



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

June 17, 1997

Bristol Resources Corporation
6655 South Lewis
Suite 200
Tulsa, Oklahoma 74136

Re: Gregory El Paso Federal Well No. 4
Unit K, Section 33, T-25S, R-37E,
Lea County, New Mexico

Attention: Ms. Lori Livingston

Dear Ms. Livingston:

In an effort to update our records concerning the Gregory El Paso Federal Well No. 4, the Division is requesting that you supply the following described information:

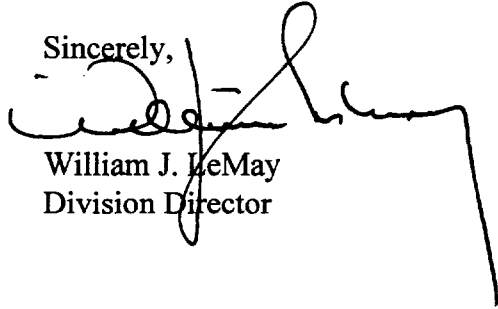
A description and analysis of the fluid being injected into the commercially operated Gregory El Paso Federal Well No. 4. This includes an analysis of each and every water source and a description of its point of origin (i.e. San Andres produced water from the Grayburg-Jackson Pool). In addition, this includes water delivered to the well by pipeline and truck.

Division and Federal UIC Rules and Regulations require that all operators of disposal wells provide source water analysis at a reasonable frequency. Our records indicates that the Gregory El Paso Federal Well No. 4 was permitted by Union Texas Petroleum Corporation in October, 1981. Our records further indicate that the well was originally proposed to be utilized to dispose of produced water only from the Devonian formation.

Please provide the information requested within 60-days from the date of this letter. If you need additional time, or you wish to discuss the matter further, please contact Mr. David Catanach at (505) 827-8184.

Failure to comply may result in the imposition of fines and/or the termination of injection authority.

Sincerely,

A handwritten signature in black ink, appearing to read 'William J. LeMay', with a long horizontal stroke extending to the right.

William J. LeMay
Division Director

xc: File-SWD-240 /
OCD-Hobbs
UIC Enforcement File



Union Texas Petroleum Corporation

1300 Wilco Building
Midland, Texas 79701

State Of New Mexico
Energy and Minerals Department
P.O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

ATTN: Oscar Simpson III

RE: Saltwater Disposal Well
Gregory El Paso Federal #4
Sec 33, Township 25 South
Range 37 East, Lea County - New Mexico

Dear Mr. Simpson:

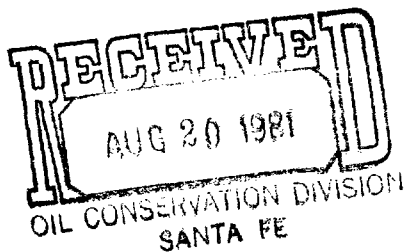
As per your request please find attached addition information in regard to the above well.

- 1.) Analysis of fluid.
- 2.) Diagram of injection well.
- 3.) Summary of all wells within one half mile of subject well.
- 4.) Corrected C-108.

Sincerely,

A handwritten signature in cursive script that reads 'Billie Hood'.

Billie Hood
Regulatory Analyst



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

RESULT OF WATER ANALYSES

TO: Ms. Billie Hood
1300 Wilco Building, Midland, Texas

LABORATORY NO. 881108
SAMPLE RECEIVED 8-12-81
RESULTS REPORTED 8-13-81

COMPANY Union Texas Petroleum Corp. LEASE Gregory El Paso Federal Salt Water
FIELD OR POOL _____ Disposal
SECTION _____ BLOCK _____ SURVEY _____ COUNTY Lea STATE NM
SOURCE OF SAMPLE AND DATE TAKEN: _____

