



August 2, 1996

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

RE: Administrative Order SWD-627
REVISED 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
Revised Form C-108 application of Maralo, Inc. for authorization
to inject into the Schenck Well #1, API #30-025-07245, 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,

A handwritten signature in cursive script, appearing to read "Dorothea Logan".

Dorothea Logan
Regulatory Analyst

Enclosures/Attachments (13)

cc: OCD/Hobbs w/attachments

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

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

WELL API NO. 30-025-07245
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name SCHENCK
8. Well No. 1
9. Pool name or Wildcat WILDCAT (PENN.)
10. Elevation (Show whether DF, RKB, RT, GR, etc.)

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" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER SALT WATER DISPOSAL	
2. Name of Operator MARALO, INC.	
3. Address of Operator P. O. BOX 832, MIDLAND, TX 79702	
4. Well Location Unit Letter A : 660 Feet From The NORTH Line and 660 Feet From The EAST Line Section 20 Township 13S Range 38E NMPM LEA County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.)	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <input type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

REGARDING ADMINISTRATIVE ORDER SMD-627

AFTER DRILLING 350' INTO DEVONIAN FORMATION, IT HAS BEEN DETERMINED THAT THERE IS NO POROSITY SUITABLE FOR SALTWATER DISPOSAL INJECTION PER ABOVE ORDER.

REVISED FORM C-108 APPLICATION TO INJECT INTO THE UPPER PENNSYLVANIAN FORMATION AT ESTIMATED DEPTHS OF 9,990 - 10,800' WILL BE FORWARDED WHEN COMPLETED.

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

SIGNATURE *Dorothea Logan* TITLE REGULATORY ANALYST DATE JULY 26, 1996
TYPE OR PRINT NAME DOROTHEA LOGAN TELEPHONE NO. 915 684-7441

(This space for State Use) ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

JUL 31 1996

REVISED

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, TX 79702

Contact party: RICHARD 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: AUGUST 2, 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.

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.

Application For Authorization To Inject
Maralo, Inc
Schenck Well #1
UL A, Section 20-T13S-R38E
Lea County, New Mexico

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

Maralo, Inc. plans to convert this well to a water disposal well into the Upper Pennsylvanian 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. (Attachments B1 and B2)

- VII. 1. Proposed average daily injection volume approximately 2000 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 Upper Pennsylvanian formation consisting of porous dolomite from estimated depths of 9,990 - 10,800' with perforations as follow:

10,209 - 10,222
10,232 - 10,238
10,248 - 10,264

Application for Authorization to Inject

Schenck #1

-2- VIII. continued

10,291 - 10,299
10,320 - 10,330
10,370 - 10,380
10,416 - 10,429
10,564 - 10,570
10,579 - 10,588
10,602 - 10,632

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

- IX. The proposed disposal interval may be acidized with 15% HCL acid and a small frac treatment.
- X. Well Logs are filed at the Hobbs OCD office.
- 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 application 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

