SWD-621 5/7/96

maralo inc.

April 19, 1996

Engineering Department
New Mexico Energy & Minerals Department
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RE: Form C-108 Application of Maralo, Inc. for Salt Water Disposal, Lea County, New Mexico

Attention: David Catanach

Under the provisions of Rule 701 (B), enclosed please find Form C-108 application of Maralo, Inc. for authorization to inject into the Schenck Well #1 located 660 feet from the North line and 660 feet from the East line (Unit A) of Section 20, Township 13 South, Range 38 East, NMPM, Lea County, New Mexico.

Sincerely,

Dorothea Logan

Dorothea Logan
Regulatory Analyst

Enclosures/Attachments (13)

cc: OCD/Hobbs w/Attachments and Electrical Log

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☐ no

II. Operator: **MARALO, INC.**

Address: **P. O. BOX 832, MIDLAND, TEXAS 79702**

Contact party: **RICHARD A. GILL, PETROLEUM ENGINEER** Phone: **(915) 684-7441**

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ☐ yes ☒ no
If yes, give the Division order number authorizing the project _____.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: **DOROTHEA LOGAN** Title **REGULATORY ANALYST**

Signature: Dorothea Logan Date: **APRIL 19, 1996**

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal. _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;

(3) the formation name and depth with expected maximum injection rates and pressures; and

(4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

C-108

Application For Authorization To Inject
Maralo, Inc
Schenck Well #1
A 20-13S-38E
Lea County, New Mexico

I. The purpose of completing this well is to make a disposal well for produced Wolfcamp water into the Devonian formation.

Maralo, Inc. plans to convert this well to a water disposal well into the Devonian formation.

II. Operator: Maralo, Inc.
P. O. Box 832
Midland, TX 79702
Richard A. Gill (915) 684-7441

III. Well Data : See Attachment A

IV. This is not an expansion of an existing project.

V. See attached map, Attachment B

VI. There are 2 wells within the area of review which penetrate the proposed injection zone. (Attachment B1 and Attachment B2)

VII. 1. Proposed average daily injection volume approximately 1800 BWPD.
Maximum Daily injection volume approximately 2000 BWPD.

2. This will be a closed system.

3. Proposed average injection pressure-unknown
Proposed maximum injection pressure--2000 psi.

4. Sources of injected water would be produced water from the Wolfcamp. (Attachment C)

5. See Attachment C.

VIII. The proposed injection interval is the portion of the Devonian formation consisting of porous Dolomite from estimated depths:

12,464 - 12,530'

Fresh water zones overlie the proposed injection formations at depths of approximately 100 feet. There are no fresh water zones underlying the formation.

IX. The proposed disposal interval may be acidized with 15% HCL acid.

X. Well Log is filed at the Hobbs/OCD office with copy of this C-108 application.

XI. The location of fresh water wells and windmills existing within a one mile radius of the subject location are noted on the map. Water Analysis (Attachment D).

XII. Maralo, Inc. has examined geologic and engineering data and has found that there is no evidence of faulting in the proposed interval.

XIII. Proof of Notice

A. Certified letter sent to the Surface Owner. There are no Offset Operators. (Attachment E)

B. Copy of legal advertisement (Attachment F) attached.

XIV. Certification is signed.

MARALO, INC.
SCHENCK #1
A 20-13S-38E
LEA COUNTY, NEW MEXICO

Attachment A
Page 1

III. Well Data

A. 1. Lease Name/Location
Schenck, Well #1
A 20-13S-38E
660' FNL & 660' FEL

2. Casing Strings:
Present Well Condition:
13-3/8" 48# H40 @ 345' w/425 sx (circ)
9-5/8" 36# J55 @ 4650' w/2150 sx (circ)
7-5/8" 26, 29 & 33# @10,800 w/125 sx
5-1/2" 20# N-80 Liner Top @ 10,195', set at 12,530' TD w/400 sxs.

3. Proposed well condition:
Casing and Liner same as above.
2-7/8" 6.5# K-55 duo-line plastic coated injection tubing @ +/- 12,350.

4. Propose to use Baker nickel-plated Loc-Set packer set at +/- 12,350'.

B. 1. Injection Formation: Devonian Dolomite
Field/Pool: Wildcat

2. Injection Interval will be through perforations at approximately 12,464 - 12,530'.

3. Well was original drilled as a Devonian Wildcat oil well. Tests proved well to be non-commercial. Well will be Devonian Dolomite Water disposal well (12,464 - 12,530') when work is completed.

