

DATE 10/1/03	SUSPENSE 12/16/03	ENGINEER DRC	LOGGED IN LR	TYPE WFX	APR NO. PLR0333649485
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



DEC 01 2003

OIL CONSERVATION
DIVISION

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication

☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☒ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

798

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Certification

I hereby certify that I, or personnel under my supervision, have reviewed the applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common.

I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Ann E. Ritchie

Print or Type Name

Signature

Regulatory Agent

Title

11/12/03

Date

WTOR1948@aol.com

e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? X Yes No

II. OPERATOR: Melrose Operating Co.

ADDRESS: P0 Box 953 Midland, TX 79702

CONTACT PARTY: Ann E. Ritchie (432) 684-6381

PHONE: _____

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? X Yes No
If yes, give the Division order number authorizing the project: Division Order # R-2243

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 geologic data on the injection zone including appropriate lithologic detail, geologic 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 sources 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 sources 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: Ann E. Ritchie

TITLE: Regulatory Agent

SIGNATURE: _____

DATE: 11/12/03

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

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate 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 the 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, 2040 South Pacheco, Santa Fe, New Mexico 87505, 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 C-108
New Mexico Oil Conservation Division
Melrose Operating Company

Re: **Jalmat Field Yates Sand Unit Well # 109**, 1980 FNL & 2310 FEL, 30-025-08594
Section 11, T22S, R35E Lea County, New Mexico
Jalmat Field Yates Sand Unit Well # 113, 1980 FSL & 2310 FWL, 30-025-08589
Section 11, T22S, R35E, Lea County, New Mexico

I. Melrose Operating plans to convert the above referenced two wells to injection wells in the Jalmat Field Yates Sand pool.

II. Operator: Melrose Operating Co., PO Box 953, Midland, TX 79702
Contact: Ann E. Ritchie (432) 684-6381

III. Well Data:

A.

1. **Jalmat Field Yates Sand Unit Well # 109**, 1980 FNL & 2310 FEL, Section 11, T22S, R35E Lea County, New Mexico
2. 12 1/4" hole w/ 8 5/8" csg set @ 335' w/ 200 sxs cmt, circulated to surface
7 7/8" hole w/ 5 1/2" csg set @ 4029' w/ 303 sxs cmt, TOC @ 910' determined by temperature survey
3. Tubing - 2 3/8" @ 3800'
4. Packer - Baker AD-1 tension packer @ 3800'

1. **Jalmat Field Yates Sand Unit Well # 113**, 1980 FSL & 2310 FWL, Section 11, T22S, R35E Lea County, New Mexico
2. 12 1/4" hole w/ 8 5/8" csg set @ 335' w/200 sxs cmt, circulated to surface
7 7/8" hole w/ 5 1/2" csg set @ 4102' w/350 sxs cmt, TOC @ 1840 determined by temperature survey
3. Tubing - 2 3/8" @ 3750'
4. Packer - Baker AD-1 Tension packer @ 3750'

B.

1. The injection formation for the # 109 & # 113 is the Tansill, Yates, Seven Rivers
2. Injection interval will be through the following perforations:
Jalmat Field Yates Sand Unit Well # 109 - Perforations: 3876-3972'
Jalmat Field Yates Sand Unit Well # 113 - Perforations: 3893-4018'

Melrose Operating Co
Jalmat Field Yates Sand Unit Application for Authorization to Inject

-2-

3. Both the # 109 & #113 were drilled as producing oil wells in The Jalmat Field Yates Sand pool.
 4. Initial perforations – same as above
 5. Next shallow oil or gas zone: Queen @ approx 1650'
Next deeper oil or gas zone: Abo @ approx 6200'
- IV. This is an expansion of the existing Jalmat Field Yates Sand Unit Waterflood Project in Lea County, New Mexico, approved by Division Order No. R-2243, April 25, 1962, additional Order WFX 633, May 14, 1992. Copies of Orders are attached.
- V. Please see attached map indicating Area of Review
- VI. Please see attached tabulation of all wells within the ½ mile radius Area Of Review. Also attached are the schematics of four identified plugged wells.
- VII.
1. The proposed average daily rate of injection for well # 109 & 113 is 500 BWPD
The proposed maximum daily rate of injection is 1000 BWPD per well
 2. This is a closed system
 3. The proposed average injection pressure for well # 109 & 113 is 1500#
The maximum injection pressure is 775# per well
 4. Sources of injection water will be from the Penrose/Queen/Grayburg/San Andres
 5. Chlorides are listed on the attached Water analysis
- VIII.
- Geologic data has been previously submitted for Division Order No. R-2243, May 27, 1962 also Administrative Order No. WFX-633, May 14, 1992.
- IX. At this time no stimulation program is proposed for the injection interval.
- X. Logs have been previously submitted.
- XI. Reference the two attached water analysis. The fresh water is estimated to be @ 350-400' according to New Mexico Oil Conservation Division recommendations for this area & by landowner.
- XII. To the best of current knowledge of the area there is no evidence of open faults or other hydrologic connection between the injection zone and any underground sources of drinking water.

Melrose Operating Co
Jalmat Field Yates Sand Unit Application for Authorization to Inject

-3-

XIII. Please find attached the Affidavit of Publication from the Hobbs New-Sun.
Melrose Operating Co. & Tempo Energy are the only two operators within ½ mile
of Well # 109 & # 113, notification is required - including the listed surface
owner:

Tempo Energy
PO Box 9515
Midland, TX 79702

Surface Owner:

Mr. John Pearson
Merchant Livestock Co.
PO Box 1166
Carlsbad, NM 88221

Interested parties must file objections or requests for hearing with the Oil Conservation
Division, 2040 South Pacheco, Santa Fe, New Mexico, 87505, within 15 days.

A copy of the 3 page initial application and plat has been sent to the above listed parties
on this the 12 day of November, 2003.
Reference attached proof of certified letters.

XIV. Certification: See attached NMOCD Form C-108

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 2546
Order No. R-2243

APPLICATION OF THE BRITISH AMERICAN
OIL PRODUCING COMPANY FOR A WATER-
FLOOD PROJECT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 25, 1962, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 28th day of May, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the Jalmat Field-Yates Sand Unit has heretofore been approved by the Commission by Order No. R-2235; that the Jalmat Field-Yates Sand Unit Area comprises 2,680 acres in Township 22 South, Range 35 East, NMPM, Lea County, New Mexico, as more fully described in said order.