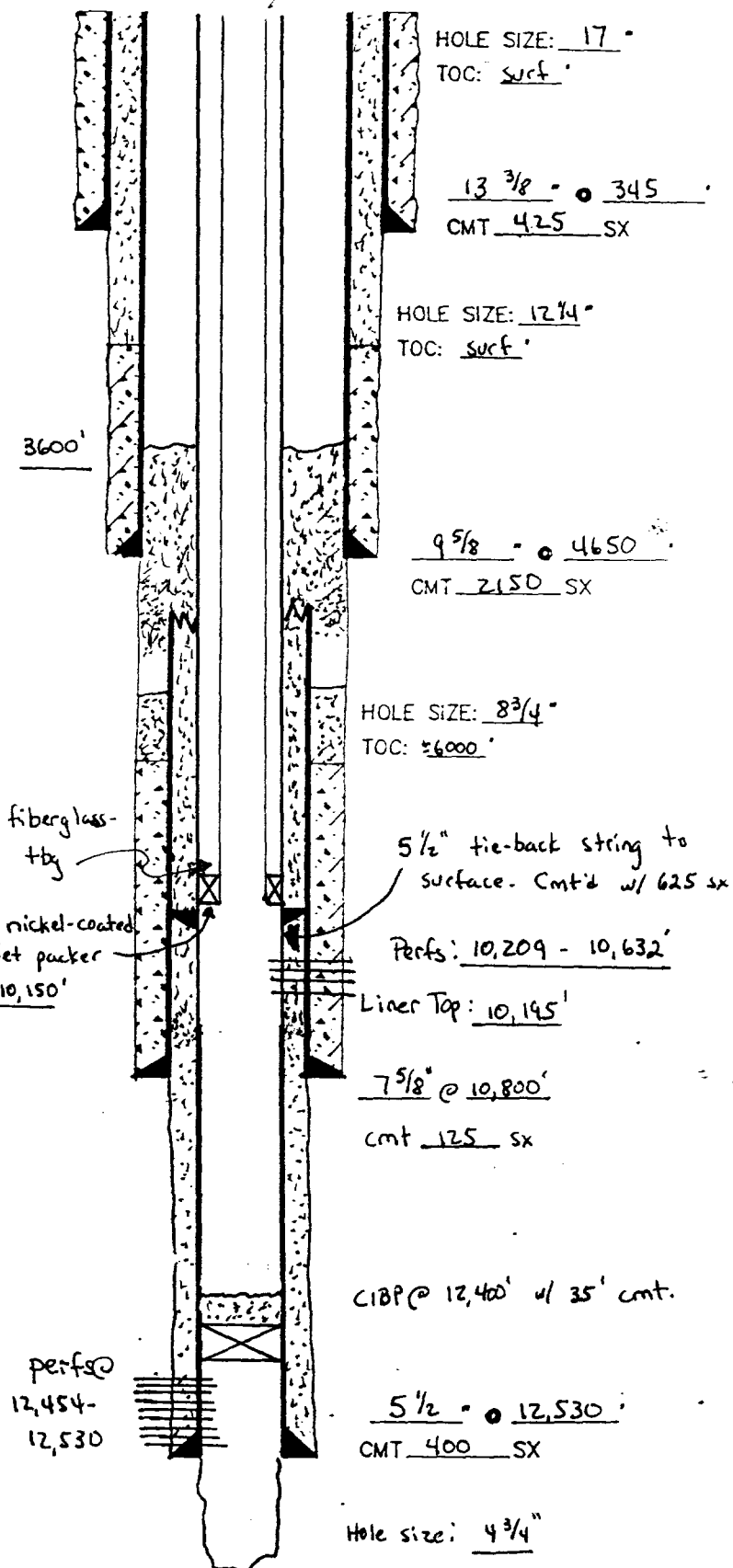
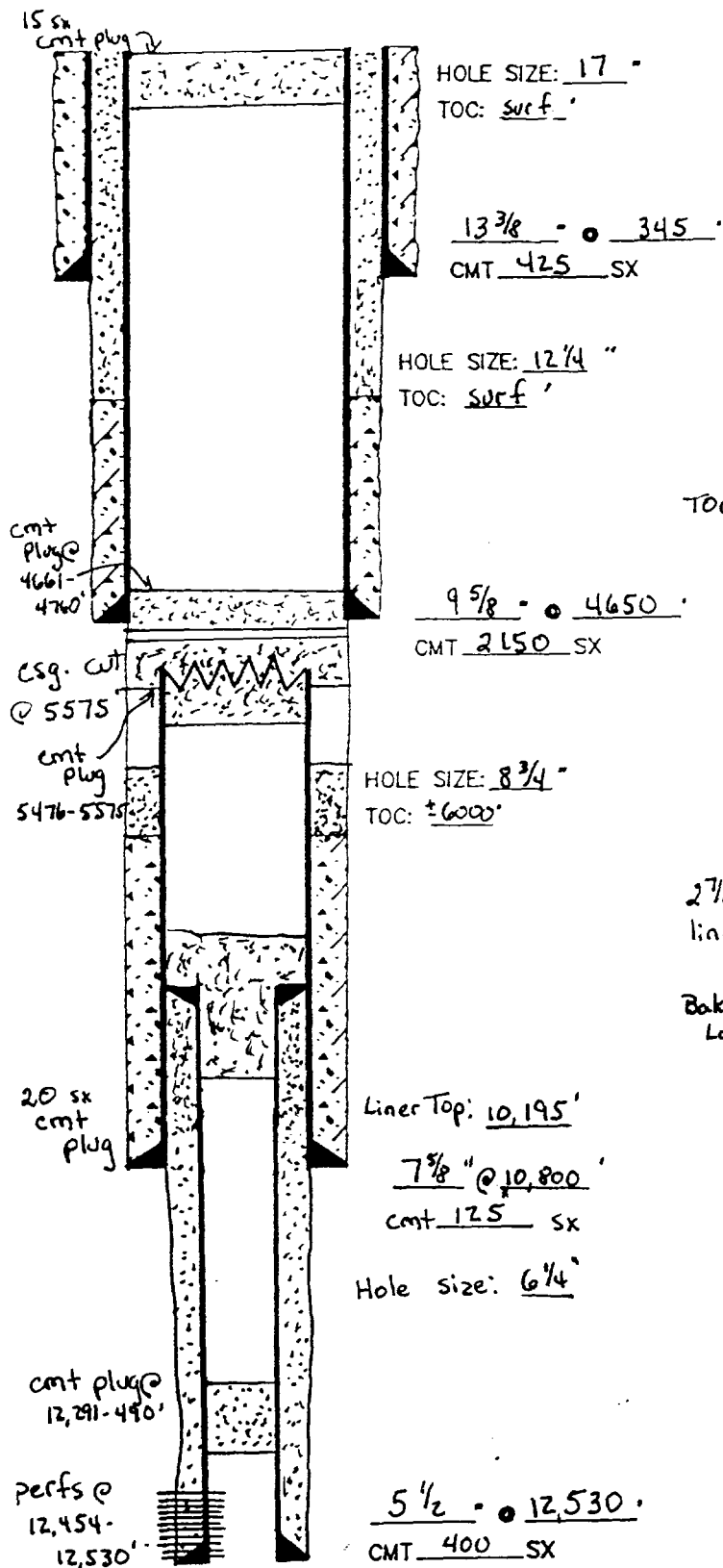
III. Well Data