4. Additional Perforations: None

5. There is higher Wolfcamp (9400') but no lower oil or gas zones within the area of interest.

ATTACHMENT A1

LEASE & WELL NAME: Schenk #1
FIELD: Bronco, SW COUNTY: Lea ST.: NM
LOCATION: 660' FNL & 660' FEL, Sec. 20, T-13-S, R-38-E
DATE: 4/16/96 BY: RAG REV.: BY:

CURRENT

15 sx cmt plug

HOLE SIZE: 17"
TOC: surf'

13 3/8" @ 345'
CMT 425 SX

HOLE SIZE: 12 1/4"
TOC: surf'

cmt plug @ 4661-4760'

9 5/8" @ 4650'
CMT 2150 SX

csg. cut @ 5575'

cmt plug 5476-5575'

HOLE SIZE: 8 3/4"
TOC: ±6000'

20 sx cmt plug

Liner Top: 10,195'
7 5/8" @ 10,800'
cmt 125 sx

Hole size: 6 1/4"

cmt plug @ 12,291-490'

perfs @ 12,464-12,530'

5 1/2" @ 12,530'
CMT 400 SX

TD: 12,530' PBD: 12,530'

PROPOSED

csg bowl @ 5575'
cmt to liner top

2 7/8" fiberglass-lined tbg

Baker nickle-coated Lok-set pkr @ 12,350'

perfs @ 12,464-12,530

HOLE SIZE: 17"
TOC: surf'

13 3/8" @ 345'
CMT 425 SX

HOLE SIZE: 12 1/4"
TOC: surf'

Liner Top: 4225'

9 5/8" @ 4650'
CMT 2150 SX

HOLE SIZE: 8 3/4"
TOC: ±6000'

Liner Top: 10,195'
7 5/8" @ 10,800'
cmt 125 sx

5 1/2" @ 12,530'
CMT 400 SX

TD: 12,530' PBD: 12,530'

ATTACHMENT B1

Submit to Appropriate
District Office
State Lease – 6 copies
Fee Lease – 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-105
Revised 1-1-89

WELL API NO. 30-025-32860

5. Indicate Type of Lease STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

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 ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER

7. Lease Name or Unit Agreement Name: LOWE 20

2. Name of Operator: MARALO, INC.

8. Well No.: 1

3. Address of Operator: P. O. BOX 832, MIDLAND, TX 79702

9. Pool name or Wildcat: WILDCAT (WOLFCAMP)

4. Well Location
Unit Letter B : 350 Feet From The NORTH Line and 1550 Feet From The EAST Line
Section 20 Township 13S Range 38E NMPM LEA County

10. Date Spudded	11. Date T.D. Reached	12. Date Compl. (Ready to Prod.)	13. Elevations (DF& RKB, RT, GR, etc.)	14. Elev. Casinghead
05/26/95	07/13/95	08/24/95	3827'	-

15. Total Depth	16. Plug Back T.D.	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By	Rotary Tools	Cable Tools
12,537'	12,365'			0-TD	

19. Producing Interval(s), of this completion - Top, Bottom, Name: 9754 - 9861' (WOLFCAMP)

20. Was Directional Survey Made: YES

21. Type Electric and Other Logs Run: CNL/LD/GR, CNL/GR/CCL, CNL/LDT/NGT, AIT/GR, CBL/GR/CCL

22. Was Well Cored: NO

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

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.50#	567'	17-1/2"	650 SXS "C"	
8-5/8"	32#	4624'	11"	900 SXS HOWCO LT + 250 SXS "C"	
5-1/2"	17# & 20#	12470'	7-7/8"	535 SXS 50/50 +110 HALCO LT.	
		DV @ 9882'		2ND STG. 400 SXS 50/50 POZ MX.	

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2-7/8"	9608'	9608'

26. Perforation record (interval, size, and number)
12,454 - 12,470' (64 HOLES)
9,754 - 9,894' (80 HOLES)

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
12,400'	5½" CIBP SET W/35' CMT CAP
9754 - 9894'	ACDZ'D W/4300 GALS 15% NEFE ACID
9872'	RBP SET

28. PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping - Size and type pump)	Well Status (Prod. or Shut-in)
08/24/95	FLOWING	SI

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
09/28/95	24 HRS.	48/64"		683	900	729	1318

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)
250 PSI	-					40.0

29. Disposition of Gas (Sold, used for fuel, vented, etc.): W/O GAS LINE

Test Witnessed By: PHILLIP SMITH

30. List Attachments: DEVIATION SURVEY, TEMPERATURE SURVEY, C-104, LOGS (2) C-123 + C-102

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Dorothea Logan Printed Name DOROTHEA LOGAN Title REGULATORY ANALYST Date 10/02/95

