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W. Thomas Kellahin
Karen Aubrey

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Post Office Box 2265
Santa Fe, New Mexico 87504-2265

Telephone 982-4285
Area Code 505

September 27, 1984

RECEIVED

OCT 3 - 1984

OIL CONSERVATION DIVISION

Mr. Richard L. Stamets
Acting Director
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

"Hand Delivered"

Re: Gulf Oil Exploration and Production Company

Dear Mr. Stamets

Case 83 98

On behalf of Gulf, please find enclosed the following three applications:

- (1) Application of Gulf Exploration and Production Corporation for Statutory Unitization, Eunice Monument South Unit, Lea County, New Mexico;
- (2) Application of Gulf Exploration and Production Company for Authority to Institute a Waterflood Project for the Eunice Monument South Unit, Lea County, New Mexico; and
- (3) Application of Gulf Exploration and Production Corporation for Extension of the Vertical Limits of the Eunice-Monument Oil Pool underlying the Eunice Monument South Unit, Lea County, New Mexico.

Also, in connection with the Waterflood Project Application, please find enclosed the completed Division Order C-108 with enclosures.

I would appreciate you scheduling this applications for a Commission hearing on November 8, 1984. If that date is not convenient for you, please let me know so that we can discuss an alternate date.

Best regards,



W. Thomas Kellahin

WTK:ca
Enc.

KELLAHIN and KELLAHIN

Mr. Richard L. Stamets
September 27, 1984
Page 2

cc: John Frank
Gulf Oil Corporation
P. O. Box 1150
Midland, Texas 79702

David Berlin
Gulf Oil Corporation
P. O. Box 1150
Midland, Texas 79702

Gulf Oil Exploration and Production Company

WESTERN DIVISION

L. A. Turner
GENERAL MANAGER
U.S. PRODUCTION OPERATIONS

P. O. Drawer 1150
Midland, TX 79702

September 24, 1984

RECEIVED

OCT 3 - 1984

State of New Mexico
Department of Energy and Minerals
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

OIL CONSERVATION DIVISION

Attention: Mr. R. L. Stamets, Acting Director

Case 8398

Gentlemen:

Re: Applications for Commissioners'
Hearing for
Eunice Monument South Unit,
Lea County, New Mexico

Gulf Oil Corporation respectfully requests that our attached applications concerning the proposed Eunice Monument South Unit, Lea County, New Mexico, be set for the earliest scheduled Commissioners' Hearing in November, 1984. The attached applications, each for separate docketing, are for Statutory Unitization, Authority to Institute a Waterflood Project, and the Extension of the Vertical Limits of the Eunice-Monument Oil Pool for the proposed Eunice Monument South Unit.

The proposed Eunice Monument South Unit area consists of 14,189.84 acres, more or less, comprising approximately 357 40-acre units divided into 101 individual tracts. The proposed vertical interval to be unitized shall include the formations from a lower limit defined by the base of the San Andres formation, to an upper limit defined by the top of the Grayburg formation or a -100 foot subsea datum, whichever is higher.

The purpose for forming the Eunice Monument South Unit is to provide for secondary recovery operations to substantially increase the ultimate recovery of oil and gas. Gulf projects that, as a result of unitized management, operation and further development of the "Unitized Interval" within the "Unit Area", the ultimate production will increase by approximately 64.2 million barrels of oil over a 30 year flood life.

To establish an effective and manageable waterflood project, the contraction of the vertical limits of the Eumont Gas Pool and the upward extension of the vertical limits of the Eunice-Monument Oil Pool under the proposed Unit Area is needed. This will allow for a more controllable waterflood of the entire oil column within the



A DIVISION OF GULF OIL CORPORATION

Unitized Interval, thereby preventing waste and protecting correlative rights.

Submitted and attached to the enclosed applications are copies of the Unit Agreement and Unit Operating Agreement, various plats of the Unit Area, a table detailing ownership of oil and gas interests, percentages and participations in the Unit, a well log showing the vertical limits of the Unitized Interval, the OCD Form C-108, wellbore configurations of proposed injection wells, geologic data, fresh water source data, and schematic diagrams and other pertinent well data on all wells within the Unit boundary and one-half mile outside the Unit boundary.