(3) That the applicant, The British American Oil Producing Company, seeks permission to institute a waterflood project in the Jalmat Field-Yates Sand Unit Area by the injection of water into the Yates formation of the Jalmat Pool initially through 16 wells located within said unit area.

(4) That the wells in the subject waterflood project are properly classified as "stripper" wells.

(5) That the subject application should be approved and should be made subject to the provisions of Rule 701.

(6) That restrictions should be imposed upon the method used to inject water in order to protect fresh water-bearing formations in the area.

IT IS THEREFORE ORDERED:

(1) That The British American Oil Producing Company is hereby authorized to institute a waterflood project in the Jalmat Field-Yates Sand Unit Area, located in Township 22 South, Range 35 East, NMPM, Lea County, New Mexico, by the injection of water initially through the following-described wells:

Amerada-State WE-J Well No. 2, Unit D, Section 11;
Aztec-State J-10 Well No. 1, Unit P, Section 10;
British American-Hull State "F" Well No. 1, Unit P, Section 11;
British American-Hull State "F" Well No. 4, Unit H, Section 11;
British American-Hull State "F" Well No. 5, Unit O, Section 11;
British American-Hull State "F" Well No. 7, Unit J, Section 11;
British American-Hull State "F" Well No. 10, Unit F, Section 11;
British American-Hull State "F" Well No. 13, Unit B, Section 11;
British American-New Mexico "B" Well No. 8, Unit B, Section 14;
Carper Drilling Company-Randel "A" Well No. 5, Unit N, Section 2;
Carper Drilling Company-Randel "C" Well No. 3, Unit N, Section 12;
Carper Drilling Company-Randel "C" Well No. 4, Unit L, Section 12;
Gulf-Janda "K" Well No. 2, Unit F, Section 14;
Gulf-Janda "K" Well No. 3, Unit N, Section 14;
Gulf-Janda "K" Well No. 5, Unit D, Section 14; and
Gulf-Janda "K" Well No. 6, Unit L, Section 14.

(2) That the subject waterflood project shall be governed by the provisions of Rule 701.

(3) That water injection shall be accomplished either by injecting into all sands through one string of tubing under a packer or by injecting selectively through two strings of tubing under a packer; provided, however, that in the case of selective injection wells which are equipped with less than 5 1/2-inch pipe, selective injections may be made through one string of tubing under a packer and through the casing-tubing annulus in which case the casing must have been perforated and squeeze-cemented from total depth to the shoe of the surface string of casing.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-3-
CASE No. 2546
Order No. R-2243

DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

esr/



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

ADMINISTRATIVE ORDER NO. WFX-633

*APPLICATION OF SMITH & MARRS, INC. TO EXPAND ITS WATERFLOOD PROJECT
IN THE JALMAT POOL IN LEA COUNTY, NEW MEXICO*

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Order No. R-2243, Smith & Marrs, Inc. has made application to the Division on May 14, 1992, for permission to expand its Jalmat Field - Yates Sand Unit Waterflood Project in the Jalmat Pool in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been filed in due form.
- (2) Satisfactory information has been provided that all offset operators have been duly notified of the application.
- (3) No objection has been received within the waiting period as prescribed by Rule 701(B).
- (4) The proposed injection well is eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced Jalmat Field - Yates Sand Unit Waterflood Project will not cause waste nor impair correlative rights.
- (6) The application should be approved.

Administrative Order WFX-633
Smith & Marrs, Inc.
May 27, 1992
Page 2

IT IS THEREFORE ORDERED THAT:

The applicant, Smith & Marrs, Inc., be and the same is hereby authorized to inject water into the Tansill, Yates & Seven Rivers formations at approximately 3844 feet to approximately 3946 feet through 2 inch plastic lined tubing set in a packer at approximately 3744 feet in the following described well shown on Exhibit "A" attached hereto for purposes of secondary recovery to wit.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 769 psi.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Tansill, Yates and Seven Rivers formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

Administrative Order WFX-633
Smith & Marrs, Inc.
May 27, 1992
Page 3

The subject well shall be governed by all provisions of Division Order No. R-2243, as amended and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

DONE at Santa Fe, New Mexico, on this 27th day of May, 1992.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY
Director