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn. "B"
T. Salt	T. Strawn	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt	T. Atoka 11,206	T. Pictured Cliffs	T. Penn. "D"
T. Yates	T. Miss 11,696	T. Cliff House	T. Leadville
T. 7 Rivers	T. Devonian 12,446	T. Menefee	T. Madison
T. Queen	T. Silurian	T. Point Lookout	T. Elbert
T. Grayburg	T. Montoya	T. Mancos	T. McCracken
T. San Andres	T. Simpson	T. Gallup	T. Ignacio Otzte
T. Glorieta	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenburger	T. Dakota	T.
T. Blinebry	T. Gr. Wash	T. Morrison	T.
T. Tubb	T. Delaware Sand	T. Todilto	T.
T. Drinkard	T. Bone Springs	T. Entrada	T.
T. Abo	T.	T. Wingate	T.
T. Wolfcamp XX 9434	T.	T. Chinle	T.
T. Penn	T.	T. Permain	T.
T. Cisco (Bough C)	T.	T. Penn "A"	T.

OIL OR GAS SANDS OR ZONES

No. 1, from.....to..... No. 3, from.....to.....

No. 2, from.....to..... No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology	From	To	Thickness in Feet	Lithology
40	567	527	SURFACE ROCK & REDBED				
567	1576	1009	SALT & ANHY				
1576	2709	1133	SALT, REDBED & ANHY				
2709	4624	1915	SALT & ANHY				
4624	4890	266	DOLO & ANHY				
4890	5674	784	DOLO				
5674	6445	771	DOLO & LIME				
6445	7985	1540	DOLO				
7985	9431	1446	DOLO & SHALE				
9431	9467	36	DOLO & LIME				
9467	9636	169	DOLO, LIME & SHALE				
9636	9735	99	LIME & SHALE				
9735	11135	1400	DOLO & LIME				
11135	11650	515	LIME & SHALE				
11650	11880	230	SHALE, LIME & CHERT				
11880	12350	470	SHALE & LIME				
12350	12470	120	DOLO				