The working interest owners, operators, and surface land owners within the Unit Area, as well as offset operators, the Commissioner of Public Lands of the State of New Mexico, and the District Director of the Bureau of Land Management are being notified of this request by a copy of this letter, a Unit Area plat, and each of the applications without their attachments.

Your consideration and granting of the attached applications for a Commissioners' Hearing in November, 1984, regarding the proposed Eunice Monument South Unit, will be greatly appreciated. If you should need additional information or have any questions concerning this, please contact Mr. D. T. Berlin at (915) 687-7339 or Mr. A. W. Bohling at (915) 687-7336.

Yours very truly,

A handwritten signature in black ink, appearing to read "L. A. Turner". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

L. A. TURNER

AWB:ac

Enclosures

cc: Enclosed List
W. Thomas Kellahin
P. O. Box 2265
Santa Fe, New Mexico 87501

STATE AND FEDERAL AGENCIES

United States Department of the Interior
Bureau of Land Management
Roswell District Office
P. O. Box 1397
Roswell, New Mexico 88201

Attention: Mr. Roy Stovall

State of New Mexico
Commissioner of Public Lands
P. O. Box 1148
Santa Fe, New Mexico 87504

Attention: Mr. Jim Baca

State of New Mexico
Department of Energy and Minerals
Oil Conservation Division
District 1
P. O. Box 1980
Hobbs, New Mexico 88240