S E A L

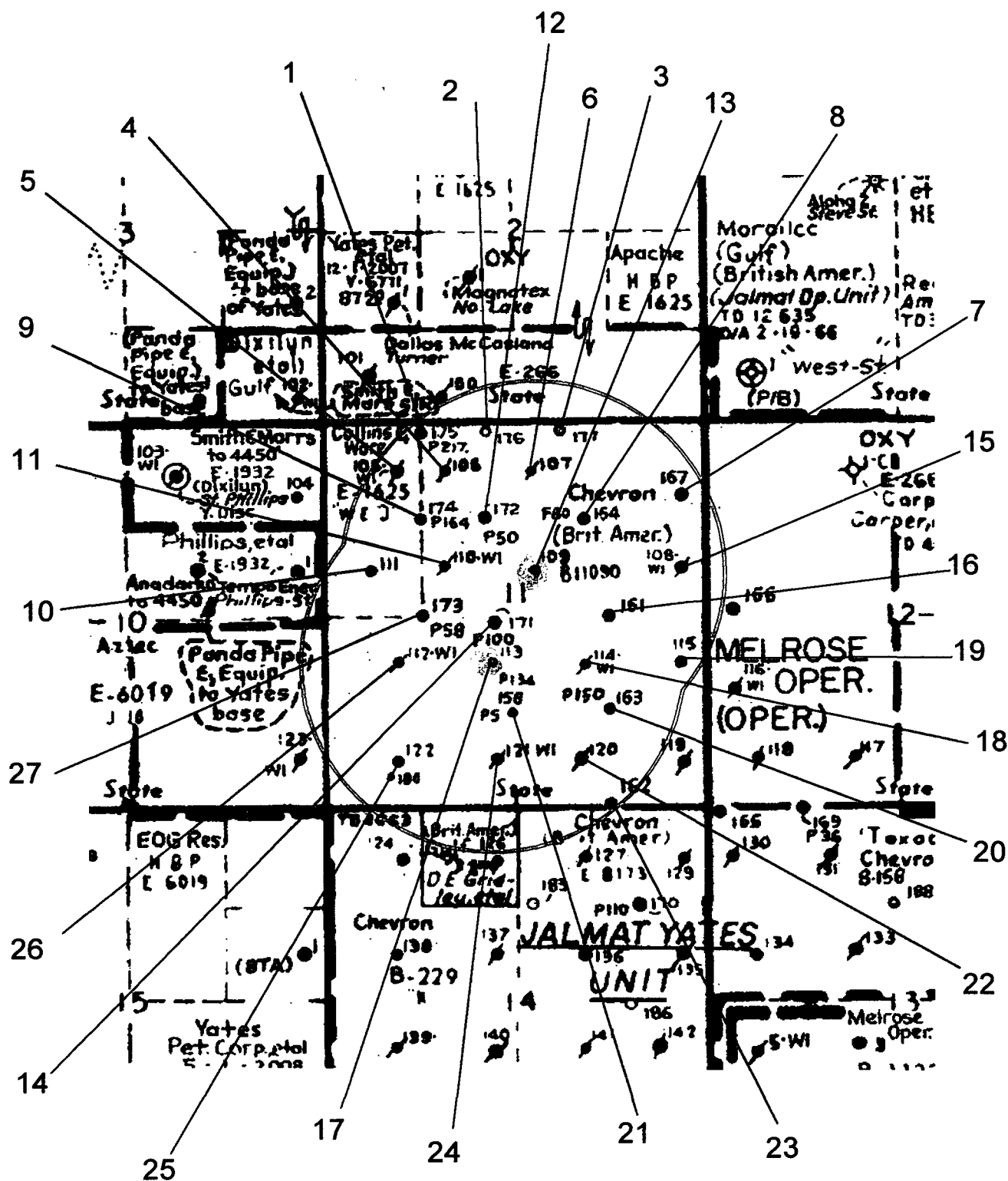
jc/

cc: Oil Conservation Division - Hobbs

EXHIBIT "A"
DIVISION ORDER NO. WFX-633
IALMAT FIELD - YATES SAND UNIT WATERFLOOD
APPROVED INJECTION WELLS

Well Number	Location	Unit	S-T-R	Injection Perforations	Packer Depth	Tubing Size	Injection Pressure
JFYSU No. 115	1980' FSL & 330' FEL	I	11-22S-3SE	3844' - 3946'	3744'	2"	760 PSIG

Located in Lea County, New Mexico



MELROSE OPERATING CO.

C-108 Injection Application

Wells number 109 and 113 - Jalmat Yates Sand Unit, Lea County, New Mexico

1/2 Mile Radius Area of Well Review

1 2

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

[illegible]

1/2 Mile Well Review #5

WELLBORE SCHEMATIC

Melrose Operating
#105 Jalmat Field Yates Sand Unit
660 FNL & 990 FWL
D', Section 11-22s-35e
Lea County, New Mexico
DF Elevation: 3,623'
Total Depth: 4,025 feet
API # 30-025-08583

Casing: 8 5/8"
Hole Size: 12 1/4"
Depth: 336'
Cement: 250 sx

Casing: 5 1/2"
Hole Size: 7 7/8"
Depth: 4,024'
Cement: 400 sx
TOC 2,995'

TD: 4,025'
1/17/1959



Plug #3 Surface 10 sx

Cut csg @ 385'
Plug #3 258' - 385' 55 sx

Plug #2 2070' - 1870' 25 sx

Plug #1 2797' - 3500' 25 sx
CIBP 3,797'

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

2040 Pacheco St.
Santa Fe, NM 87505

WELL API NO. 30-025-08583
Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
State Oil & Gas Lease No. E1625
Lease Name or Unit Agreement Name Jalmat Field Yates Sand Unit
Well No. 105
Pool name or Wildcat Jalmat (TN-YT-SR)

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.)	
Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER WIW <input type="checkbox"/>	
Name of Operator Melrose Operating	
Address of Operator PO Box 5061, Midland, TX 79704	
Well Location Unit Letter D 660 Feet From The North Line and 990 Feet From The West Line Section 11 Township 22S Range 35E NMPM Lea County	
Elevation (Show whether DF, RKB, RT, GR, etc.) 3623' DF	

11

Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ANBANDONMENT ☒
CASING TEST AND CEMENT JOB ☐
OTHER: ☐

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.

5/23/00 Notify OCD. MI & RU

5/24/00 RU for 2-1/16" tbg. LD tbg (118 jts). RIH & tag CIBP @ 3797'. Circ 10# mud. Spot 25 sx @ 2797 - 3500'. POH & spot 25 sx @ 2070'-1870'. POH. Close in well.

5/25/00 RIH & cut csg @ 385'. RIH & spot 55 sx @ 435'. POH & WOC. RIH & tag cmt @ 258'. POH & spot 10 sx @ surf. Cut off wellhead. Level Pit & cellar. Install dry hole marker. Move out.

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

SIGNATURE

Bonnie Atwater

TITLE Regulatory Tech

DATE

20
07-07-00

TYPE OR PRINT NAME Bonnie Atwater

TELEPHONE NO. 915/685-1761

(This space for State Use)

APPROVED BY

Johnny Robinson

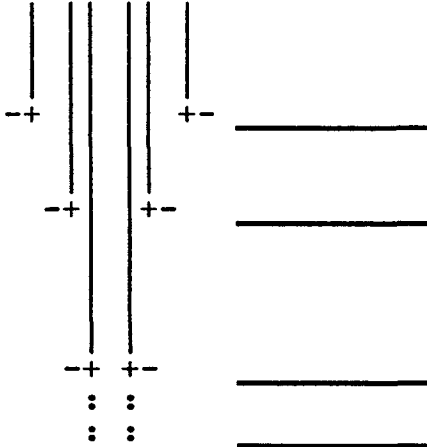
TITLE COMPLIANCE OFFICER

DATE

APR 03 2002

CONDITIONS OF APPROVAL, IF ANY:

WELL DATA SHEET



WELL NAME Well #105 FILE # 5401-05
 LSE NAME JFYSU LSE # E-1625
 LOC. D Sec 11 22S 35E 660 FNL 990 FWL
 API# 30002508583 STATUS Shut-in
 FIELD _____ Injector _____
 OIL PUR. _____ GAS _____

DRILL AND COMPLETE

Amerada
 ORIG. OP. State WE "J" #2
 GL _____ DF 3623 KB _____
 SPUD DATE 1/3/59 COMP. DATE 1/17/59
 TD 4025 PBTD 4019

TOPS: _____

CASING	HOLE SIZE	CASING	WT. GRADE	DEPTH SET	SKS	TOC
	12 1/4	8 5/8		336	250	
	7 7/8	5 1/2		4024	400	2995

COMPLETION

PERFS 2 bullet holes per ft. 3877-3900, 3904-07, 3912-18, 3924-38, 3946-66, 3978-4008. 750 gals 15% acid SOF w/20000 gals refined oil & 20000# sand & 200 ball sealers.

Pumped 107.64 bo, .86 bs&w, in 24 hrs. Gas 23.369 mcfpd.
 BOPD _____ BWPD _____ MCFPD _____ BHP _____

PERFS _____

BOPD _____ BWPD _____ MCFPD _____ BHP _____

REMEDIAL WORK AND WORKOVER

DATE 9/1/62 Work Converted to WIW

3/31/82 TA'd Inj.
 DATE _____ WORK _____

1/2 Mile Well Review #6

WELLBORE SCHEMATIC

Gulf Oil Corporation
#107 Jalmat Field Yates Sand Unit
660 FNL & 2310 FEL
B', Section 11-22s-35e
Lea County, New Mexico
Ground Elevation: 3,604'
Total Depth: 4,010 feet
API # 30-025-08596

Casing: 8 5/8"
Hole Size: 12 1/4"
Depth: 335'
Cement: 200 sx

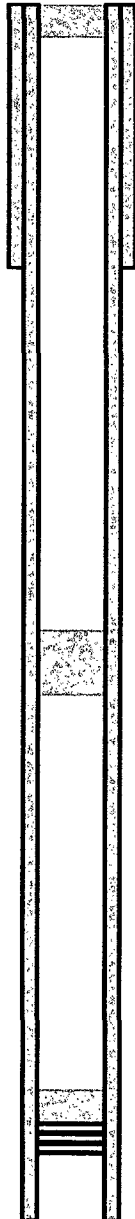
Plug #3 0 - 100' 10 sx

Casing: 5 1/2"
Hole Size: 7 7/8"
Depth: 4,010'
Cement: 350 sx

Plug #2 2008 - 1842' 15 sx

TD: 4,010'
7/10/1958

Plug #1 Top of BP 5 sx
CIBP 3,831'



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OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-85

5a. Indicate Type of Lease
State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.
E-8244

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. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- <u>Water Injection Well</u>	7. Unit Agreement Name
2. Name of Operator	8. Farm or Lease Name
<u>Gulf Oil Corporation</u>	
3. Address of Operator	9. Well No.
<u>Box 670, Hobbs, New Mexico 88240</u>	<u>107</u>
4. Location of Well	10. Field and Pool, or Wildcat
UNIT LETTER <u>B</u> , <u>660</u> FEET FROM THE <u>North</u> LINE AND <u>2310</u> FEET FROM	<u>Jalmat</u>
THE <u>East</u> LINE, SECTION <u>11</u> TOWNSHIP <u>22-S</u> RANGE <u>35-E</u> NMPM.	
15. Elevation (Show whether DF, RT, GR, etc.)	12. County
<u>3604' GL</u>	<u>Lea</u>

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

TEMPORARILY ABANDON ☐

PULL OR ALTER CASING ☐

OTHER ☐

PLUG AND ABANDON ☐

CHANGE PLANS ☐

OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐

COMMENCE DRILLING OPNS. ☐

CASING TEST AND CEMENT JOB ☐

OTHER ☐

ALTERING CASING ☐

PLUG AND ABANDONMENT ☐

Plugged and abandoned

17. 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.

4010' TD, 4004' PB.

Pulled producing equipment. Ran CI BP and set at 3831'. Loaded hole with gel water. Spotted 5 sack cement plug on top of BP. Spotted 15 sack cement plug from 2008' to 1842', across salt. Spotted 10 sack cement plug from 100' to surface. Installed dry hole marker and cleaned location. Plugged and abandoned June 18, 1974

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

SIGNED <u>[Signature]</u>	TITLE <u>Area Engineer</u>	DATE <u>June 18, 1974</u>
APPROVED BY <u>[Signature]</u>	TITLE <u>Geologist</u>	DATE <u>SEP 10 1974</u>
CONDITIONS OF APPROVAL, IF ANY:		

DATA SHEET

WELL NAME Well #107 FILE # 5401-07
 LSE NAME JFYSU LSE # E-8244
 LOC. B Sec 11 22S 35E 660 FNL 2310 FRL
 API# _____ STATUS P & A
 FIELD _____
 OIL PUR. _____ GAS _____

DRILL AND COMPLETE

British American Oil Corporation
 ORIG. OP. Hall State "F" #13
 GL 3604 DF 3613 KB 3616
 SPUD DATE 6/27/58 COMP. DATE 7/10/58
 TD 4010 PBTD 4004

TOPS: _____

CASING

HOLE SIZE	CASING	WT. GRADE	DEPTH SET	SKS	TOC
12 1/4	8 5/8		335	200	
7 7/8	5 1/2	14	4010	200 req. 150 sx	neat.

Cored 3848-98 and to TD. Core description in Well File.

PERFS 4/JSPF 3959-47, 3937-30, 3899-3913, 3883-96. 4 stage frac w/300
balls & SOF of 40000 gals oil & 40000# sand.

BOPD 358 in 17 hrs on 48/64" choke. BHP _____
4/29/59
 PERFS 3883-96, 3899-3913, 3930-37, 3947-59, 2 bullet shots/ft.

BOPD average production after perforating 42 bo & 5 bwpd.