NO. 1 Produced water - taken from Gregory El Paso Federal SWD 8-11-81

NO. 2 _____

NO. 3 _____

NO. 4 _____

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0663			
pH When Sampled				
pH When Received	7.0			
Bicarbonate as HCO ₃	305			
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	14,200			
Calcium as Ca	4,560			
Magnesium as Mg	680			
Sodium and/or Potassium	28,310			
Sulfate as SO ₄	1,818			
Chloride as Cl	52,199			
Iron as Fe	7.0			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	87,872			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	37.5			
Resistivity, ohms/m at 77° F.	0.103			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

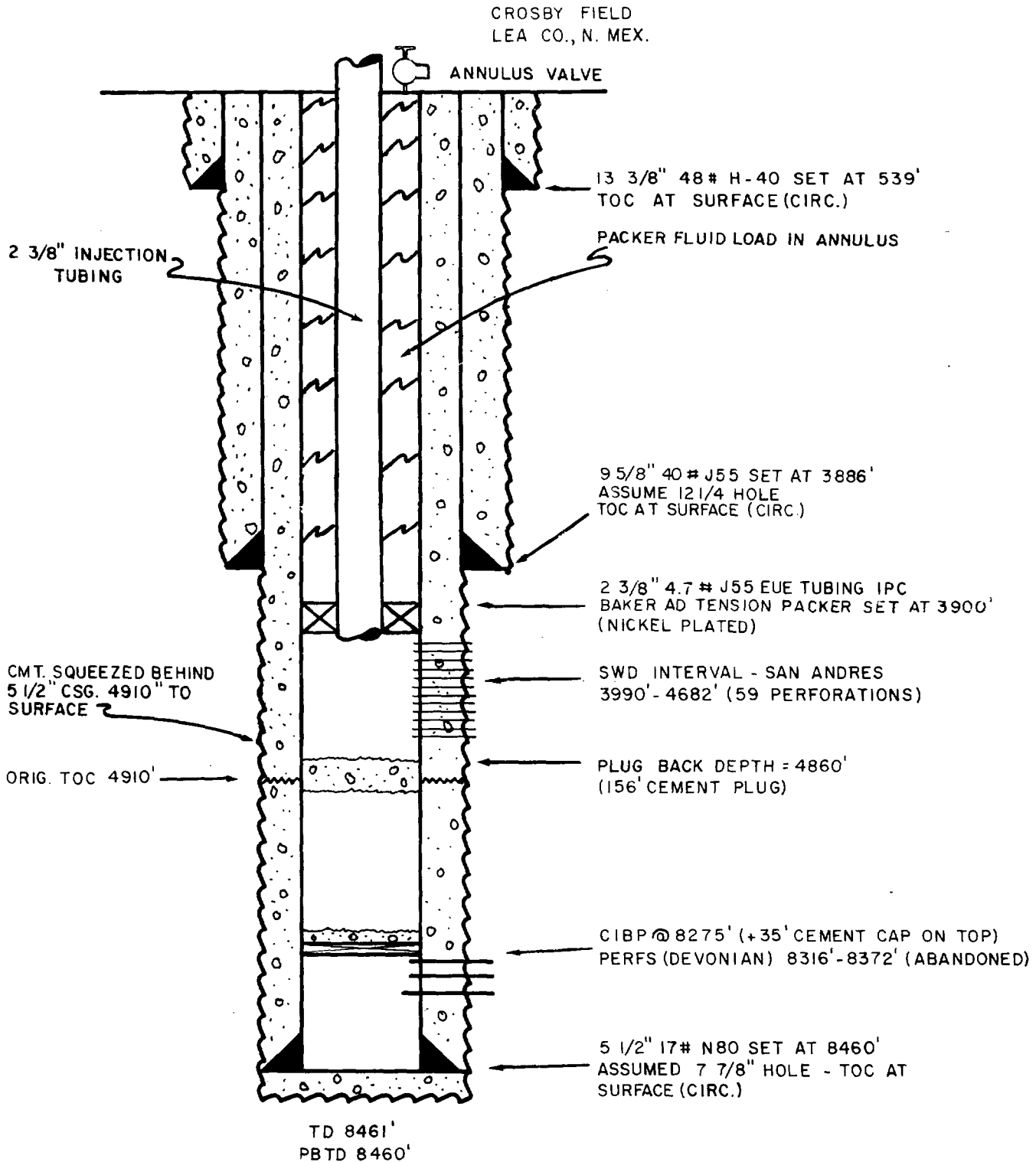
Results Reported As Milligrams Per Liter