ATTACHMENT B2 # WELLBORE SKETCH AND WELL HISTORY #101-S

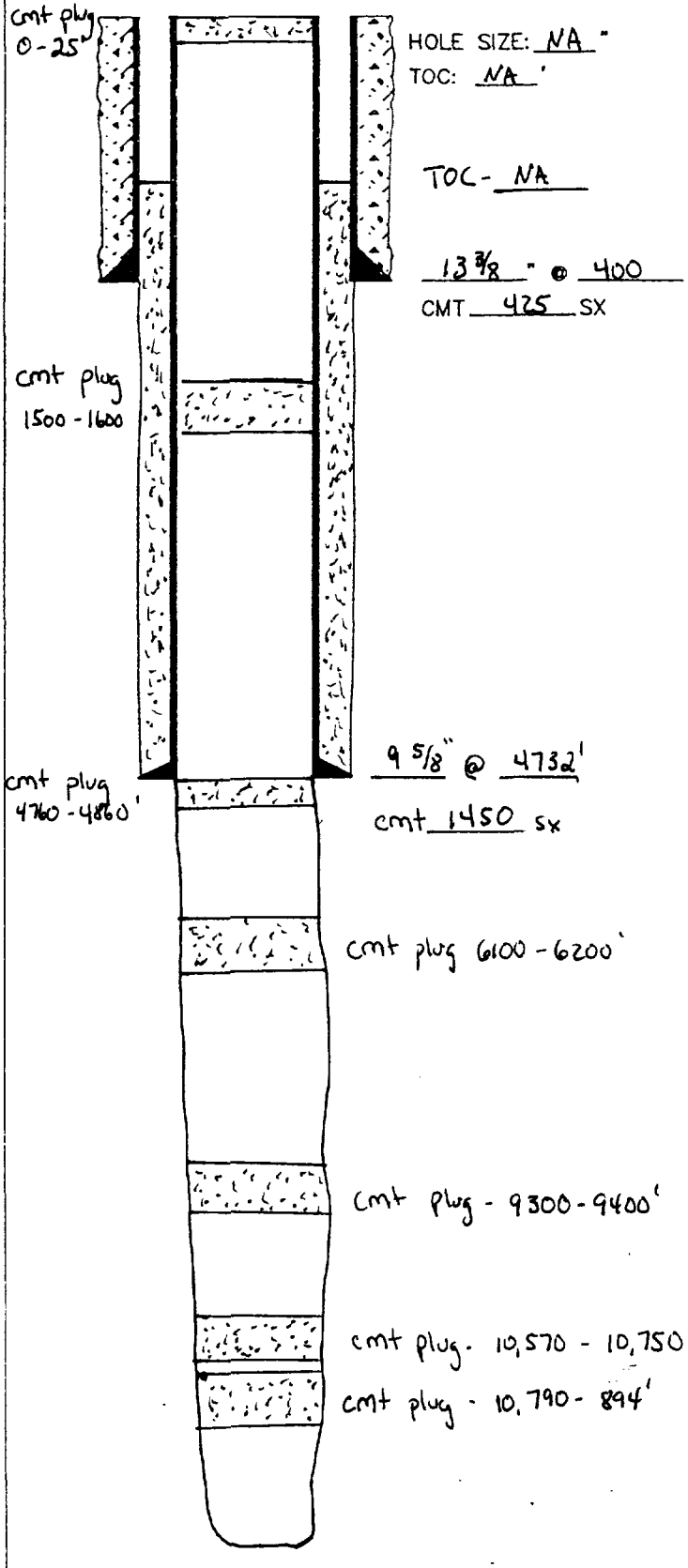
ELEV.: GL 3819 ", _____' ABOVE _____

LEASE & WELL NAME: Inexco #1 Williams

FIELD: — COUNTY: Lea ST.: NM

LOCATION: 660' FSL & 660' FWL, Sec. 16 - 13S - 38E

DATE: 4/17/96 BY: Rog REV.: _____ BY: _____



TD: 12,510' PBD: _____'

CASING RECORD

SURFACE CASING

O.D.	WT/FT	GRADE	SET AT
13 3/8"	NA	NA	400'
9 5/8"	NA	NA	4732'

PRODUCTION CASING

NONE			

TUBING

NO. JTS.	O.D.	THD.	TYPE	WT.	GDE.	SET AT
NONE						

WELL HISTORY:

9/21/80 Spud well

12/4/80 Well P & A'd. D & A

ATTACHMENT C-1

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

LABORATORY NO. 29655
SAMPLE RECEIVED 2-10-96
RESULTS REPORTED 2-12-96

TO: Mr. Bill Hunt
P O Box 832, Midland, TX 79702

COMPANY Maralo, Inc. LEASE Lowe "20"
FIELD OR POOL Bronco, South
SECTION ____ BLOCK ____ SURVEY ____ COUNTY Lea STATE NM
SOURCE OF SAMPLE AND DATE TAKEN:
NO. 1 Produced water - taken from Lowe "20" #1. 2-10-96
NO. 2
NO. 3
NO. 4

REMARKS: Wolfcamp

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0316			
pH When Sampled				
pH When Received	6.59			
Bicarbonate as HCO_3	1,366			
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	8,000			
Calcium as Ca	1,600			
Magnesium as Mg	972			
Sodium and/or Potassium	11,382			
Sulfate as SO_4	2,965			
Chloride as Cl	20,240			
Iron as Fe	62.0			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	38,526			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen,				
Hydrogen Sulfide	721			
Resistivity, ohms/m at 77° F.	0.215			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks: The above results show some mild changes in the characteristics of the water as compared to previous results. The main difference we see is an increase in calcium and magnesium along with a somewhat lower pH. It is possible this could have resulted from a very minute influence from spent acid. However, the water continues to have the same basic characteristics as previously encountered and still does not correlate with what we would expect from Wolfcamp based on records in the area of this well.

Form No. 3

By Waylan C. Martin, M.A.

ATTACHMENT C-2

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. Bill Hunt
P O Box 832, Midland, TX 79702

LABORATORY NO. 296196
SAMPLE RECEIVED 2-29-96
RESULTS REPORTED 2-1-96

COMPANY Maralo, Inc. LEASE Lowe "20"
FIELD OR POOL Bronco, South
SECTION ____ BLOCK ____ SURVEY ____ COUNTY Lea STATE NM
SOURCE OF SAMPLE AND DATE TAKEN:
NO. 1 Produced water - taken from Lowe "20" #2. 2-28-96
NO. 2
NO. 3
NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0355			
pH When Sampled				
pH When Received	6.75			
Bicarbonate as HCO_3	1,122			
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	12,400			
Calcium as Ca	3,520			
Magnesium as Mg	875			
Sodium and/or Potassium	11,883			
Sulfate as SO_4	2,658			
Chloride as Cl	24,502			
Iron as Fe	192			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	44,560			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen,				
Hydrogen Sulfide	424			
Resistivity, ohms/m at 77° F.	0.185			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks: The above results reveal a significant increase in calcium, slight increase in chloride, and a slight decline in sulfate as compared to the last water recovered from this well on 2-10-96 and reported on laboratory #29655. However, it still shows to have basically the same characteristics as previously encountered and does not correlate with what we would anticipate from Wolfcamp in this area.

