J. L. McGILL

Petroleum Engineer - P.E. 48745

2818 W. DENGAR

915-697-1539

MIDLAND, TEXAS 79701

March 9, 1983

Oil Conservation Division
P. O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

Attention: Mr. Oscar Simpson

Re: Proposed Gandy SWD Well
Sec. 12, T-9-S, R-37-E
Lea County, New Mexico

Gentlemen:

Enclosed herewith please find New Mexico Oil Conservation Division Form 108 with supporting exhibits as required by Section III, V, VI, VII, VIII, XI, XII, and XIII. These exhibits are discussed as follows:

Section III - Only one well is proposed for injection, the Warren Petroleum Corp. (now Gulf) Federal Heep No. 1, P. & A. in 1956; Well Data Sheet is submitted on this well.

Section V - Map identifying all wells and leases within two miles of the proposed injection well and a one-half radius circle around same as the wells area of review.

Section VI - Tabulation of data on all wells within the area of review with schematic drawing of physical condition of each well.

Section VII - Data on the proposed operation is submitted as requested.

Section VIII- The geological data on the injection zone and underground sources of drinking water are submitted as requested.

Section XI - Enclosed are chemical analyses on the only three active fresh water wells within one mile of the proposed injection well.

Section XII - An affirmative statement concerning any hydrologic connection that may exist between the disposal zone and any underground source of drinking water is submitted as requested.

Section XIII- The "Proof of Notice" is documented, as required, by submitting copies of the certified mail receipts to the land surface owners and to each leasehold operator within one-half mile of the proposed injection well location.

Should you desire any additional information, please advise and I will furnish same.

Yours truly,

J. L. McGill

JLM/jra

Enclosures

cc: See Attached List

ADDRESS LIST

Copies of Form C-108 for
J. L. McGill Gandy SWD

Brazos Petroleum Company
P. O. Box 1782
Midland, Texas 79702

R. S. Cooley
P. O. Box 254
Midland, Texas 79702

Katherine D. Gilmore
Western Bldg., Suite 101
1031 Andrews Hwy.
Midland, Texas 79701

W. H. Gilmore
Western Bldg., Suite 101
1031 Andrews Hwy.
Midland, Texas 79701

Gene Milford
P. O. Box 427
Tatum, New Mexico 88267

Yates Petroleum Corporation
207 South 4th Street
Artesia, New Mexico 88210

Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88240

Carlsbad Resource Area
Attn: Mark Hollis
P. O. Box 1778
Carlsbad, New Mexico 88201

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

RECEIVED
MAR 14 1983

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☐ no

II. Operator: J. L. McGill

Address: 2818 W. Dengar; Midland, Texas 79701

Contact party: J. L. McGill Phone: 915/697-1539 or 915/684-4463

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. See attached map.

* 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. See attached well schematics

VII. Attach data on the proposed operation, including:

See attached Operations Data Sheet

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed; & water analyses
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. See attached Geological Data.

IX. Describe the proposed stimulation program, if any. 2000 gal. 15% HCl acid.

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.) Previously submitted.

* 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. See attached chemical analyses.

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. See attached Applicants Affirmative Statement.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. See attached copies of Certified Mail Receipts.

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: J. L. McGill Title Operator & Owner

Signature: J. L. McGill Date: March 9, 1983

* 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. N/A

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division 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 name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;

(3) the formation name and depth with expected maximum injection rates and pressures; and

(4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

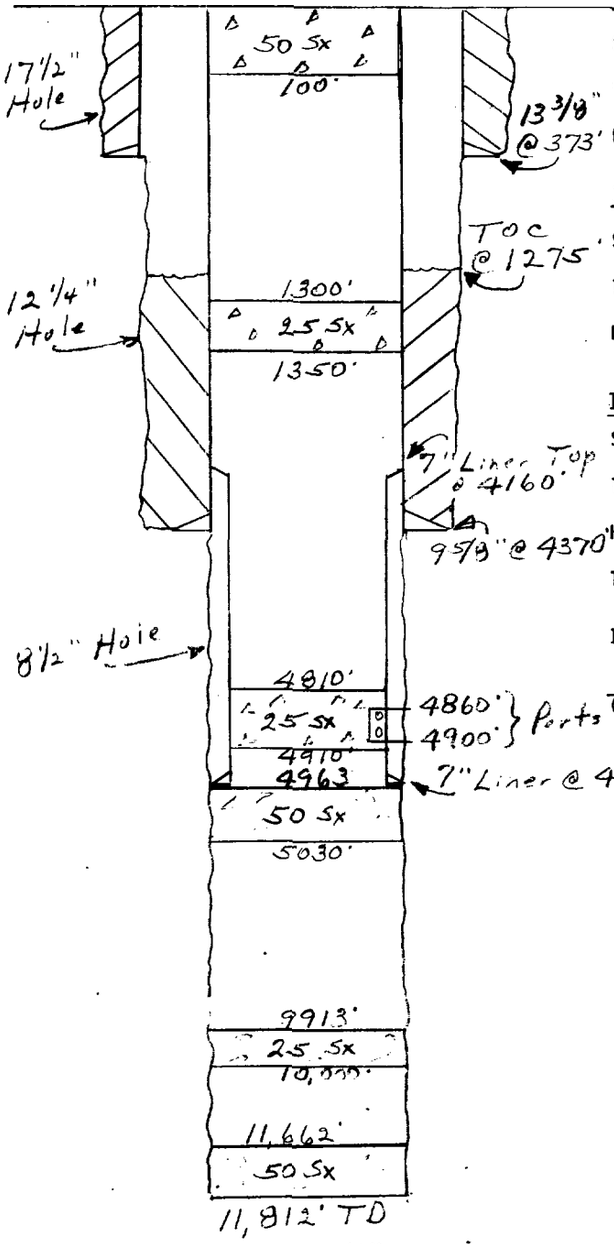
NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