- 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' w/400 sx.
3. Proposed Well Condition:
Casing and Liner same as above.
2-7/8" 6.5# K-55 duo-line plastic coated
injection tubing @ +/- 10,150'.
4. Propose to use Baker nickel-plated Loc-Set
packer set at +/- 10,150'.
- B. 1. Injection Formation: Upper Pennsylvanian
Field/Pool: Wildcat (Penn.)
2. Injection Interval will be through
perforations at 10,209 - 10,632'.
3. Well was original drilled as a Devonian Wildcat
oil well. Tests proved well to be non-
commercial. The well will be an Upper
Pennsylvanian dolomite saltwater disposal well
(9,990 - 10,800') when work is completed.
4. See attached schematic for additional well data.
5. There is a higher Wolfcamp (9400') oil or gas
zone within the area of interest.

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

CURRENT

PROPOSED (REVISED)



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

TD: 12,885'

UL. "A", SECTION 20, T 13 S - R 38 E

SCALE : 1" = 4,000'

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 <input type="checkbox"/> FEE <input checked="" type="checkbox"/>

6. State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____	7. Lease Name or Unit Agreement Name LOWE 20
b. Type of Completion: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR <input type="checkbox"/> OTHER _____	

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 <u>B</u> : <u>350</u> Feet From The <u>NORTH</u> Line and <u>1550</u> Feet From The <u>EAST</u> Line Section <u>20</u> Township <u>13S</u> Range <u>38E</u> NMPM LEA County
--

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

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

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	25. TUBING RECORD
SIZE TOP BOTTOM SACKS CEMENT SCREEN	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' 5 1/2" CIBP SET W/35' CNT CAP 9754 - 9894' ACIDZ'D W/4300 GALS 15% NEFE ACID 9872' RBP SET
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28. **PRODUCTION**

Date First Production 08/24/95	Production Method (Flowing, gas lift, pumping - Size and type pump) FLOWING	Well Status (Prod. or Shut-in) SI
Date of Test 09/28/95	Hours Tested 24 HRS.	Choke Size 48/64"
Prod'n For Test Period	Oil - Bbl 683	Gas - MCF 900
Water - Bbl 729	Gas - Oil Ratio 1318	
Flow Tubing Press. 250 PSI	Casing Pressure -	Calculated 24-Hour Rate
Oil - Bbl	Gas - MCF	Water - Bbl
Oil Gravity - API - (Corr.) 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

