



October 12, 1982

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Jalmat Yates Unit  
Well #30  
Sec. 18 T-25-S, R-37-E  
2310 FS & WL  
Lea County, New Mexico

Dear Sir:

Attached for your consideration is Maralo's application for administrative approval to inject water for purpose of secondary recovery in the above referenced well in the Jalmat Yates Unit.

It is Maralo's proposal that the well be recompleted from a depleted gas well to a water injection well. This well was completed as a gas well in January, 1950 producing open hole from 2835-2900'. The well was deepened to 2913' and fraced in January of 1962 and has produced gas since that time. Because the gas is now depleted, we feel it would be advantageous to add this well to our unit as an injector. We propose to deepen to 3062', cement 4½" liner and inject an average daily volume of 500 barrels of water with a maximum of 1,000 barrels of water. The average injection pressure will be 100 psi with a maximum of 600 psi. The system will be a closed system and the source of water to be injected will be produced from water supply wells located within a mile of this injection well (Water supply wells are spotted on attached map in yellow). A chemical analysis of fresh water from the supply wells is attached.

The Yates zone (the zone of injection) is made up of several series of sand, shale and carbonates and is approximately 300' thick. The overlying sources of underground drinking water can be found at a total depth of 525'.

The zone of injection will be stimulated by spotting 150 gals 15% NEA acid across perfs gross interval 3040'-2822' and acidized with 3000 gals 15% NEA acid + 2 ball sealers per 50 gals.

All logs for the well have been previously submitted to the NMOCC. If there is anything further you need, please let me know.

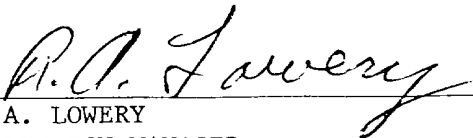
Yours truly,

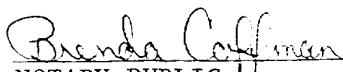
A handwritten signature in cursive script, appearing to read "R. A. Lowery".

R. A. Lowery  
Production Manager

BC

THIS IS TO CERTIFY that on October 12, 1982 each Individual or Company, as listed on attached, was mailed a copy of the application for approval to inject water for purpose of secondary recovery by certified mail. The application is for the Jalmat Yates Unit Well #30, Lea County, New Mexico.