Warren Petroleum Corp.	Federal-Heep			
OPERATOR	LEASE			
1	1980' FSL & 660' FEL	12	9-S	37-E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Schematic



Tabular Data

Surface Casing

Size 13 3/8" @ 373' " Cemented with 400 sx.

TOC Surface feet determined by Visual

Hole size 17 1/2"

Intermediate Casing

Size 9 5/8" @ 4370' " Cemented with 2200 sx.

TOC 1275 feet determined by unknown

Hole size 12 1/4"

Liner

Size 7"; 4961-4160' " Cemented with 325 sx.

TOC 4160 feet determined by drlg. cement

Hole size 8 1/2"

Total depth 11,812'

Injection interval

4210 feet to 4810 feet

(perforated or open-hole, indicate which)

Tubing size 2 7/8" OD lined with AMF TK-75 Epoxy (material) set in a

Baker Model "AD" Tension (brand and model) packer at 4110 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres

2. Name of Field or Pool (if applicable) None

3. Is this a new well drilled for injection? [ ] Yes [X] No

   If no, for what purpose was the well originally drilled? Devonian test-failure

4. 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) 7" OD liner perforated from 4860-4900'. No other zone perforated. 50 sx. 11662-812'; 25 sx. 9913-10000'; 50 sx. 4963-5030'; 25 sx. 4810-4910'; 25 sx. 1300-1350'; 50 sx. 0-100'.

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

   Sawyer San Andres Pool located to the south.