REMEDIAL WORK AND WORKOVER

DATE 8/27/62 Work Converted to WIW. Perforated 3983-95 w/24 gram jets
 per foot, perf'd 3960-66, 3940-48, 3858-83 w/2 80 gram jets per
 foot. Buiberson L-30 packer set @ 3957. RIH w/plastic coated tbq. & began
 injection.
 Nov. 1969 Cleaned out, perforated & frac'd.

DATE 6/18/74 WORK 5 sxs on top of BP, 15 sx from 2008 to 1842, 10 sxs
from 100' to surface. Installed dry hole marker.

WELL INVENTORY:

TUBING _____
 RODS _____
 PUMP _____
 ANCHOR _____ SN _____
 PACKER _____
 PUMPING UNIT _____ ID# _____
 MOTOR _____ ID# _____
 WELLHEAD _____ METER # _____

REMARKS: _____

1/2 Mile Well Review #22

WELLBORE SCHEMATIC

Gulf Oil Corporation
#120 Jalmat Field Yates Sand Unit
660 FSL & 1650 FEL
O', Section 11-22s-35e
Lea County, New Mexico
Ground Elevation: 3,609'
Total Depth: 4,026 feet
API # 30-025-08585

Casing: 8 5/8"
Hole Size: 12 1/4"
Depth: NA
Cement: 225 sx

Plug #3 0 - 62' NA

Casing: 5 1/2"
Hole Size: 7 7/8"
Depth: 4,030'
Cement: 795 sx
TOC 1,790'

Plug #2 1260' - 1100' 16 sx

TD: 4,026'
4/1/1957

Plug #1 3712' - 3801' 10 sx
CIBP 3,801'



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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease
State ☒ Fee ☐

5. State Oil & Gas Lease No.

B-8244

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. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	7. Unit Agreement Name
2. Name of Operator	Jalmat Field Yates Sand Unit
3. Address of Operator	8. Farm or Lease Name
Box 670, Hobbs, New Mexico 88240	9. Well No.
4. Location of Well	120
UNIT LETTER 0, 660 FEET FROM THE South LINE AND 1650 FEET FROM	10. Field and Pool, or Wildcat
THE East LINE, SECTION 11 TOWNSHIP 22-S RANGE 35-E NMPM.	Jalmat
15. Elevation (Show whether DF, RT, GR, etc.)	12. County
3609' GL	Lea

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"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	

Plugged and abandoned

17. 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.

4026' PB, 4031' TD.

Pulled rods and tubing. Ran CI BP on 2-7/8" tubing and set BP at 3801'. Spotted 10 sack cement plug from BP to 3712'. Loaded 5-1/2" casing with 83 barrels of water containing 23 sacks of salt gel. Spotted 16 sack cement plug from 1260' to 1100', at top of salt. Spotted 62' cement plug from 62' to surface. Installed dry hole marker. Cleaned location. Plugged and abandoned March 30, 1973.

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

SIGNED H. J. Beazale TITLE Area Engineer DATE March 30, 1973
APPROVED BY John W. Remyan TITLE Geologist

WELL DATA SHEET

WELL NAME Well #120 FILE # 5401-20
 LSE NAME JFYSU LSE # E-8244
 LOC. 0 Sec 11 22S 35E 660 FSL 1650 FEL
 API# _____ STATUS P & A
 FIELD _____
 OIL PUR. _____ GAS _____

DRILL AND COMPLETE

British American Oil
 ORIG. OP. Hall State "F"
 GL 3609 DF 3618 KB 3620
 SPUD DATE 3/21/57 COMP. DATE 4/1/57
 TD 4031 PBTD 4026

TOPS: _____

CASING

HOLE SIZE	CASING	WT. GRADE	DEPTH SET	SKS	TOC
12 1/4	8 5/8			225	
7 7/8	5 1/2	14	4030		1790
809 cu. ft. + 100 sx neat.					

COMPLETION

4/3/57
 PERFS 3982-94/GR 4jets/ft. SOF 10000 gals. oil & 10000# sand.
 4/9/57 Perf'd 3910-22, 3929-44, 3966-76 w/4 35 GM jets/ft. SOF dn. csq. 4
 stages total of 30000 gals. oil, 30000# sand, 180 ball sealers, flushed w/
 145 BO.
 10/5/57 After load recovered produced @ rate of 28 BOPD, 2 BW in 24 hrs. gas
 volume 11.3 MCFPD, GOR 262:1.
 9/5/64
 PERFS 2/24 gram JSPF 3860-70 GR. SOF 42000 gals refined oil & 63000# 20/40
 mesh sand

BOPD _____ BHPD _____ MCFPD _____ BHP _____

REMEDIAL WORK AND WORKOVER

DATE _____ Work _____

 DATE March 1973 WORK POOH. Set BP @ 3801' spotted 10 sx cmt plug from BP
 to 3712', loaded csq w/83 bbls. water & salt gel, 16 sx plug 1260-1100.
 Spotted 62' cmt plug from 62' to surf, installed dry hole marker.

WELL INVENTORY:

TUBING _____
 RODS _____
 PUMP _____
 ANCHOR _____ SN _____
 PACKER _____
 PUMPING UNIT _____ ID# _____
 MOTOR _____ ID# _____
 WELLHEAD _____ METER # _____

REMARKS:

1/2 Mile Well Review #26

WELLBORE SCHEMATIC

Gulf Oil Corporation
#117 Jalmat Field Yates Sand Unit
660 FSL & 1980 FWL
N', Section 12-22s-35e
Lea County, New Mexico
Ground Elevation: 3606
Total Depth: 3,908 feet
API # 30-025-35427

Casing: 8 5/8"
Hole Size: 12 1/4"
Depth: 292'
Cement: 255 sx

Plug #3 0 - 100' 15 sx

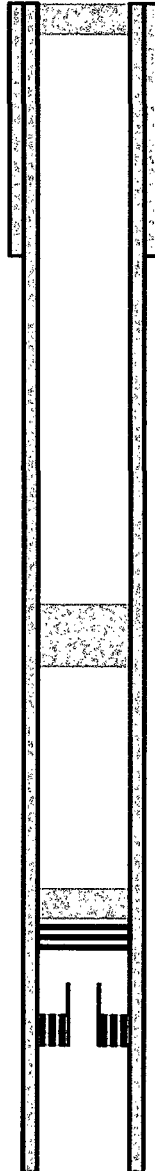
Casing: 5 1/2"
Hole Size: 7 7/8"
Depth: 3,907'
Cement: 600 sx

Plug #2 2001 - 1849 15 sx

Plug #1 Top of BP 5 sx
CIBP 3,639'

Could not pull tubing - cut and recovered
3,713', leaving 10' tubing and packer in hole.