  
\_\_\_\_\_  
R. A. LOWERY  
PRODUCTION MANAGER

  
\_\_\_\_\_  
Brenda Coffman  
NOTARY PUBLIC  
MIDLAND COUNTY, TEXAS

SURFACE OWNERS

James Bryant  
Drawer "D"  
Jal, New Mexico 88252

Ruby Slack  
601 S. Oleander  
Pecos, Texas 79772

LEASEHOLD OPERATORS WITHIN 1/2 MILE

Getty Oil Company  
P. O. Box 1231  
Midland, Texas 79702

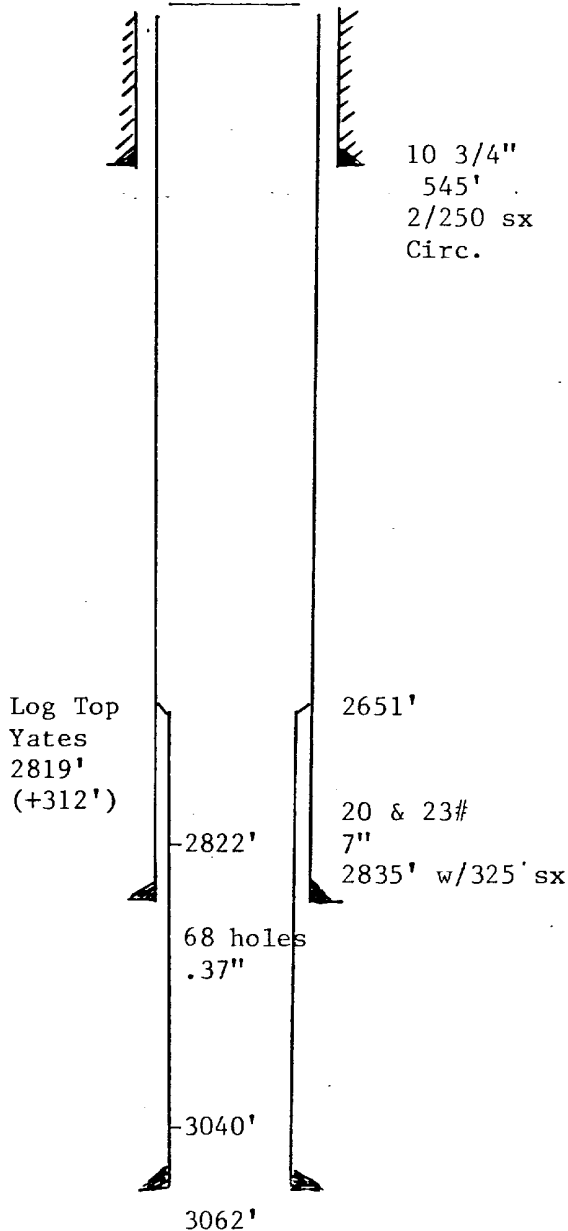
APPLICATION FOR AUTHORIZATION TO INJECT

- 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 0832  
Contact party: Brenda Coffman 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: Brenda Coffman Title Agent  
Signature: Brenda Coffman Date: 10-6-82
- \* 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.

## SECTION WELL DATA SHEET

Maralo, Inc.	Jalmat Yates Unit			
OPERATOR	LEASE			
30	2310' FSL & 2310' FWL	18	25 S	37 E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

## Schematic



## Tabular Data

## Surface Casing

Size 10 3/4 " Cemented with 250 sx.TOC Circ. feet determined by observationHole size 12"

## Intermediate Casing

Size 7" " Cemented with 325 sx.TOC Unknown feet determined by N/AHole size 9"

## Long string

Size 4 1/2 " Cemented with 100 sx.TOC 2473 feet determined by drill bitHole size 6"Total depth 3062

## Injection interval

2822 feet to 3040 feet  
(perforated or open-hole, indicate which)Tubing size 2 3/8 lined with plastic coated set in a  
(material)Baker AD - 1 nickel plated packer at 2803' feet  
(brand and model)

(or describe any other casing-tubing seal).

## Other Data

1. Name of the injection formation Yates2. Name of field or Pool (if applicable) Jalmat Yates Unit3. Is this a new well drilled for injection? ☐ Yes ☒ NoIf no, for what purpose was the well originally drilled? gas well4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) open hole 2835 - 2900' deepened & ran liner. Liner shoe @ 3051' TO liner @ 2653' Cmt. w/100 sx Cl. H5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Seven Rivers (now depleted)

**AFFIDAVIT OF PUBLICATION**

State of New Mexico,

County of Lea.

1, \_\_\_\_\_

ROBERT L. SUMMERS

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 in a supplement thereof for a period

of \_\_\_\_\_

ONE \_\_\_\_\_ weeks.

Beginning with the issue dated  
OCTOBER 3, 1982

and ending with the issue dated  
OCTOBER 3, 1982

*Robert L. Summers*  
Publisher.

Sworn and subscribed to before  
me this 3RD day of

OCTOBER 1982  
*Synette Nagle*  
Notary Public.

My Commission expires  
*March 29*, 1986  
(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  
OCTOBER 3, 1982**

**NOTICE OF APPLICATION FOR APPROVAL TO INJECT WATER FOR PURPOSE OF SECONDARY RECOVERY.**

Maralo, Inc. of P. O. Box 832, Midland, Texas 79702, Telephone # 915 684-7441, has applied to the Oil Conservation Commission for a permit to inject water into the Jalmat Yates Unit Well #30, for the purpose of secondary recovery in the Jalmat Yates Unit. The well is located in the NE/4 of the SW/4 of Sec. 18, T-25-S, R-37-E, Lea County New Mexico; and is 2310' FS & WL of the section. Injection will occur at a depth of from 2822' to 3040' in the Yates formation; with a maximum injection rate of 500 B/D and a pressure of 1000 psi.

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.

R-36-E

R-37-E

MARALO, INC.  
JALMAT YATES WATER FLOOD UNIT

1/2 MILE RADIUS  
CIRCLE

DALPORT "E"

DALPORT "D"

TEXAS PACIFIC

SO. CALIF.  
RESERVE

PROPOSED  
INJECTION  
WELL

LEGEND

JALMAT WATER FLOOD UNIT BORDER

MARALO, INC.