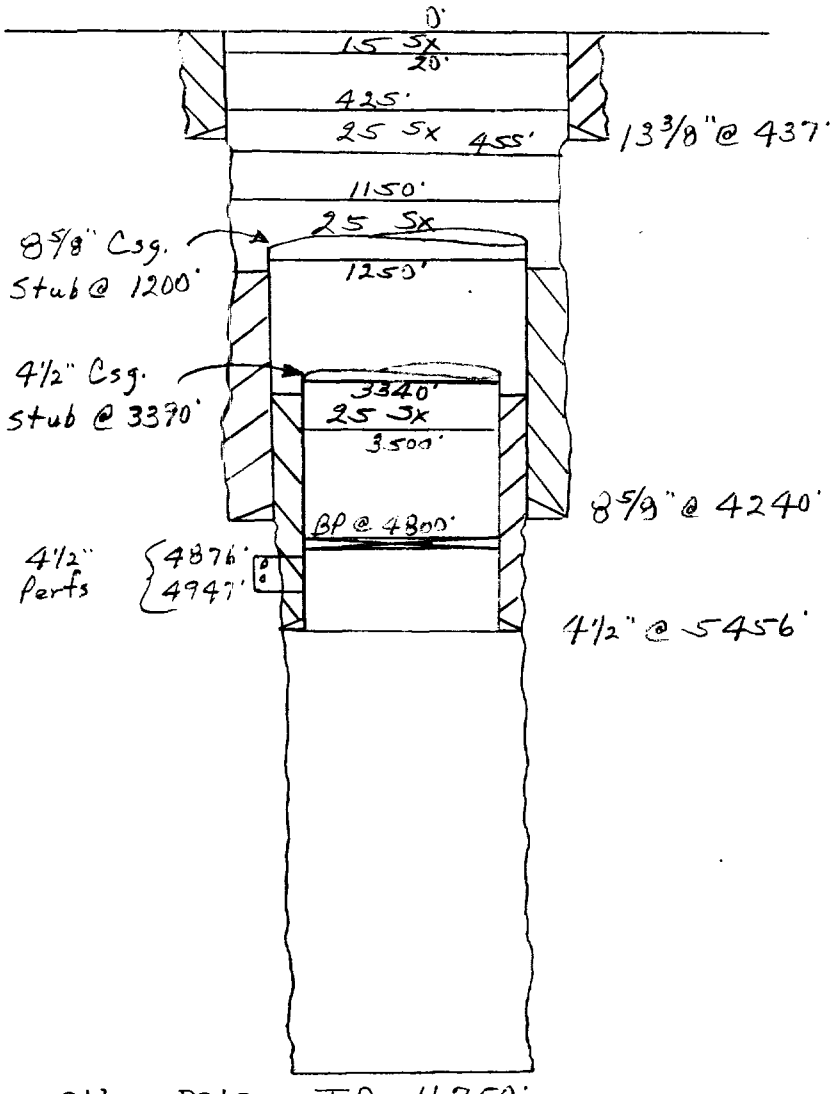
AREA OF REVIEW WELL DATA SHEET

Associated Oil & Gas Exploration, Inc. — OPERATOR
Trainer-Federal — LEASE

1	330' FSL & 660' FWL	7	9-S	38-E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Lea County, New Mexico

SCHEMATIC



Other Data TD 11,750'

TABULAR DATA

Surface Casing

Size 13 3/8"@437' Cmtd w/ 400 sx.

TOC Surface ft. as per visual

Hole size 17 1/2 "

Intermediate Casing

Size 8 5/8"@4240', Cmtd w/ 550 SX.

TOC Unknown ft. as per ------

Hole size 11 "

Long string

Size 4 1/2"@5456', Cmtd w/ 425 sx.

TOC Unknown ft. as per -----

Hole size 7 7/8 "

Liner

Size None ", from ' to '

Cmtd. w/ sx, TOC

Hole size "

Total Depth 11,750'

1. Name of Field or Pool (if applicable) NA

2. Is this a new well drilled for injection ____ Yes x No
If no, for what purpose was the well originally drilled? Devonian test (failure) then attempted San Andres completion.

3. 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)4 1/2" Csg. perfed from 4876' to 4947' w/ 9 holes; 25 sx @ 4650' - 4950' (did not hold) set BP @4800'; shot off 4 1/2" csg. and recovered 3390' of 4 1/2" csg., then recovered 1200' of 8 5/8" csg.; 25 sx 3340-3500'; 25 sx 1150 -1250';25sx@ 425-455; 15 sx. @ 0-20

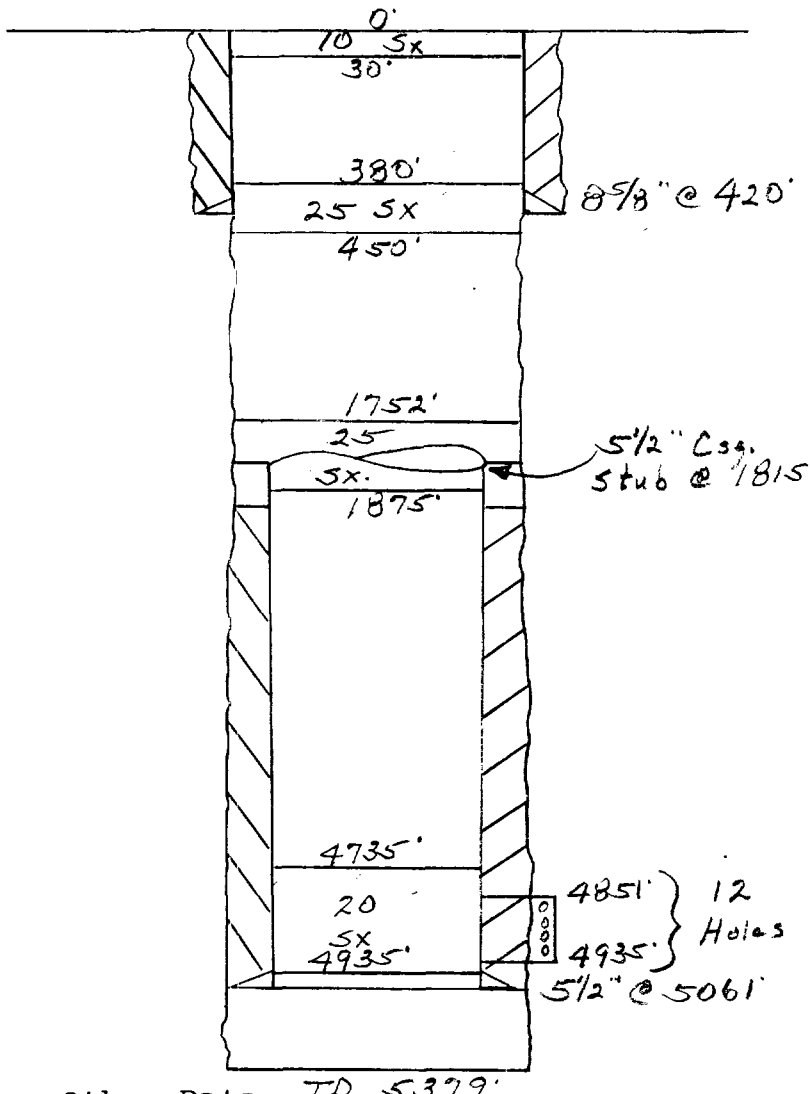
AREA OF REVIEW WELL DATA SHEET

Associated Oil & Gas Exploration Co., Inc. — OPERATOR
Federal-Midwest — LEASE

1	1650' FS & EL	12	9-S	37-E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Lea County, New Mexico

SCHEMATIC



TABULAR DATA

Surface Casing

Size 8 5/8"@420', Cmtd w/ 200 sx.