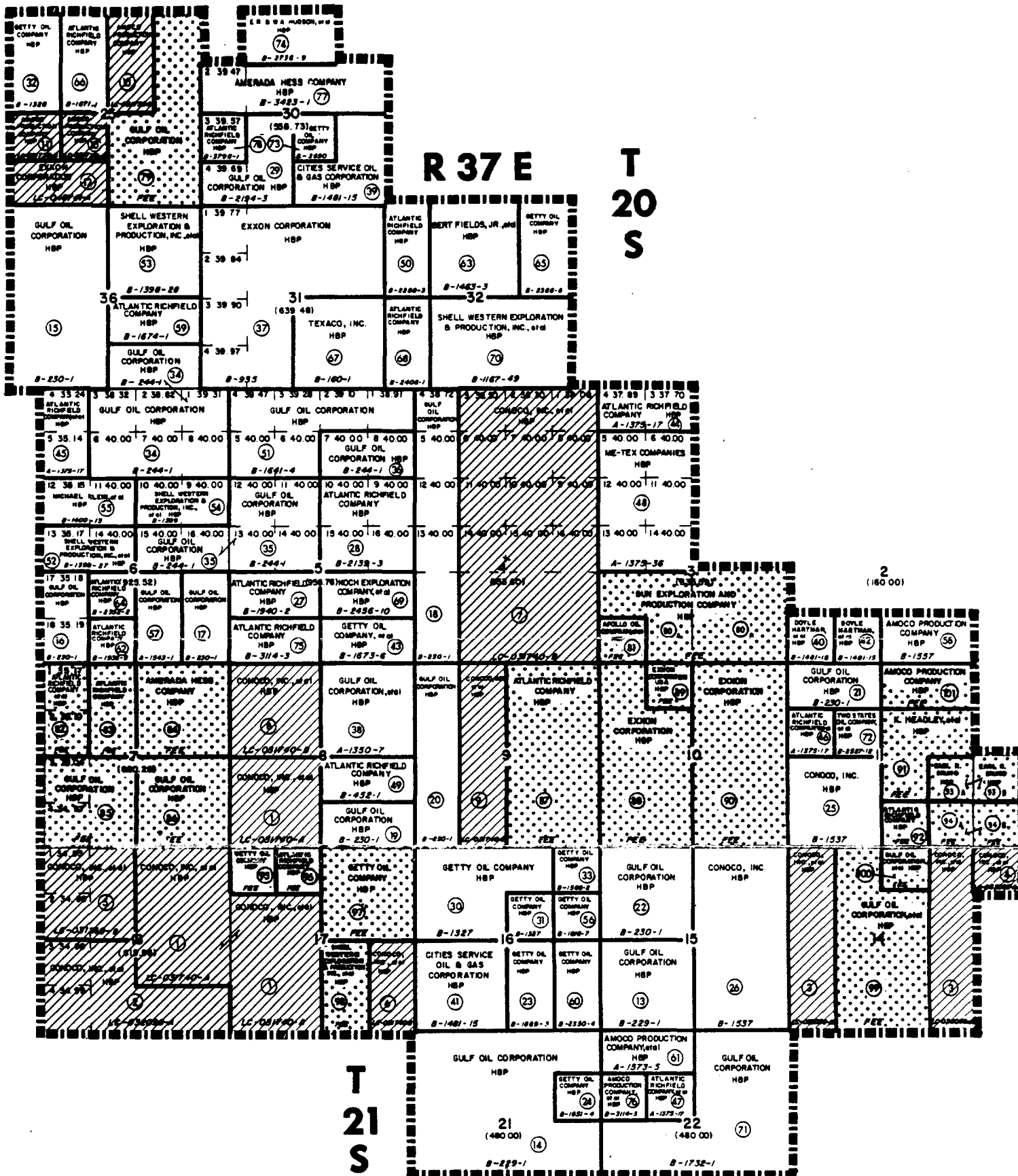
Attention: Mr. Jerry Sexton

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

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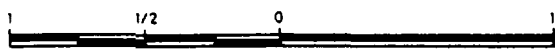


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	ACREAGE	PERCENTAGE
	FEDERAL LANDS	2,734.76 19.27 %
	STATE LANDS	8,274.80 58.32 %
	PATENTED LANDS	3,180.28 22.41 %
	TOTAL	14,189.84 100.00 %

UNIT OUTLINE (3) TRACT NUMBER



SCALE IN MILES

NOTE: UNLESS OTHERWISE INDICATED, THE VARIOUS SECTIONS ON THIS PLAT CONTAIN 640.00 ACRES

EXHIBIT "1"

EUNICE MONUMENT SOUTH UNIT AREA

LEA COUNTY, NEW MEXICO

GULF OIL CORPORATION
MIDLAND, TEXAS

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY AND MINERALS
OIL CONSERVATION DIVISION

RECEIVED

OCT 3 - 1984

OIL CONSERVATION DIVISION

APPLICATION OF GULF OIL CORPORATION
FOR AUTHORITY TO INSTITUTE A
WATERFLOOD PROJECT FOR THE
EUNICE MONUMENT SOUTH UNIT
LEA COUNTY, NEW MEXICO

Case No. 8398

A P P L I C A T I O N

Gulf Oil Corporation hereby applies to the New Mexico Oil Conservation Commission for an order authorizing Gulf to institute a waterflood project for the Eunice Monument South Unit, Lea County, New Mexico, and in support of its application states:

1. Gulf Oil Corporation (Gulf) is a Pennsylvania corporation authorized to transact business in the State of New Mexico, and is engaged in the business of, among other things, producing and selling oil and gas.

2. The proposed area (the "Project Area") for which application is made is known as the Eunice Monument South Unit and consists of 14,189.84 acres, more or less, in Lea County, New Mexico, and is more particularly shown in Exhibit No. 1 attached hereto and incorporated herein by reference. Gulf proposes to seek an order pursuant to the New Mexico Statutory Unitization Act providing for the unitized management, operation and further development of the Project Area.

3. By converting certain presently producing wells to water injection wells and by drilling new water injection wells, Gulf proposes to inject fluids into the producing interval which shall include the formations which extend from an upper limit described as 100 feet below

mean sea level or at the top of the Grayburg formation, whichever is higher, to a lower limit at the base of the San Andres formation. The geologic markers have been previously found by the Oil Conservation Division to occur at 3,666 feet and 5,283 feet, respectively, in Continental Oil Company's Meyer B-4 Well No. 23 (located at 660 feet FSL and 1,980 feet FEL of Section 4, T-21-S, R-36-E, Lea County, New Mexico) and as recorded on the Welex Acoustic Velocity Log taken on October 30, 1962, said log being measured from a kelly drive bushing elevation of 3,595 feet above sea level. A copy of the Welex Acoustic Velocity Log for said well on said date is attached hereto and incorporated herein by reference as Exhibit No. 2. Also attached hereto and incorporated herein by reference as Exhibit No. 3 is a Well Status Map of the Eunice Monument South Unit Area showing the location and current status of all wells and leases located within the project area as well as those that are located within a two mile radius of the Unit Area. It also shows the proposed well numbering system within the Unit. Also attached hereto and incorporated herein by reference is Exhibit No. 4 which is a Well Status Map of the Eunice Monument South Unit which also shows the proposed well numbering system and the proposed Unit injection wells. Regarding both Exhibit No. 3 and Exhibit No. 4 and attached hereto and incorporated herein by reference as Exhibit No. 5 is a computer printout relating current and proposed well data on each individual well within the Unit Area. Diagrammatic sketches illustrating the wellbore configurations typical of the majority of the proposed injection wells and showing the manner in which the wells will be equipped for injection are attached hereto and incorporated herein by reference as Exhibit No. 6. All the available well logs of the proposed