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

UNION TEXAS PETROLEUM

GREGORY EL PASO FEDERAL NO. 4

WELL BORE CONDITIONS AFTER CONVERSION



8 2471

WELLS OFFSETTING UTP GREGORY EL PASO FEDERAL SWD #4
(1/2 MILE RADIUS-PENETRATING INJECTION ZONE)

El Paso, Gregory (2-X) 2-Y TD 8170'
760' FNL & 1650' FWL; Sec. 33, T-25-S, R-37E; Lea, New Mexico

13-3/8" @ 542' w/ 500 sx.
9-5/8" @ 3633' w/ 3400 sx.
7 " @ 8170' w/ 300 sx.

Prod. Interval 7980' - 8090' Perfs.
Presently TA

El Paso, Gregory Federal #3 TD 8285'
1980' FSL & 1980' FEL; Sec. 33, T-25-S, R-37-E; Lea, New Mexico

13-3/8" @ 496' w/ 500 sx.
9-5/8" @ 3894' w/ 958 sx.
7 " @ 8282' w/ 400 sx.

Producing Interval 8142' - 80' Perfs.

Union Texas Petroleum, Crosby Deep No. 2 TD 10445'
1650' FNL & 2310' FEL; Sec. 33, T-25-S, R-37-E; Lea, New Mexico

13-3/8" @ 505' w/ 500 sx.
9-5/8" @ 3812' w/ 2300 sx.
5-1/2" @ 10445' w/ 890 sx.

Prod. Interval 8780' - 90' Perfs.

Union Texas Petroleum, Crosby Deep Unit #3 TD 10155'
1980' FSL & 1980' FEL; Sec. 33, T-25-S, R-37-E, Lea, New Mexico

13-3/8" @ 496' w/ 500 sx.
9-5/8" @ 3894' w/ 958 sx.
7 " @ 8282' w/ 700 sx.
4-1/2" @ 7917' - 10102' w/ 200 sx.

Prod. Interval; 8657' - 95', 9641' - 9720' Perfs.

continued...

Union Texas Petroleum, Crosby Deep No. 4 TD 8894'
785' FNL & 1980' FWL; Sec. 33, T-25-S, R-37-E, Lea, New Mexico

13-3/8" @ 870' w/ 700 sx.
8-5/8" @ 3727' w/ 1050 sx.
5-1/2" @ 8889' w/ 1150 sx.

Prod. Interval 8718' - 64' Perfs.

Union Texas Petroleum, Gregory El Paso Fed. #1 TD 8461'
660' FSL & 1650' FEL; Sec. 33, T-25-S, R-37-E, Lea, New Mexico

13-3/8" @ 515' w/ 450 sx.
8-5/8" @ 3778' w/ 1350 sx.
5-1/2" @ 8460' w/ 639 sx.

Prod. Interval 8308' - 8378' Perfs.

Union Texas Petroleum, Gregory El Paso Fed. No. 2 TD 8975' *unit 4*
760' FSL & 1880' FWL; Sec. 33, T-25-S, R-37-E, Lea, New Mexico *SWD*

13-3/8" @ 320' w/ 250 sx.
8-5/8" @ 3800' w/ 1300 sx.

~~Well P & A~~

No schematic of how plugged
Gregory FA as per telephone conversation with Billie Howard 10/11/81
Connected to SWD well 69 - as per SWD 87

WAH/ejw

CORRECTED COPY

Form C-108
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

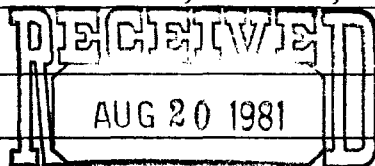
OPERATOR UNION TEXAS PETROLEUM CORPORATION		ADDRESS 1300 Wilco Bldg, Midland, Texas 79701	
LEASE NAME GREGORY-EL PASO - FEDERAL	WELL NO. 4	FIELD CROSBY DEVONIAN	COUNTY LEA
LOCATION UNIT LETTER K ; WELL IS LOCATED 1980 FEET FROM THE S LINE AND 1980 FEET FROM THE W LINE, SECTION 33 TOWNSHIP 25 RANGE 37 NMPM.			