TOC Surface ft. as per Visual

Hole size 11 "

Intermediate Casing

Size None, Cmtd w/ _____ SX.

TOC _____ ft. as per _____

Hole size _____ "

Long string

Size 5 1/2"@5061', Cmtd w/ 400 sx.

TOC Unknown ft. as per _____

Hole size 7 5/8 "

Liner

Size None ", from _____ 'to _____ '

Cmtd. w/ _____ sx, TOC _____

Hole size _____ "

Total Depth 5379'

Other Data

1. Name of Field or Pool (if applicable) _____

2. Is this a new well drilled for injection _____ Yes x No
   If no, for what purpose was the well originally drilled? San Andres test.

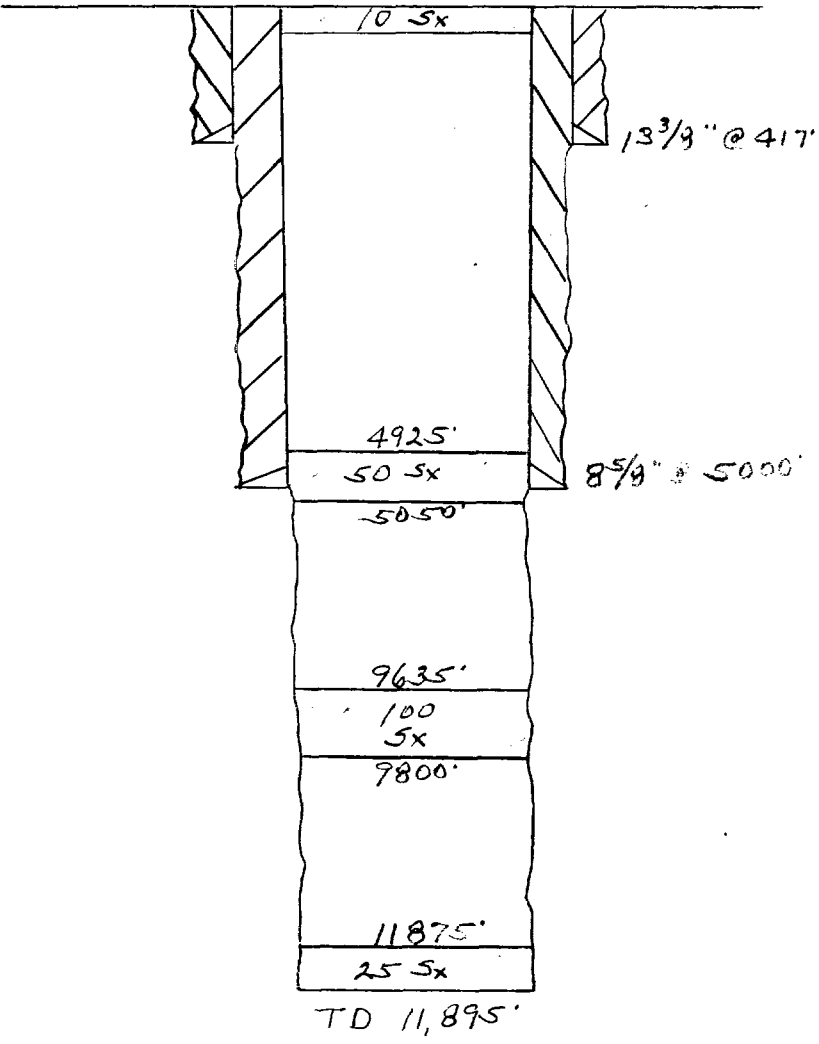
3. Has the well ever been perforated in any other zone (s) ? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug (s) used) 5 1/2" csg. perf. 4851-4935' (12 holes); 20 sx @ 4735-4935; shot 5 1/2" csg. @ 1815' and recovered same; 25 sx @ 1752-1875; 25 sx @ 380-450; 10 sx @ surface to 30'

AREA OF REVIEW WELL DATA SHEET

Magnolia Petroleum Co.	Byler-Federal			
OPERATOR	LEASE			
2	1980' FNL & 660' FWL	7	9-S	38-E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Lea County, New Mexico

SCHEMATIC



TABULAR DATA

Surface Casing

Size 13 3/8"@417, Cmtd w/ 450 sx.

TOC Surface ft. as per Visual

Hole size 17 1/2 "

Intermediate Casing

Size 8 5/8"@5000', Cmtd w/ 2891 SX.