Form No. 3

Waylan C. Martin, M.A.

Copy: Bill/Dick/Richard/Shane
3/4/96

ATTACHMENT "D"

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 OR 563 1040

Martin Water Laboratories, Inc.

700 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. Bill Hunt
P. O. Box 832, Midland, TX 79702

LABORATORY NO. 1095182
SAMPLE RECEIVED 10-27-95
RESULTS REPORTED 10-31-95

COMPANY Maralo, Inc. LEASE November 16 #1
FIELD OR POOL
SECTION ___ BLOCK ___ SURVEY ___ COUNTY Lea STATE NM
SOURCE OF SAMPLE AND DATE TAKEN:
X1 NO. 1 Raw water - taken from section 16 windmill well. 10-25-95
X2 NO. 2 Raw water - taken from Harris Orchard water well. 10-25-95
X3 NO. 3 Raw water - taken from North Townsand windmill well. 10-25-95
X4 NO. 4 Raw water - taken from R. N. Williams house windmill well (section 16). 10-25-95
REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0021	1.0020	1.0018	1.0014
pH When Sampled				
pH When Received	6.92	6.68	6.95	6.92
Bicarbonate as HCO_3	220	271	259	259
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	480	616	292	252
Calcium as Ca	146	178	84	82
Magnesium as Mg	28	42	20	12
Sodium and/or Potassium	53	86	101	67
Sulfate as SO_4	202	288	169	123
Chloride as Cl	145	200	88	41
Iron as Fe	0.04	0.04	0.16	0.08
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	793	1,065	721	584
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen.				
Hydrogen Sulfide	0.0	0.0	0.0	0.0
Resistivity, ohms/m at 77° F.	8.96	6.69	11.08	14.86
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Nitrate, as N	4.8	8.2	3.5	1.8

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

Form No. 3

By Waylan C. Martin, M.A.

ATTACHMENT "E"

SCHENCK WELL #1

OFFSET OPERATORS:

THERE ARE NOT OFFSET OPERATORS

SURFACE OWNER:

MS MARY RUTH MCCRORY
P. O. BOX 25764
ALBUQUERQUE, NEW MEXICO 87125

(copy of certified letter attached)

ATTACHMENT "F"

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

Publisher

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of

1 weeks.

Beginning with the issue dated

March 24, 1996

and ending with the issue dated

March 24, 1996

Kathi Bearden
Publisher

Sworn and subscribed to before me this 5th day of April, 1996

Marilyn B. Ribbeiro
Notary Public.

My Commission expires
March 24, 1998
(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE
March 24, 1996

Maralo, Inc., P. O. Box 832, Midland, Texas 79702, is filing Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for injection well. The proposed well, the Schenck #1, is located 660' FNL and 660' FEL, Section 20, Township 13 South, Range 38 East, Lea County, New Mexico, will be used for saltwater disposal. Disposal waters from the Wolfcamp formation will be injected into the Devonian formation at a depth of 12,464 - 12,530 feet with a maximum pressure of 2000 psi and a maximum rate of 2000 BWPD.

All interested parties opposing the aforementioned must file objections or requests for a hearing with the Oil Conservation Division, P. O. Box 6429, Santa Fe, New Mexico, 87504-6429, within 15 days. Additional information can be obtained by contacting R. A. Lowery at (915) 684-7441.

#14455

April 19, 1996

CERTIFIED MAIL - RETURN RECEIPT

Ms. Mary Ruth McCrory
P. O. Box 25764
Albuquerque, New Mexico 87125

Dear Sir:

In accordance with Item XIV (Proof of Notice) Side 2, on the enclosed Form C-108 (New Mexico OCD Application for Authority to Inject), Maralo Inc. hereby furnishes notice to the surface owner of the Schenck Lease, Well #1 located 660 feet from the North line and 660 feet from the East line (Unit A) of Section 20, Township 13 South, Range 32 East, NMPM, Lea County, New Mexico.

Should you have any questions, please feel free to contact me at (915) 684-7441.

Sincerely,

Dorothea Logan

Dorothea Logan
Regulatory Analyst

Enclosure

cc: Oil Conservation Division
Santa Fe, New Mexico

SWD-627

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

4/23/96

GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

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

RE: Proposed:
MC
DHC
NSL
NSP
SWD X
WFX
PMX

Gentlemen:

I have examined the application for the:

Maralo Inc | Schenck | #1-A | 20-13s-38e
Operator | Lease & Well No. | Unit | S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Supervisor, District 1

/ed