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13 3/8	539		Surface	
INTERMEDIATE	9 5/8	3886		Surface	
LONG STRING	5 1/2	8460		Surface	
TUBING	2 3/8	4860	NAME, MODEL AND DEPTH OF TUBING PACKER Baker A D-1 Tension @ 3650 3900 GAS		
NAME OF PROPOSED INJECTION FORMATION SAN ANDRES		TOP OF FORMATION 3990		BOTTOM OF FORMATION 4860	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLES? Performations		PROPOSED INTERVAL(S) OF INJECTION 3990 - 4682	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? oil producer			HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes	

LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH Devonian (8316-8372) Set CIBP @8275 W/ 5 sx Cmt; Spot 17 sx smt plug from 4859-6006					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA Santa Rosa 800'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA QUEEN-3360		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA DEVONIAN 8316	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 150	MINIMUM 600	MAXIMUM Closed	OPEN OR CLOSED TYPE SYSTEM Grav	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Grav	APPROX. PRESSURE (PSI) 1
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - Yes		WATER TO BE DISPOSED OF Devonian		NATURAL WATER IN DISPOSAL ZONE San Andres	ARE WATER ANALYSES ATTACHED? -No YES

NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Clyde N. Cooper, Jal, New Mexico	
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL Sun Texas P. O. Box 4067, Mialdn, Texas 79701	
El Paso Natural Gas Co P. O. Box 1492, El Paso, Texas 79999	



HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? Yes	SURFACE OWNER SANTA FE	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	THE NEW MEXICO STATE ENGINEER Yes
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Yes	PLAT OF AREA Yes	ELECTRICAL LOG Yes	DIAGRAMMATIC SKETCH OF WELL Yes

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

(Signature)

Regulatory Analyst

(Title)

June 1, 1981

(Date)

NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

June 17, 1981

Union Texas Petroleum Corporation
1300 Wilco Building
Midland, Texas 79701

Attention: Billie Hood

Re: SaltWater Disposal Well
Gregory El Paso Federal #4
Section 33, Township 25
South, Range 37 East, Lea
County, New Mexico

Dear Mr. Hood:

In response to your application of June 5, 1981, for conversion of the captioned well from an oil well to a salt water disposal well, we are requesting additional information in order to evaluate your application.

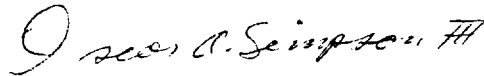
The requested information is as follows:

1. Submit an analysis of the fluid to be injected, as per Rule 701-B(4);
2. Submit a new or revised schematic diagram of the injection well illustrating:
 - 1) The packer should be set within 100' or less above the top of injection interval.
 - 2) The casing-tubing annulus (in each well) 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.
 - 3) Submit a tabular summary of all wells within one-half mile of the injection well and which penetrate the injection zone showing all casing strings, setting depths, sacks of cement used, cement tops, total depth, producing interval, well identification, and location. Applications for expansion of projects need not include

the tabulation if the same is on file and no additional wells are included.

4. Submit a schematic of all plugged and abandoned wells within the one-half mile radius and which have penetrated the injection zone showing all information required under (2) above plus the size and location of all plugs and the date of abandonment. Applications for expansion of projects need not include the schematic if the same is on file and no additional wells are included.
5. Explain the conflict of information submitted on Form C-108 concerning the top of cement on the S/2 inch casing or being 4910 and the schematic of the well diagram showing the cement as being circulated to the surface.

Sincerely,

A handwritten signature in cursive script, appearing to read "Oscar Simpson III".