PROPOSED CONVERSION  
OF WELL NO. 30 TO  
WATER INJECTION  
JALMAT WATER FLOOD  
UNIT  
LEA COUNTY, NEW MEXICO

DATE. 9-26-82

DRWN BY. R.N. WALDEN

SCALE. 1" = 1000

DPWG. NO. M-4583

TABULATION OF DATA  
FOR ALL WELLS

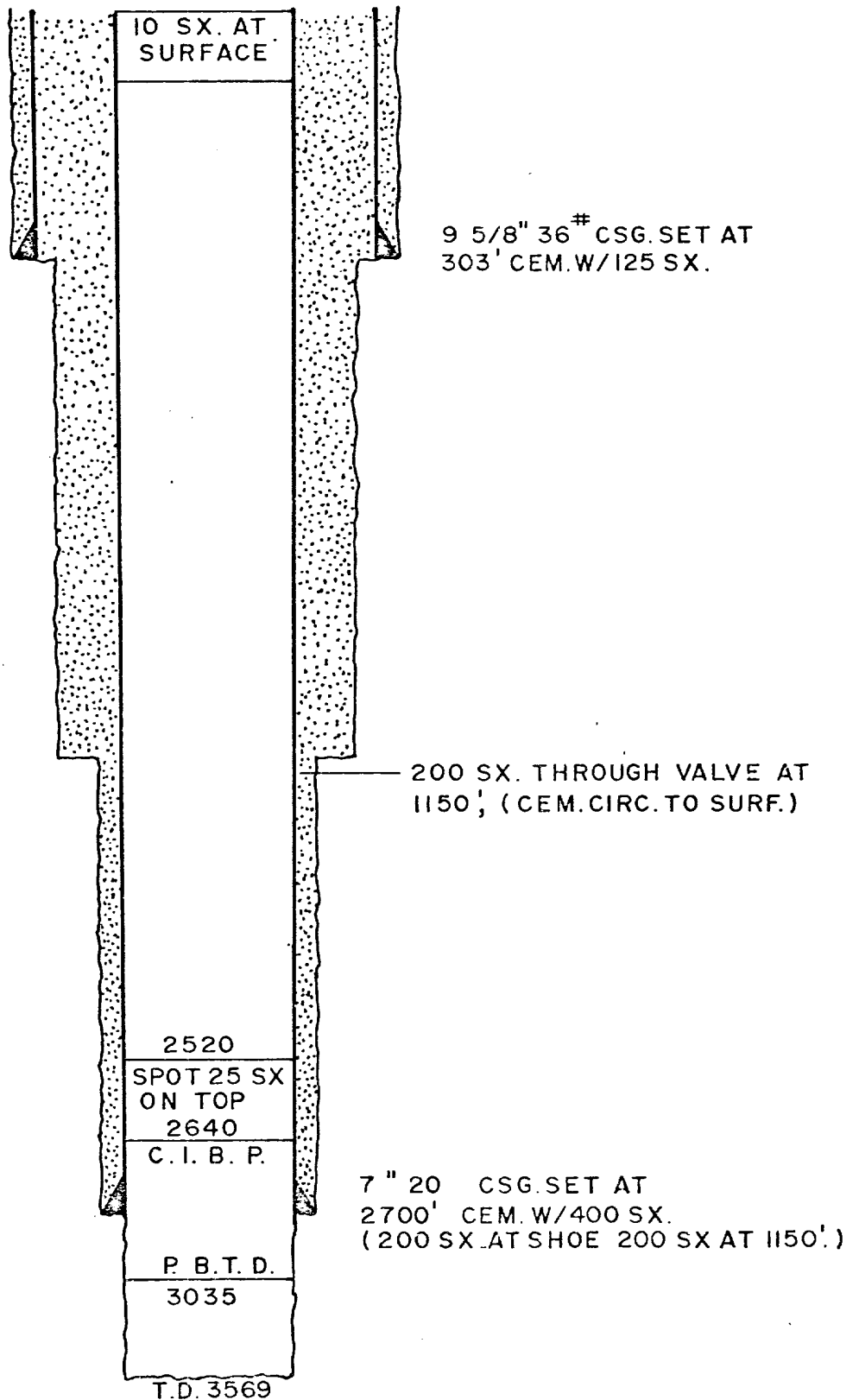
WITHIN ONE HALF MILE RADIUS OF JALMAT #30