TOC Unknown ft. as per _____

Hole size 11 "

Long string

Size None, Cmtd w/_____sx.

TOC _____ft. as per _____

Hole size _____"

Liner

Size None", from _____'to_____'

Cmtd. w/_____sx, TOC_____

Hole size _____"

Total Depth 11,895'

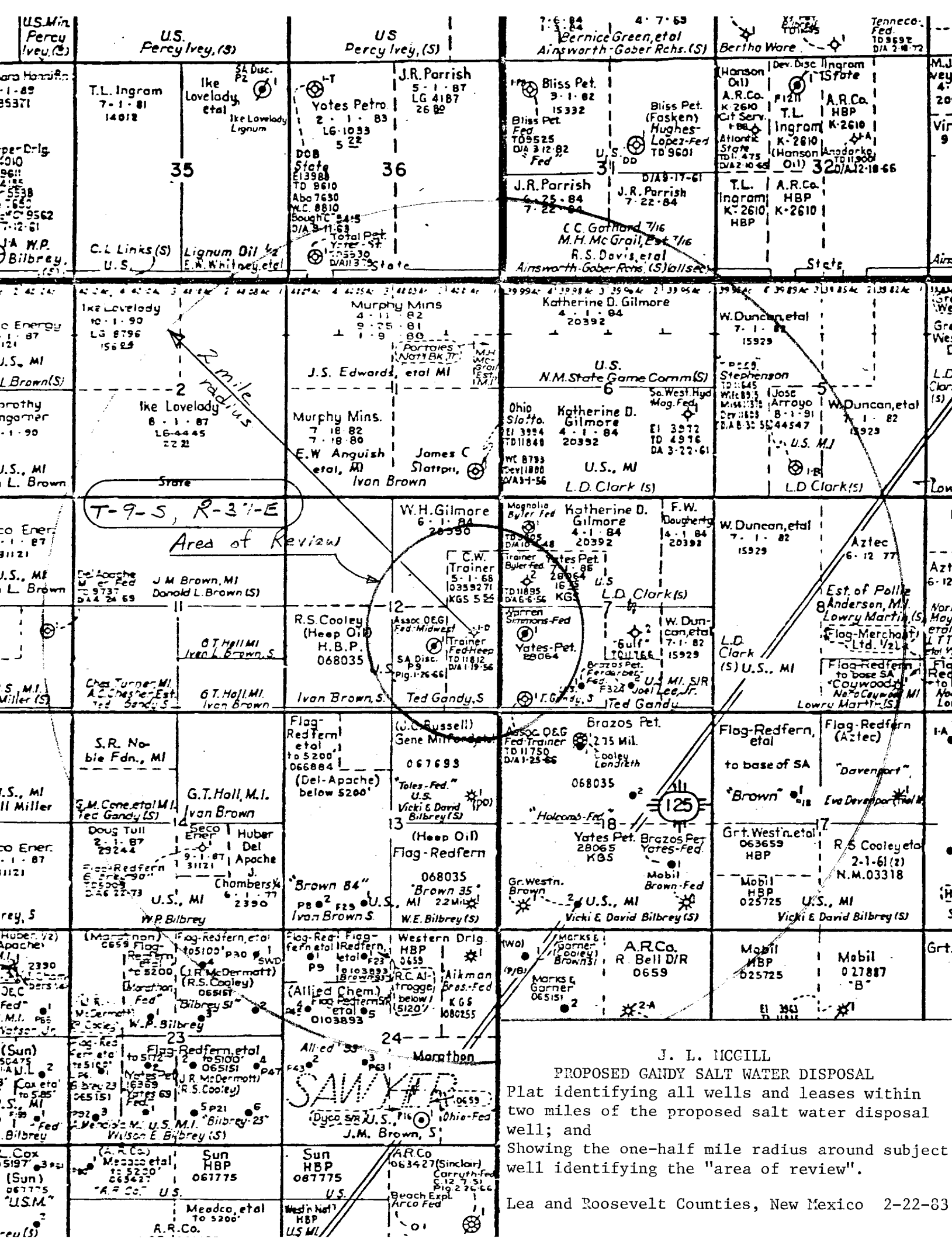
No Casing Pulled

Other Data

1. Name of Field or Pool (if applicable)_____

2. Is this a new well drilled for injection _____Yes x No
   If no, for what purpose was the well originally drilled? Devonian test (failure)

3. 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) 25 sx @ 11875-11895'; 100 sx @ 9635-9800'; 50 sx @ 4925-5050'; 10 sx @ surface.



J. L. MCGILL

PROPOSED GANDY SALT WATER DISPOSAL

Plat identifying all wells and leases within two miles of the proposed salt water disposal well; and

Showing the one-half mile radius around subject well identifying the "area of review".