OSCAR SIMPSON III
Water Resources Specialist

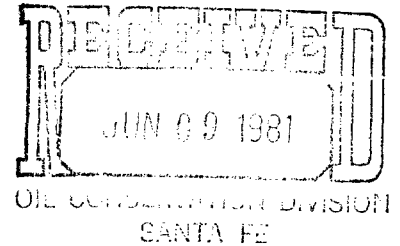
PS/og



Union Texas Petroleum Corporation

1300 Wilco Building
Midland, Texas 79701
(915) 684-0600

June 5, 1981



Secretary Directory
Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

RE: Gregory El Paso Federal #4
1980' FS & WL
Section 33, T-25-S, R-37-E
Lea County, New Mexico

Gentlemen,

Attached in triplicate, is form C-108 requesting permission to dispose of salt water by injection into a porous formation using subject well as the disposal well.

Copies of said application have been sent to surface lease owner and each operator within one-half mile of subject well.

Very Truly Yours,

A handwritten signature in cursive script that reads 'Billie Hood'.

Billie Hood
Regulatory Analyst

BH:so
cc: New Mexico State Engineer
U.S. Dept. of the Interior
Geological Survey
P. O. Box 1857
Roswell, New Mexico 88201

NEW MEXICO OIL CONSERVATION COMMISSION
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR UNION TEXAS PETROLEUM CORPORATION		ADDRESS 1300 Wilco Bldg, Midland, Texas 79701	
LEASE NAME GREGORY-EL PASO - FEDERAL	WELL NO. 4	FIELD CROSBY DEVONIAN	COUNTY LEA
LOCATION UNIT LETTER K ; WELL IS LOCATED 1980 FEET FROM THE S LINE AND 1980 FEET FROM THE W LINE, SECTION 33 TOWNSHIP 25 RANGE 37 NMPM.			

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13 3/8	539		Surface	
INTERMEDIATE	9 5/8	3886		Surface	
LONG STRING	5 1/2	8460		4910	Survey
TUBING	2 3/8	4860	NAME, MODEL AND DEPTH OF TUBING PACKER Baker A D-1 Tension @ 3650		
NAME OF PROPOSED INJECTION FORMATION SAN ANDRES			TOP OF FORMATION 3990		BOTTOM OF FORMATION 4860
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? Perforations	PROPOSED INTERVAL(S) OF INJECTION 3990 - 4682		
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? oil producer			HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH Devonian (8316-8372) Set CIBP @8275 W/ 5 sx Cmt; Spot 17 sx smt plug from 4859-6006					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA Santa Rosa 800'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA QUEEN-3360		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA DEVONIAN 8316	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 150	MINIMUM 600	MAXIMUM Closed		IS INJECTION TO BE BY GRAVITY OR PRESSURE? Grav	APPROX. PRESSURE (PSI) 1
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - Yes		WATER TO BE DISPOSED OF Devonian		NATURAL WATER IN DISPOSAL ZONE San Andres	ARE WATER ANALYSES ATTACHED? No
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Clyde N. Cooper, Jal, New Mexico					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL Sun Texas P. O. Box 4067, Mialdn, Texas 79701 El Paso Natural Gas Co P. O. Box 1492 , El Paso, Texas 79999					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? Yes					
SURFACE OWNER Yes		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes		THE NEW MEXICO STATE ENGINEER Yes	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Yes		ELECTRICAL LOG Yes		DIAGRAMMATIC SKETCH OF WELL Yes	