TD: 3,908'
1/11/1957



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OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-85

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
E-2682	
7. Unit Agreement Name	
8. Farm or Lease Name	
9. Well No.	
117	
10. Field and Pool, or Wildcat	
Jalmar	
12. County	
Lea	

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. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- <input checked="" type="checkbox"/>	Water Injection Well Jalmar Field Yates Sand Unit
2. Name of Operator	Gulf Oil Corporation
3. Address of Operator	Box 670, Hobbs, New Mexico 88240
4. Location of Well	UNIT LETTER N, 660 FEET FROM THE South LINE AND 1980 FEET FROM THE West LINE, SECTION 12 TOWNSHIP 22-S RANGE 35-E NMPM.
15. Elevation (Show whether DF, RT, GR, etc.)	3606' GL

16.

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>

SUBSEQUENT REPORT OF:

REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
CASING TEST AND CEMENT JOBS <input type="checkbox"/>	OTHER <input type="checkbox"/>

Plugged and abandoned.

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

3908' TD, 3900' PB.

Could not pull tubing. Cut and recovered 2-1/16" tubing from 3713', leaving 10' tubing and packer in hole. Ran CI BP and set at 3639'. Loaded hole with gel water. Spotted 5 sack cement plug on top of BP. Spotted 15 sack cement plug from 2001' to 1849', across salt. Spotted 15 sack cement plug from 100' to surface. Installed dry hole marker and cleaned location. Plugged and abandoned June 18, 1974.

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

SIGNED <u>B. Barba</u>	TITLE <u>Area Engineer</u>	DATE <u>June 18, 1974</u>
APPROVED BY <u>John W. Penney</u>	TITLE <u>Geologist</u>	DATE <u>SEP 18 1974</u>
CONDITIONS OF APPROVAL, IF ANY:		

WELL DATA SHEET

WELL NAME Well #117 FILE # 5401-17
 LSE NAME JFYSU LSE # E-2682
 LOC. N Sec 12 22S 35E 660 FSL 1980 FWL
 API# _____ STATUS P & A
 FIELD _____
 OIL PUR. _____ GAS _____

DRILL AND COMPLETE

Carper Drilling Co. Randall #3
 ORIG. OP. British American Oil
 GL 3606 DF _____ KB 3616
 SPUD DATE 1/1/57 COMP. DATE 1/11/57
 TD 3908 KB PBTD 3900 KB

TOPS: _____

CASING

HOLE SIZE	CASING	WT. GRADE	DEPTH SET	SKS	TOC
	8 5/8	24	292 KB	255	
	5 1/2	15.5	3907 KB	600	

COMPLETION

PERFS 4/SPF 3812-18, 3824-28, 3834-42 KB. SOF w/10000 gals lease crude,
 15000# sand & 1000# Adomite preceded by 250 gals MCA.

BOPD _____ BWPD _____ MCFPD _____ BHP _____

PERFS _____

BOPD _____ BWPD _____ MCFPD _____ BHP _____

REMEDIAL WORK AND WORKOVER

DATE 8/27/62 Work Converted to WIW. Perf'd 3794-3810, w/2 90 gram jet
charges/ft., 3740-3772 4/24 gram jet charges/ft. Frac treat 3740-72 w/BP @
3785, 30000 gals water & 50000# sand in 2 stages separated by ball sealers.
Set tbq @ 3723.36' KB.

DATE June 1974 WORK Left 10' tbq and pkr in hole. Set BP @ 3639 & spotted
5 sx plug on top. Spotted 15 sx plug from 2001-1849, 15 sx plug from 100'
to surface. Installed dry hole marker.

WELL INVENTORY:

TUBING _____

RODS _____

PUMP _____

ANCHOR _____ SN _____

PACKER _____

PUMPING UNIT _____ ID# _____

MOTOR _____ ID# _____

WELLHEAD _____ METER # _____

REMARKS: _____

Analytical Laboratory Report for:

**MELROSE OPERATING
COMPANY****BJ Unichem
Chemical Services**

UNICHEM Representative: Hanson, Lavell

Production Water Analysis

Listed below please find water analysis report from: Jalmat Sand Unit, IPD

Lab Test No: 2003144500 Sample Date: 11/03/2003

Specific Gravity: 1.054

TDS: 80968

pH: 7.50

Cations:	mg/L	as:
Calcium	2860	(Ca ⁺⁺)
Magnesium	3066	(Mg ⁺⁺)
Sodium	27413	(Na ⁺)
Iron	9.00	(Fe ⁺⁺)
Barium	2.40	(Ba ⁺⁺)
Strontium	58.30	(Sr ⁺⁺)
Manganese	1.04	(Mn ⁺⁺)
Anions:	mg/L	as:
Bicarbonate	708	(HCO ₃ ⁻)
Sulfate	1650	(SO ₄ ⁻)
Chloride	45200	(Cl ⁻)
Gases:		
Carbon Dioxide	60	(CO ₂)
Hydrogen Sulfide	68	(H ₂ S)

MELROSE OPERATING
COMPANY

Lab Test No: 2003144500



DownHole SAT™ Scale Prediction
@ 104 deg. F

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO ₃)	19.99	.784
Aragonite (CaCO ₃)	16.89	.757
Witherite (BaCO ₃)	.00324	-22.85
Strontianite (SrCO ₃)	.486	-1.17
Magnesite (MgCO ₃)	26.49	.652
Anhydrite (CaSO ₄)	.719	-93.49
Gypsum (CaSO ₄ *2H ₂ O)	.759	-50.84
Barite (BaSO ₄)	5.82	1.18
Celestite (SrSO ₄)	.149	-156.1
Silica (SiO ₂)	0	-51.94
Brucite (Mg(OH) ₂)	.00494	-.216
Magnesium silicate	0	-121.19
Siderite (FeCO ₃)	83.53	.918
Halite (NaCl)	.02	-164080
Thenardite (Na ₂ SO ₄)	< 0.001	-77685
Iron sulfide (FeS)	656.12	4.79

Interpretation of DH8at Results:

The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The scale is logarithmic, i.e. a Saturation Index of 3 is 10 times more saturated than a value of 2.