ELEV.: GL 3819 " ' ABOVE

LEASE & WELL NAME: Inexco #1 Williams

FIELD: - COUNTY: Lea ST.: NM

LOCATION: 660' FSL : 660' FWL, Sec. 16-135-38E

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

CASING RECORD

SURFACE CASING

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

PRODUCTION CASING

<u>NONE</u>			

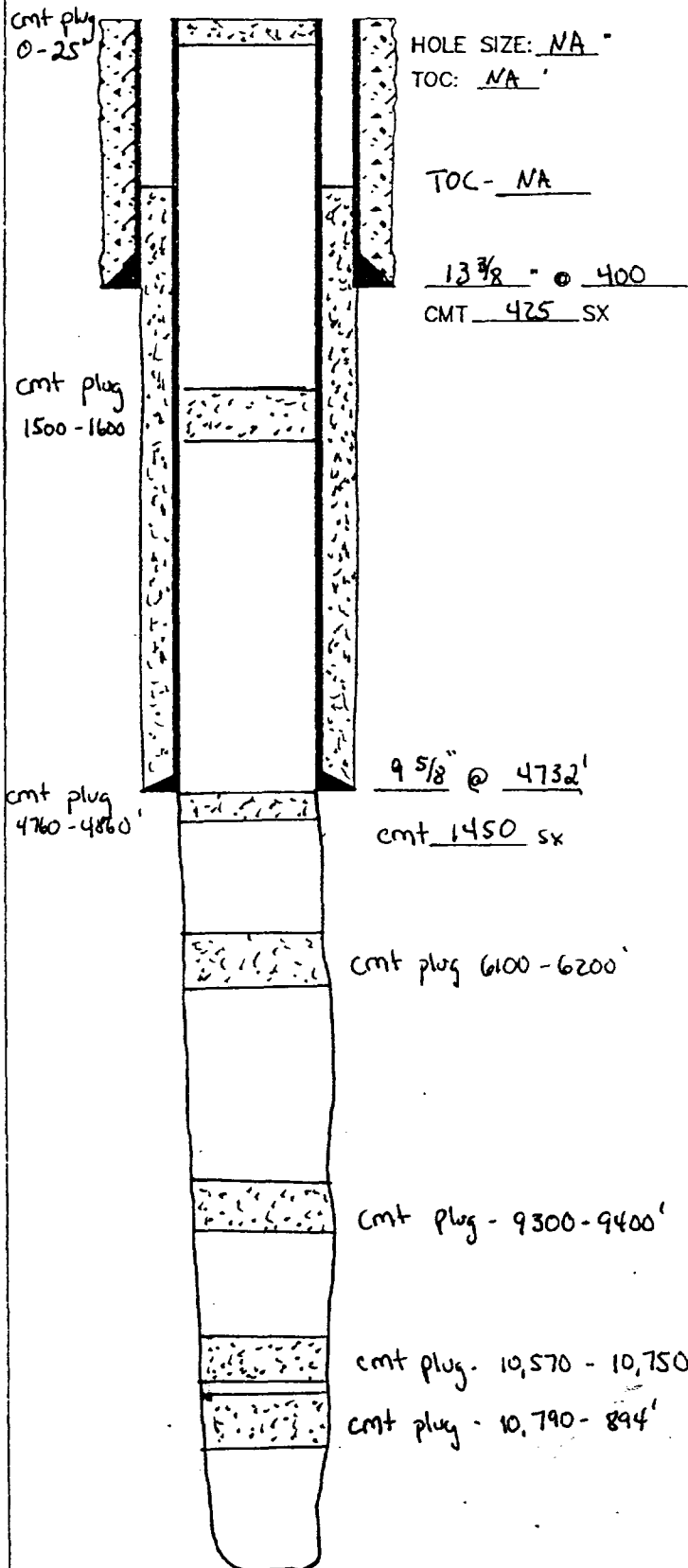
TUBING

NO. JTS.	O.D.	THD.	TYPE	WT.	GDE.	SET
<u>NONE</u>						

WELL HISTORY:

9/21/80 Spud well

12/4/80 Well P3 A'2 - D: A



TD: 12,510' PBD: -

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

By Waylan C. Martin, M.A.

Waylan C. Martin, M.A.

ATTACHMENT "D"

P. O. BOX 1488
MIDLAND, TEXAS 79701
PH. 943-3234 OR 943-1040

Martin Water Laboratories, Inc.

700 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 943-4521

RESULT OF WATER ANALYSES

TO: Mr. Bill Hunt LABORATORY NO. 1095182
P. O. Box 832, Midland, TX 79702 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:

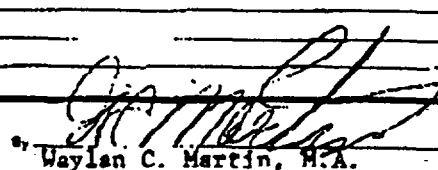
- X1 NO.1 Raw water - taken from section 16 windmill well. 10-25-95
X2 NO.2 Raw water - taken from Harris Orchard water well. 10-25-95
X3 NO.3 Raw water - taken from North Townsend windmill well. 10-25-95
X4 NO.4 Raw water - taken from R. N. Williams house windmill well (section 16). 10-25-95

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0021	1.0020	1.0018	1.0016
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, ohm-cm at 77° F.	8.96	6.69	11.08	14.86
Suspended Oil				
Pintronic 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.


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

July 28, 1996
and ending with the issue dated

July 28, 1996

Kathi Bearden
Publisher

Sworn and subscribed to before

me this 31st day of

July, 1996

Sandra Callett

Notary Public.

My Commission expires
August 29, 1999
(Seal)

LEGAL NOTICE

July 28, 1996

Maralo, Inc., P.O. Box 832,
Midland, Texas 79702, is fil-
ing Form C-108 (Application
for Authorization to Inject)
with the New Mexico Oil Con-
servation Division seeking ad-
ministrative approval for an in-
jection well. The proposed
well, the Schenck #1 is locat-
ed 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 at a
depth of 9,990 - 10,800 feet
with a maximum pressure of
2000 psi and a maximum rate
of 2000 BWPD.

All interested parties oppos-
ing the aforementioned must
file objections or requests for
a hearing with the Oil Conser-
vation Division, P.O. Box
6429, Santa Fe, New Mexico,
87505-6429, within 15 days.
Additional information can be
obtained by contacting R.A.
Lowery at (915) 648-7441.
#14697

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