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

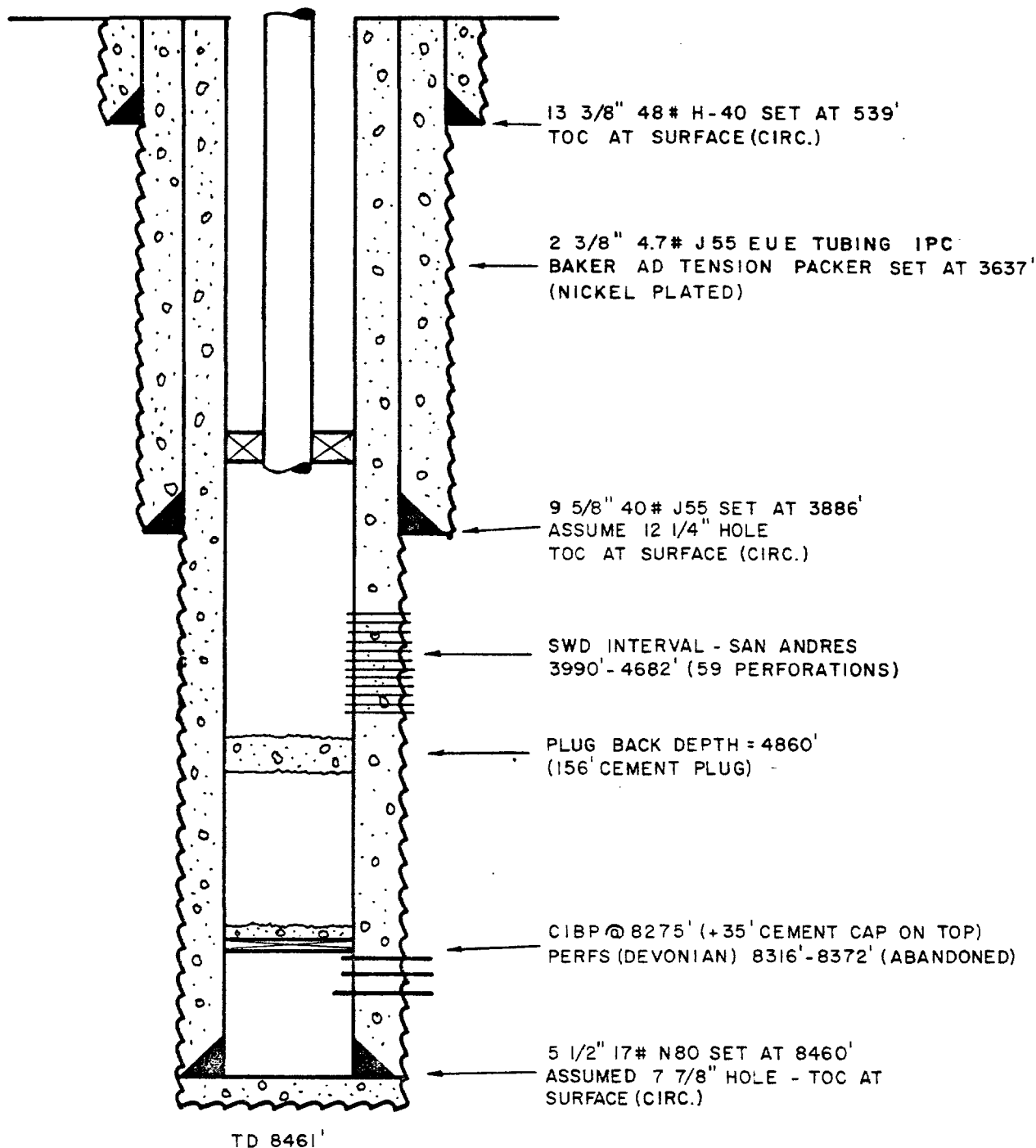
Billie Hood Regulatory Analyst June 1, 1981
(Signature) (Title) (Date)

