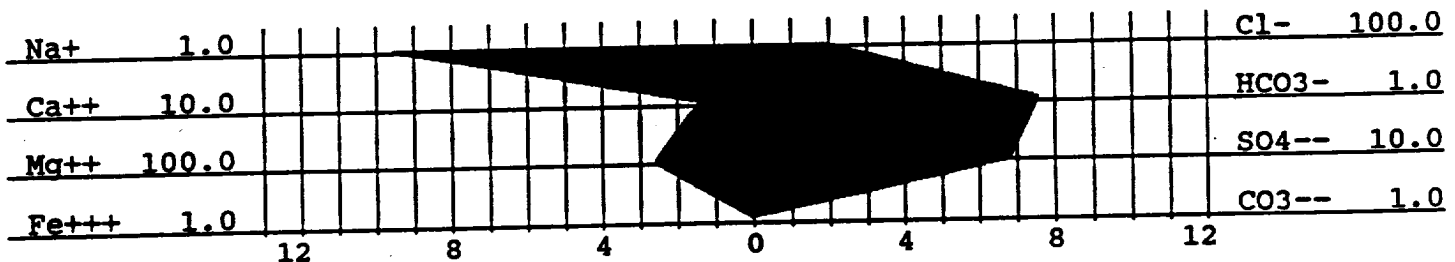
A Baker Hughes company

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		

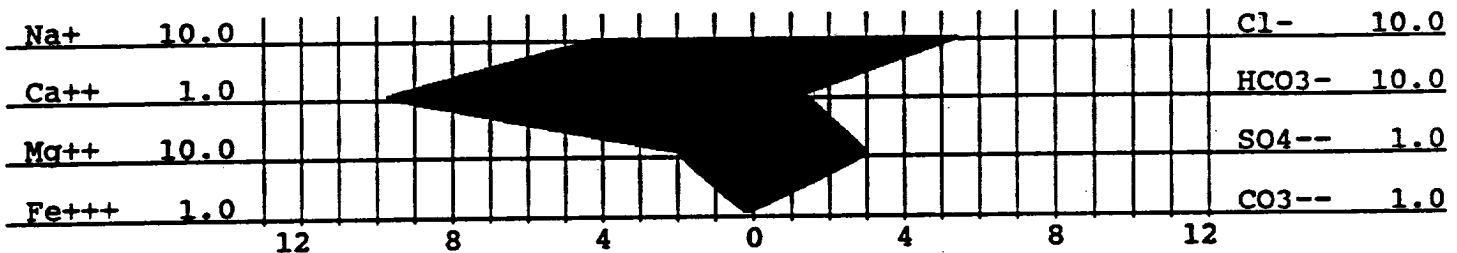
N/D = not determined



WATER ANALYSIS
for
Merrion Oil

Date of Analysis:	NOVEMBER 13, 1990	Analysis #:	4
Company:	Merrion Oil	Company Address:	Farmington
State:	New Mexico	Field:	N/D
Lease:	Media Mesa Verde	Well #:	7
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 :	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

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

2) Proposed Injection Rate: ± 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 ± 4450' and the Mesaverde Formation at a depth of ± 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 PBDT = 5300'
Proposed PBDT = 5260'

8) The well is to be completed with 2 3/8" plastic lined tubing and a Baker Lok-set Retrievable packer set @ ± 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

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

Date