injection wells are currently on file with the Oil Conservation Division. Attached hereto and incorporated herein by reference as Exhibit No. 7 is a list of those injection wells for which well logs are not available.

4. Well data sheets and schematic diagrams on all wells located within one-half mile radius of the proposed injection wells showing all casing strings, setting depths, sacks of cement used, cement tops, total depth, producing interval, well identification, and location are attached hereto and incorporated herein by reference as Exhibit No. 8. Included in this attachment are schematics of all plugged and abandoned wells located within a one-half mile radius of the proposed injection wells.

5. Initially, water to be used for injection for the waterflood project will come from the San Andres formation. As production increases, and the number of injection wells, it is expected that produced water will become the primary source of injected water supplemented by water from the San Andres formation.

6. Water is to be injected at a surface pressure not to exceed 0.2 psi per foot of depth to the top of the injection zone provided that surface pressure in excess of 0.2 psi per foot of depth to injection zone may be applied upon administrative approval of the Director of the Oil Conservation Division after showing that such higher pressure will not result in fracturing of the confining strata.

7. Furthermore, filed with this application is Division Form C-108 with attachments, which is incorporated herein by reference as Exhibit No. 9.

8. Approval of this application for the Eunice Monument South Unit waterflood project will substantially increase recoverable reserves thereby preventing waste.

WHEREFORE, Gulf respectfully requests that this application be set for hearing before the Oil Conservation Commission at the earliest practicable date and that the Commission enter its order approving the waterflood project for the Eunice Monument South Unit.