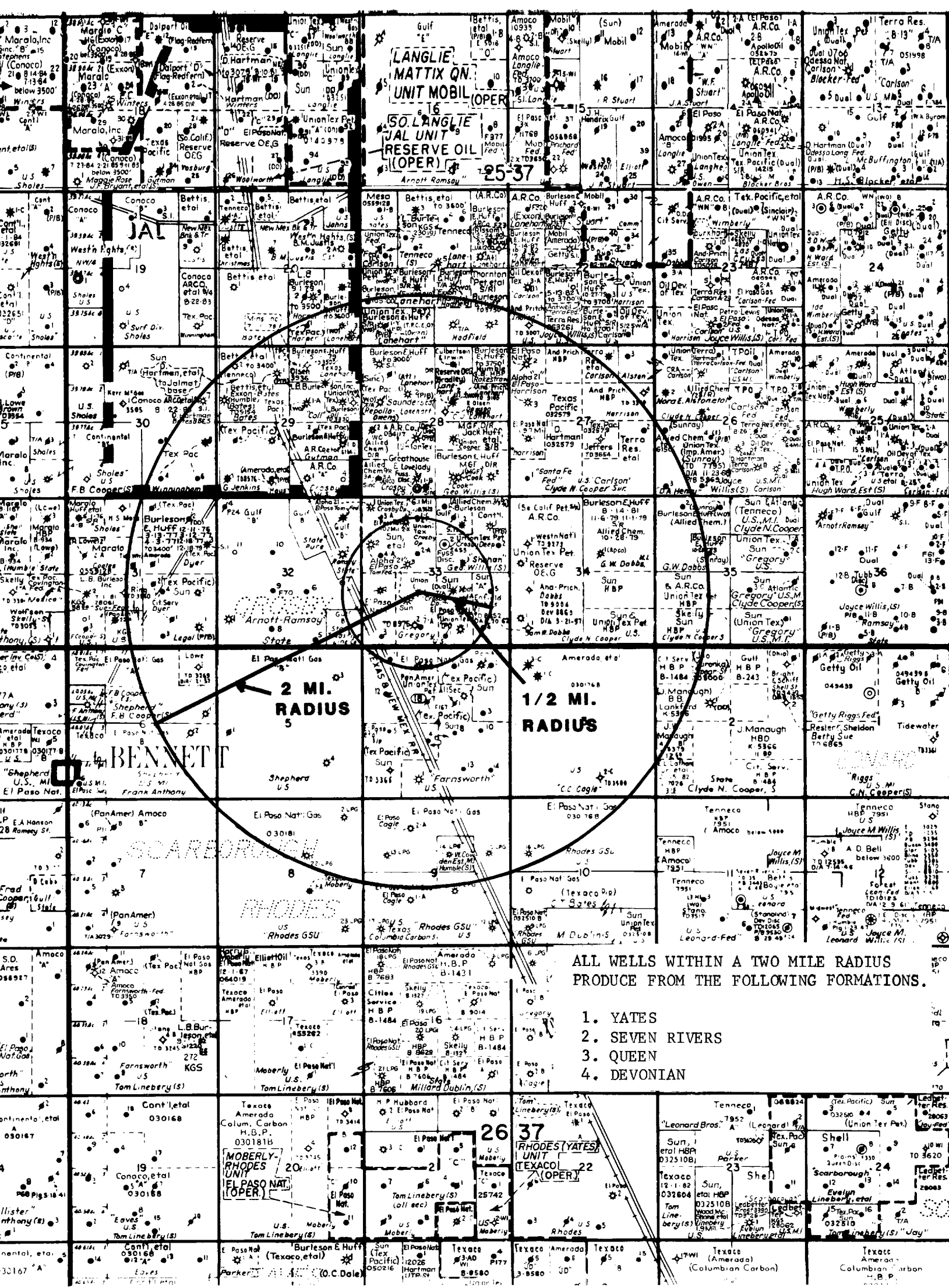
NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well, not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

UNION TEXAS PETROLEUM
GREGORY EL PASO FEDERAL NO. 4

WELL BORE CONDITIONS
AFTER CONVERSION

CROSBY FIELD
LEA CO., N. MEX.





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UNIT MOBIL (OPER)
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RESERVE OIL
(OPER)
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RADIUS

BENNETT

SCARBOROUGH

RHODES

ALL WELLS WITHIN A TWO MILE RADIUS
PRODUCE FROM THE FOLLOWING FORMATIONS.

1. YATES
2. SEVEN RIVERS
3. QUEEN
4. DEVONIAN

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RHODES (YATES)
UNIT
TEXACO (OPER)

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