The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) infinity to positive (precipitating) infinity. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

.O.BOX 2187
HOBBS, N.M. 88240



PHONE: (505) 393-7726

W A T E R A N A L Y S I S R E P O R T

Report for: John Pool
cc: Chuck Morgan
cc: Cam Robbins
cc:
Company: SDX Resources , Inc.
Address:
Service Engineer: John Cornwell

Date sampled: 02/23/95
Date reported: 03/01/95
Lease or well # : JalMat #113
County: State:
Formation:
Depth:
Submitted by: John Cornwell

CHEMICAL COMPOSITION :	mg/L	meq/L
Chloride (Cl)	4000	113
Iron (Fe) (total)	1.0	
Total hardness	1500	
Calcium (Ca)	320	16
Magnesium (Mg)	170	14
Bicarbonates (HCO ₃)	414	7
Carbonates (CO ₃)	0	
Sulfates (SO ₄)	540	11
Hydrogen sulfide (H ₂ S)	0	
Carbon dioxide (CO ₂)	0	
Sodium (Na)	2327	101
Total dissolved solids	7773	
Barium (Ba)	n/a	
Strontium (Sr)	n/a	
Specific Gravity	1.005	
Density (#/gal.)	8.375	
pH	7.080	
IONIC STRENGTH	0.15	

Stiff-Davis (CaCO₃) Stability Index :
SI = pH - pCa - pAlk - K

SI @ 86 F = +0.20
104 F = +0.42
122 F = +0.66
140 F = +0.91
158 F = +1.18

This water is 2406 mg/l (-79.35%) under ITS CALCULATED
CaSO₄ saturation value at 82 F.
SATURATION= 3032 mg/L PRESENT= 626 mg/L

REPORTED BY JOY DUNCAN 

LAB TECHNICIAN

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a
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

November 6 2003
and ending with the issue dated

November 6 2003

Kathi Bearden

Publisher

Sworn and subscribed to before

me this 6th day of

November 2003

Sonya M. Stevens

Notary Public.

My Commission expires
November 27, 2004
(Seal)

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.

LEGAL NOTICE
November 6, 2003

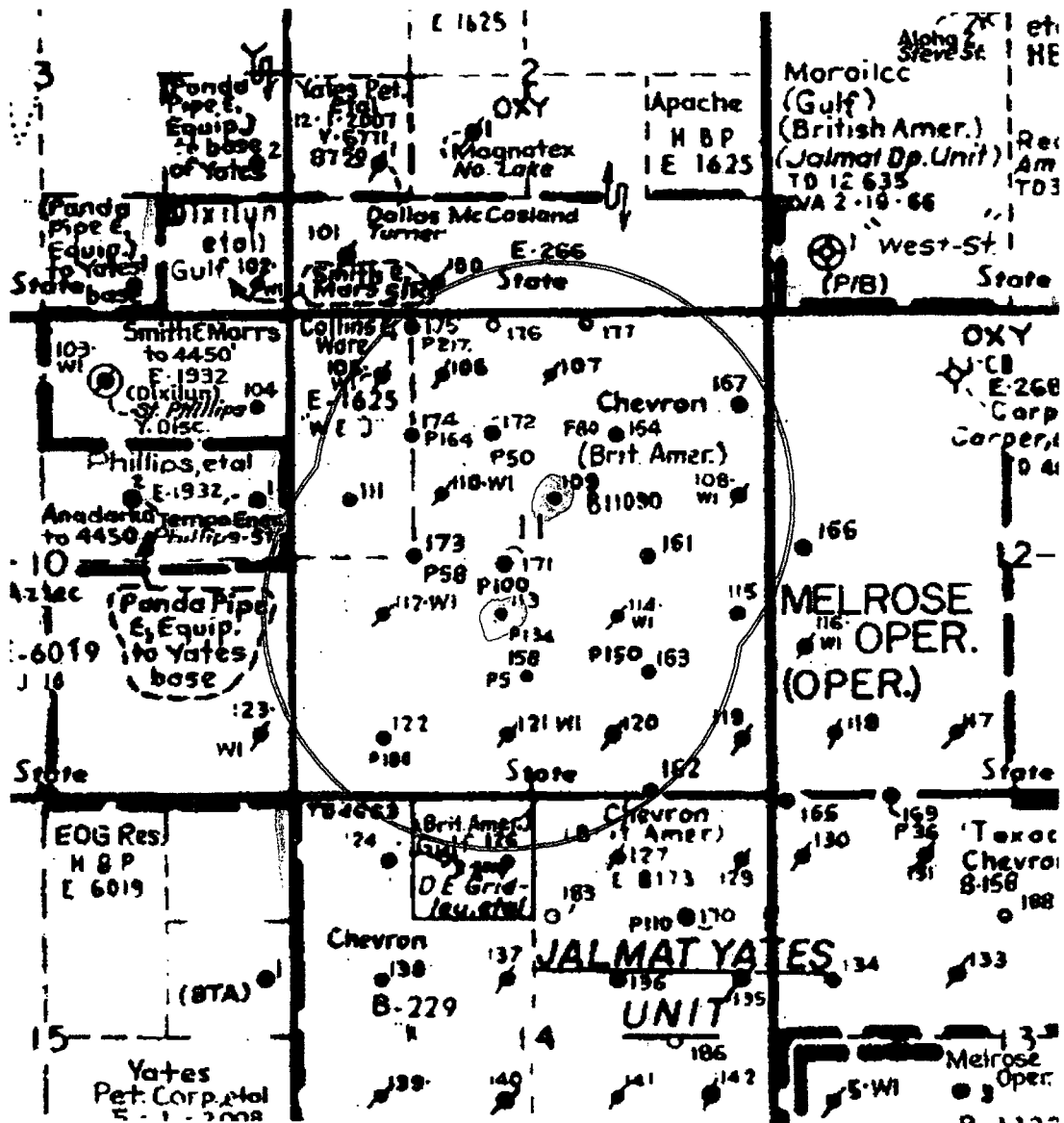
Notice of Application for
Fluid Injection Well Permit