Kellahin & Kellahin

By



W. Thomas Kellahin
P. O. Box 2265
Santa Fe, New Mexico 87501

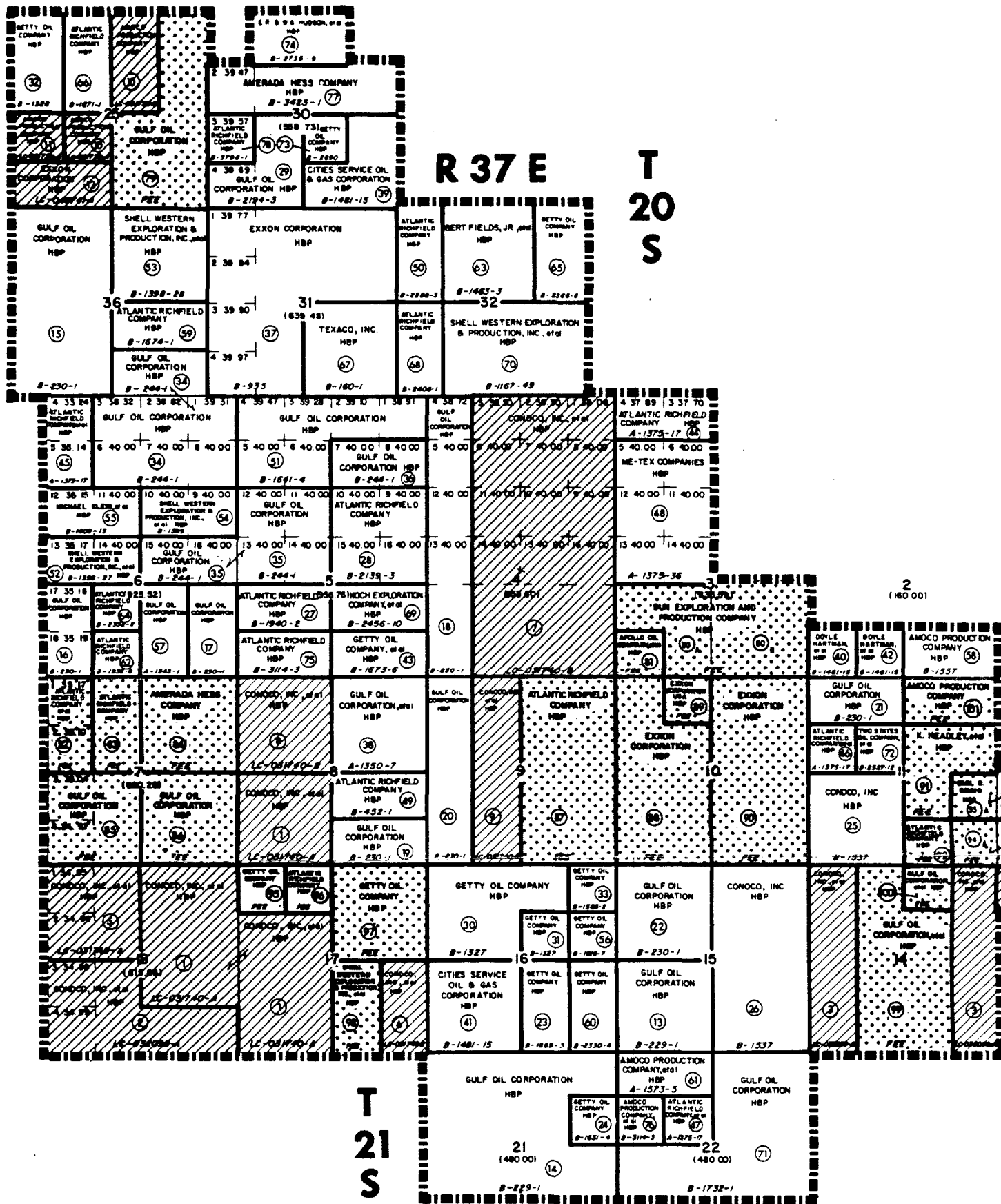
Attorneys for Gulf Oil Corporation

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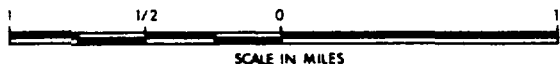


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EXHIBIT "1"

EUNICE MONUMENT SOUTH UNIT AREA

LEA COUNTY, NEW MEXICO

GULF OIL CORPORATION
MIDLAND, TEXAS

		ACOUSTIC VELOCITY LOG	
COMPANY CONTINENTAL OIL COMPANY			
WELL MEYER B-4 # 23			
FIELD OIL CENTER-BLINEBRY			
COUNTY LEA STATE NEW MEXICO			
Location 660'FSL 1980'FEL		Other Services Guard	
Sec. 4 Twp 21-S Rge 36-E			
Permanent Datum Bradenhead Flg. 3554		Elev. 3595	
Log Measured From K. B. 11		Pt. Above Perm Datum DF 3594	
Drilling Measured From Kelly Bushing		G.I.	
Date	10-30-62		
Run In	One		
Depth Driller	6350		
Depth Wellb.	6362		
Ann. Loss Int.	6:58		
Ann. Loss Int.	Surf		
Cement Driller	5/8" 1305		
Cement Wellb.			
Bit Size	7-7/8"		
Type Fluid in Hole	Mud		
Depth	9.2 89		
Sp. 1 Fluid Loss	10.2		
Source of Sample	Circulated		
R ₁ @ 100' Temp	16 @ 80°F		
R ₂ @ 100' Temp	13 @ 70°F		
R ₃ @ 100' Temp	10 @ 80°F		
Source R ₁ , R ₂	Measured		
R ₁ @ 50'	115 @ 12°F		
Temp Since Circ			
Ann. Rec Temp	112°F @ BH		
Equip Location	7121 Hobbs		
Recorded By	E. Pharr		
Witnessed By	Dr. Levine		

Reproduced By
West Texas Electrical Log Service
 Dallas 2, Texas

REFERENCE W2483M



16 COMPLETION RECORD

EXHIBIT "2"

Application For
 WATERFLOOD PROJECT

EUNICE MONUMENT SOUTH UNIT
 Lea County, New Mexico

GULF OIL CORPORATION
 Midland, Texas