WELL NAME	TYPE OF WELL	DATE DRILLED	LOCATION	TOTAL DEPTH	WELL'S CONSTRUCTION	RECORD OF COMPLETION
Getty Reserve South Langlie Mattix Jal Unit #21	Oil	7-29-52	2310 FSL-330' FEL	3340'	10 3/4" csg @ 159' 7" csg @ 3168'	Perfs: 2792-28; 2832; 2868; 2878; 2900
Dalport E #12	Gas	4-25-52	660' FNL-1980' FEL	2938	10 3/4" @ 330' w/200 sx cement 7" csg. @ 2776 w/400 sx cement	Hydrafraced w/1500 gals. 2776-2938
Dalport E #17	Oil	2-22-53	2310' FNL-330' FEL	3346	10 3/4" 325w/300 sx 7" @ 3200' w/300 sx	Hydrafrac w/2000 gals acid. 3200-3346' OH
Dalport D #16	Oil	3-30-53	2310' FNL-1980' FEL	3350	8 5/8" @ 419' w/125 sx; 5 1/2" @ 3237 w/ 400 sx	Hydrafrac 3000 GA 3237 - 3350'
Jalmat Yates Unit #26	Injection	8-7-80	2600' FNL-50' FWL	3500	8 5/8" @ 429' w/300sx 4 1/2" @ 3500' w/1450 sx	Perf Yates 2865-3092 Acidized w/7981 gals 15%
Jalmat Yates Unit #31	Injection	10-18-79	1650' FSL-1700' FWL	3500	8 5/8" @ 400' w/400 sx. 5 1/2" @ 3500' w/ 1500 sx	Perfs. 2830-3210 Acidized w/5550 gals 15%
Jalmat Yates Unit #30	Oil	9-29-49	1930' FNL-660' FWL	2983'	10 3/4" @ 563 7" @ 2890'	SF/15,000 oil + 30,000# sand
E. C. Winters #2	Oil	8-18-80	1980' FNL-990' FEL	3030	8 5/8" @ 415 w/800 sx 5 1/2" @ 3030' w/ 550 sx. 2 3/8" @ 2904'	Perfs 2784 - 2855 Acidized w/4000 gals 15% MCA
Jalmat Yates Unit #25	I/G	4-10-81	2500' FNL-1550' FWL	3510	8 5/8" @ 400' w/ 300sx 5 1/2" @ 3510 w/950 sx	Perfs. 3130-3228 2856 - 3031 Acidize 4000 gals
Jalmat Yates Unit #17	Oil	12-31-53	660' FNL-1980' FWL	3400	8 5/8" @ 1134' w/ 800 sx; 5 1/2" @ 3265' w/950sx	OH 3265 Acid w/1000 gal



WELL NAME	TYPE OF WELL	DATE DRILLED	LOCATION	TOTAL DEPTH	WELL'S CONSTRUCTION	RECORD OF COMPLETION
Jalmat Yates Unit #18	Injection	9-13-80	1800' FNL-2580' FWL	3500	8 5/8" @ 402' w/ 300 sx; 5½" @ 3500 w/1800 sx	3055'-2836 w/225 gal HCl 15% acid; 2797 w/ 2500 gal 15% HCl acid
Jalmat Yates Unit #19	Injection	3-27-80	1300' FNL-1350' FWL	3540	8 5/8" @ 406' w/ 300 sx; 5½" @ 3540' w/950 sx	Perfs 3183-3200' Acidized w/3000 gals.
Gutman #1	P&A-Gas	7-8-50	660' FSL-1980' FEL	3569	9 5/8" @ 300' w/ 126 sx; 7" @ 2700' w/400 sx.	Schematic Attached
Gutman 18 #20 (Tx Pac.)	OIL	1-17-53	1980' FS & EL	3371	8 5/8" @ 303' w/ 120 sx; 5½" @ 2876' w/40 sx	Open hole 2885-3371
Gutman 18 #24 (Tx Pac)	OIL	12-14-52	660' FSL 1650' FEL	3392	10 3/4" @ 153' w/ 175 sx; 7" @ 3112 w/450 sx	Frac w/3,000 gals frac gel
South Langlife Jal Unit #28	OIL	4-3-79	1923 FSL-1111 FEL	3612	8 5/8" @ 627 w/ 450 sx; 5½" @ 3612' w/800 sx.	Perfs 3244-3348
Jalmat Yates Unit #24	OIL	11-22-53	1980' FN&WL	3400	8 5/8" @ 1163 w/800 sx; 5½" @ 3260 w/900 sx.	2855' - acid w/500 gals. Sand fraced w/4,000
Jalmat Yates Unit #29	OIL	11-13-49	2310' FSL-990' FWL	2970	7" @ 2855	