Melrose Operating Company, PO Box 953, Midland, TX 79702 contact Ann Ritchie (432) 684-6381 is seeking administrative approval from the New Mexico Oil Conservation Division to complete the following two wells for fluid injection: 1) Jalmat Field Yates Sand Unit Well #109 located in Section 11, T22S, R35E, 1980 FNL & 2310 FEL, Lea County, NM. Proposed injection interval is in the Jalmat with perforations from 3876-3972' with a maximum daily injection volume of produced formation water at 1000 bbls per day with a maximum injection pressure of 1925#. 2) Jalmat Field Yates Sand Unit Well #113 located in Section 11, T22S, R35E, 1980FSL & 2310 FWL, Lea County, NM proposed injection interval is in the Jalmat with perforations from 3893-4018' with a maximum daily injection volume of produced formation water at 1000 bbls per day with a maximum injection pressure of 1925#. Interested parties must file objections or requests for hearing with the New Mexico Oil Conservation Division, 2040 S Pacheco, Santa Fe, New Mexico 87505 with 15 days of this notice.
#20228

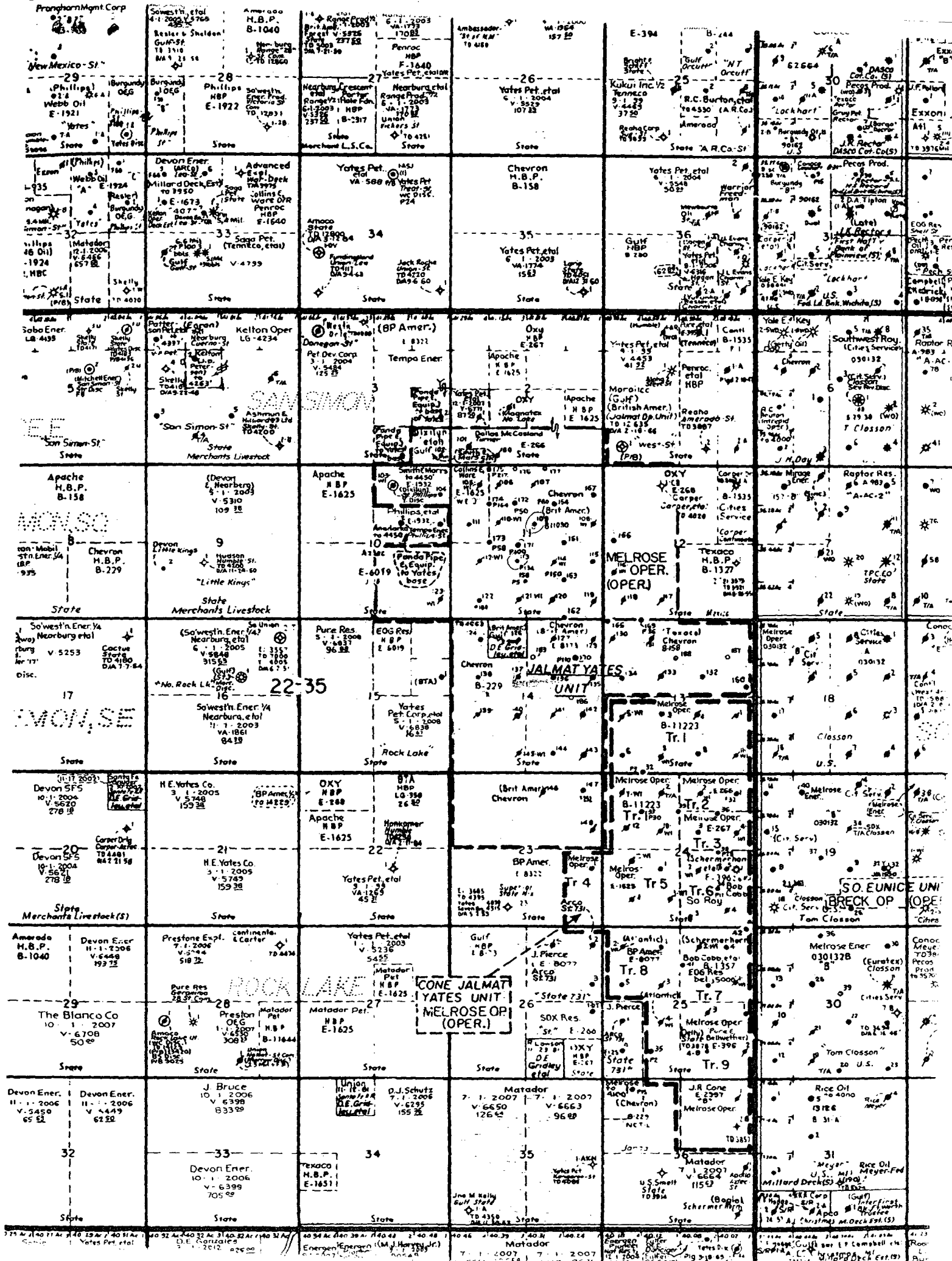
67100851000

67517845

West Texas Oil Reports
PO Box 953
MIDLAND, TX 79702



NOTIFICATION OF OFFSET OPERATORS



U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

Postage	\$.60
Certified Fee	2.30
Return Receipt Fee (Endorsement Required)	1.75
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 4.65

Postmark
Here

Name (Please Print Clearly) (To be completed by mailer)

Tempo Energy

Street, Apt. No.; or PO Box No.

PO Box 9515

City, State, ZIP+ 4

Midland, TX 79702

PS Form 3800, July 1999

See Reverse for Instructions

7099 3220 0005 1117 2278

U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

Postage	\$.60
Certified Fee	2.30
Return Receipt Fee (Endorsement Required)	1.75
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 4.65

Postmark
Here

Name (Please Print Clearly) (To be completed by mailer)

Mr. John Pearson

Street, Apt. No.; or PO Box No.

PO Box 1166

City, State, ZIP+ 4

Carlsbad, NM 88221

PS Form 3800, July 1999

See Reverse for Instructions

0220 2117 5000 0220 6602