Lea and Roosevelt Counties, New Mexico 2-22-83

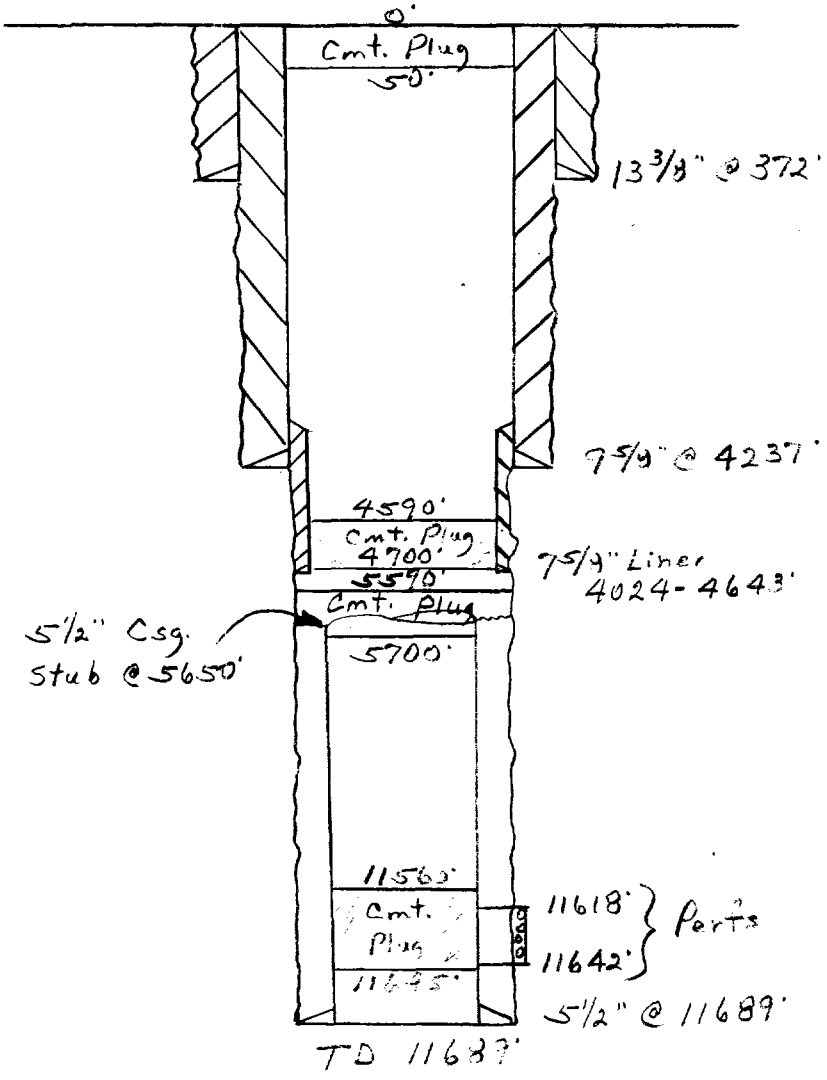
AREA OF REVIEW WELL DATA SHEET

Warren Petroleum Corp. — OPERATOR
Simmons-Federal — LEASE

1 — WELL NO.
1980' FSL & 660' FWL — FOOTAGE LOCATION
7 — SECTION
9-S — TOWNSHIP
38-E — RANGE

Lea County, New Mexico

SCHEMATIC



TABULAR DATA

Surface Casing

Size 13 3/8" @ 372', Cmtd w/ 400 sx.

TOC Surface ft. as per Visual

Hole size 17 1/2" "

Intermediate Casing

Size 9 5/8" @ 4237, Cmtd w/ 2000 SX.

TOC Unknown ft. as per ----

Hole size 12 1/4 "

Long string

Size 5 1/2" @ 11689, Cmtd w/ 1800 sx.

TOC Unknown ft. as per

Hole size 6 1/2 "

Liner

Size 7 5/8 ", from 4024 ' to 4643 '

Cmtd. w/ 175 sx, TOC Unknown

Hole size 8 1/2 "

Total Depth 11689'

Other Data

1. Name of Field or Pool (if applicable) _____

2. Is this a new well drilled for injection _____ Yes x No
If no, for what purpose was the well originally drilled? Devonian test and successful completion.

3. 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) 5 1/2" csg. perf @ 11618-11642' (Devonian); spot cement plug 11560-11645; recovered 5650' of 5 1/2" csg; spot cement plugs @ 5590-5700; 4590-4700' and 0-50' @ surface.

OPERATIONS DATA SHEET

Section VII - Data on the proposed Gandy Salt Water Disposal operation is as follows:

1. Proposed average daily rate of produced water injection - 600 BWPD
   Proposed maximum daily rate of produced water injection - 1500 BWPD
   Monthly volumes estimated at 18,000 to 45,000 barrels.

2. The proposed system would be open.

3. Proposed average and maximum injection pressures are estimated to be in the range of 400 to 800 psig at the triplex pump.