TEXAS PACIFIC GUTMAN 18 NO. 1  
660' FSL & 1980' FEL  
SECTION 18 T-25-S, R-37-E  
(UNIT 0)



## RESULT OF WATER ANALYSES

TO: Mr. R. A. Lowery LABORATORY NO. 118064 (corrected copy)  
P.O. Box 832, Midland, Texas SAMPLE RECEIVED 11-10-80  
RESULTS REPORTED 11-11-80

COMPANY Maralo, Inc. LEASE Jalmat Yates Unit  
FIELD OR POOL Jalmat  
SECTION      BLOCK      SURVEY      COUNTY Lea STATE New Mexico  
SOURCE OF SAMPLE AND DATE TAKEN:     

NO. 1 Composite supply water - taken from water well supply #1 & #2.

NO. 2 Produced water - taken from Jalmat Yates Unit #1.

NO. 3 Produced water - taken from Tenneco's E. J. wells #3 & #4.

NO. 4. Produced water - taken from Appollo Oil Company's Brown #5-A.

## REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0020	1.0208	1.0078	1.0057
pH When Sampled				
pH When Received	7.54	8.08	7.50	7.51
Bicarbonate as HCO <sub>3</sub>	378	878	1,305	1,903
Supersaturation as CaCO <sub>3</sub>	14	125	420	250
Undersaturation as CaCO <sub>3</sub>	-	-	-	-
Total Hardness as CaCO <sub>3</sub>	268	7,850	2,975	1,680
Calcium as Ca	40	260	780	336.1
Magnesium as Mg	41	1,750	249	204.1
Sodium and/or Potassium	189	6,614	1,315	1,678
Sulfate as SO <sub>4</sub>	248	2,967	1,691	252.1
Chloride as Cl	78	12,996	2,131	2,486
Iron as Fe	0.89	2.8	0.30	0.04
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	974	25,525	7,471	6,859
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	0.0	35.0	375	850
Resistivity, ohms/m at 77° F.	8.20	0.290	0.750	0.810
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Carbonate, as CO <sub>3</sub>	0	60	0	0

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks	Letter of recommendation attached.
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Form No. 3

By

Waylan C. Martin, M. A.

<p>Lips SP 924</p> <p>Gulf H B P B-743</p> <p>Phonics HBP E-1924</p> <p>Mexico Eto E-5802-425 ES</p> <p>State</p>	<p>Shillings HBP E-1924</p> <p>Mexico Eto E-5802-425 ES</p> <p>030177A Frank Anthony US Shepherd</p> <p>Amerodan Texaco Texaco US with Carbon etc 030177B 030177B</p> <p>"Shepherd" U.S. MI Frank Anthony El Paso Natl Gas</p>	<p>El Paso Natl Gas B-743</p> <p>Texas Texaco</p> <p>5</p> <p>"Shepherd Fed." US</p>	<p>E. Paso Natl Gas Sun</p> <p>Pac Pacific Sun</p> <p>03366</p> <p>"Farnsworth" US</p>	<p>Ameroda et al 030176B</p> <p>3</p> <p>US CC Eagle</p> <p>El Paso Natl Gas</p>	<p>Sera (no) H B P B-1484</p> <p>(Monaghan) BB Lancaster E-5366</p> <p>Clyde</p>
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