4. Primary sources of the injected fluid will be produced water from the Sawyer San Andres Pool of Lea County, New Mexico and the Buckshot San Andres Field of Cochran County, Texas, with a minor volume of produced water from deeper horizons in the immediate area. The bulk of the water, probably 80 to 90 percent, will be produced San Andres water being re-injected back into the San Andres. Water analyses from the San Andres reservoirs involved are submitted herewith.

5. The proposed water injection is for disposal purposes into an abandoned dry hole within one mile of oil and gas production. The same water analyses referred to in #4 above are the same as fluids in the proposed injection zone.

Sec. VII

LOCATION

YOUR EXT. NO.

THE WESTERN COMPANY

WATER ANALYSIS

ANALYSIS NO.

GENERAL INFORMATION

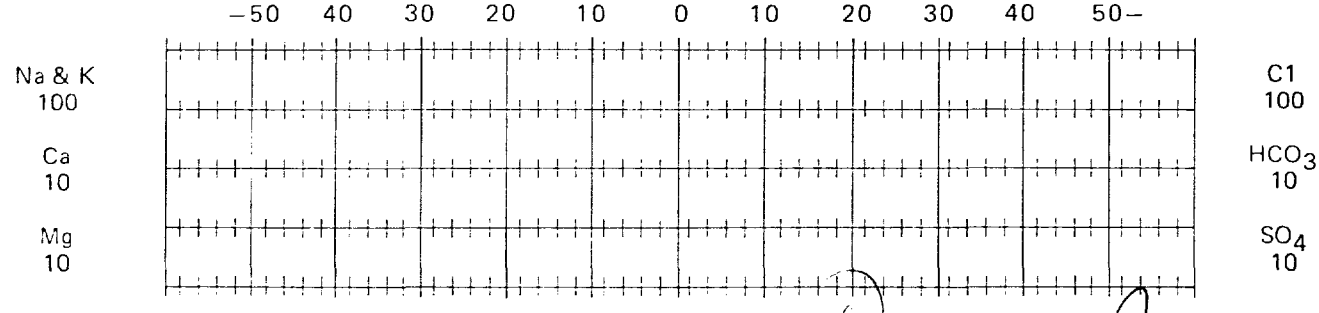
OPERATOR	*Merchinson & Mallary*	DATE SAMPLED	*12-14-59*
WELL	*Sherrill #3*	DATE RECEIVED	
FIELD	*Buckshot*	SUBMITTED BY	
FORMATION	*San Andres*	WORKED BY	
COUNTY	*Cochran*	SAMPLE DESCRIPTION:	
STATE	*Texas*		
DEPTH	*4952-4988*		

PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY	*1.155*	AT *72* °F	TOTAL DISSOLVED SOLIDS		PPM
pH	*5.5*		RESISTIVITY	*0.050*	PPM
IRON	*none*		SULFATE	*1060*	PPM
HYDROGEN SULFIDE	*very strong trace*		BICARBONATE	*610*	PPM
HARDNESS			CHLORIDE	*149,000*	PPM
CALCIUM	*13,750*		SODIUM CHLORIDE		PPM
MAGNESIUM	*6,770*	PPM	SODIUM		PPM
SODIUM & POTASSIUM		PPM	POTASSIUM		PPM
PHOSPHATE					

REMARKS:

for Stiff type plot (in meq./1.)



ANALYST Vithal Pai

FORM 052-1025 (3/81)

Sec. VII

LOCATION

YOUR EXT. NO.

THE WESTERN COMPANY

WATER ANALYSIS

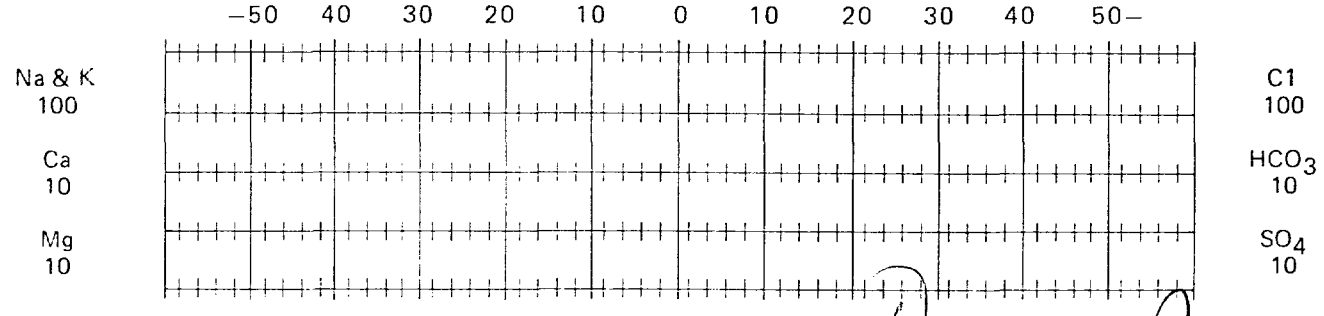
ANALYSIS NO.

GENERAL INFORMATION			
OPERATOR	R.H. Fulton Co.	DATE SAMPLED	4-28-59
WELL	Frost 13-1	DATE RECEIVED	
FIELD	Buckshot	SUBMITTED BY	
FORMATION	San Andres	WORKED BY	
COUNTY	Cochran	SAMPLE DESCRIPTION:	
STATE	Texas		
DEPTH	5000		

PHYSICAL AND CHEMICAL DETERMINATIONS				
SPECIFIC GRAVITY	1.145 AT 76 °F		TOTAL DISSOLVED SOLIDS	PPM
pH	5.8		RESISTIVITY	PPM
IRON	none		SULFATE	1,190 PPM
HYDROGEN SULFIDE	good trace		BICARBONATE	732 PPM
HARDNESS			CHLORIDE	127,200 PPM
CALCIUM	9,600		SODIUM CHLORIDE	PPM
MAGNESIUM	3,790	PPM	SODIUM	PPM
SODIUM & POTASSIUM		PPM	POTASSIUM	PPM
PHOSPHATE				

REMARKS:

for Stiff type plot (in meq./1.)



ANALYST Vithal Pai

FORM 052-1025 (3/81)

Sec. VII

LOCATION

YOUR EXT. NO.

THE WESTERN COMPANY

WATER ANALYSIS

ANALYSIS NO.

GENERAL INFORMATION

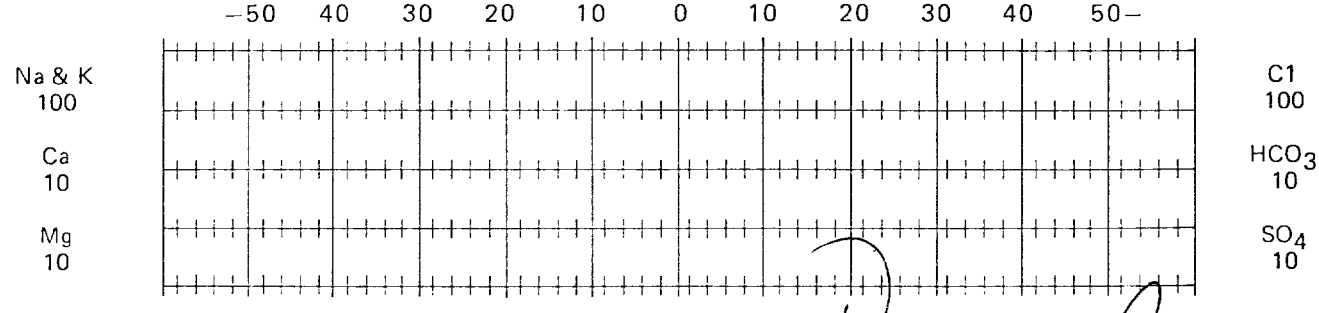
OPERATOR	*Coaley & Holcomb*	DATE SAMPLED	*2-17-65*
WELL	*Byers #1*	DATE RECEIVED	
FIELD	*Sawyer San Andres*	SUBMITTED BY	
FORMATION	*San Andres*	WORKED BY	
COUNTY	*Lea*	SAMPLE DESCRIPTION:	*10,000 gal/gelled DS-30*
STATE	*Texas*		
DEPTH			

PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY	*1.150* AT *70* °F		TOTAL DISSOLVED SOLIDS		PPM
pH	*6.6*		RESISTIVITY		PPM
IRON	*no trace*		SULFATE	*1,290*	PPM
HYDROGEN SULFIDE	*very strong trace*		BICARBONATE	*634*	PPM
HARDNESS			CHLORIDE	*127,100*	PPM
CALCIUM	*12,100*		SODIUM CHLORIDE		PPM
MAGNESIUM	*5,250*	PPM	SODIUM		PPM
SODIUM & POTASSIUM	*59,400*	PPM	POTASSIUM		PPM
PHOSPHATE					

REMARKS:

for Stiff type plot (in meq./1.)



ANALYST Vithal Rai

FORM 052-1025 (3/81)

GEOLOGICAL DATA ON INJECTION ZONE

Section VIII - The San Andres formation in the proposed injection well is 1415 feet in vertical thickness with the top at 4135 feet and the base at 55550 feet. The lithology is predominately a carbonate with anhydrite stringers in the upper 260 feet. The San Andres is of Permian age with the deposits accumulating on a marine carbonate depositional shelf. The only underground source of drinking water with total dissolved solids concentrations of 10,000 mg/l or less is the Ogallala formation, occurring at depths of 100 to 300 feet from the surface. There is no known source of drinking water underlying the San Andres.

LOCATION	

YOUR EXT. NO.	

THE WESTERN COMPANY

WATER ANALYSIS

ANALYSIS NO.	

GENERAL INFORMATION

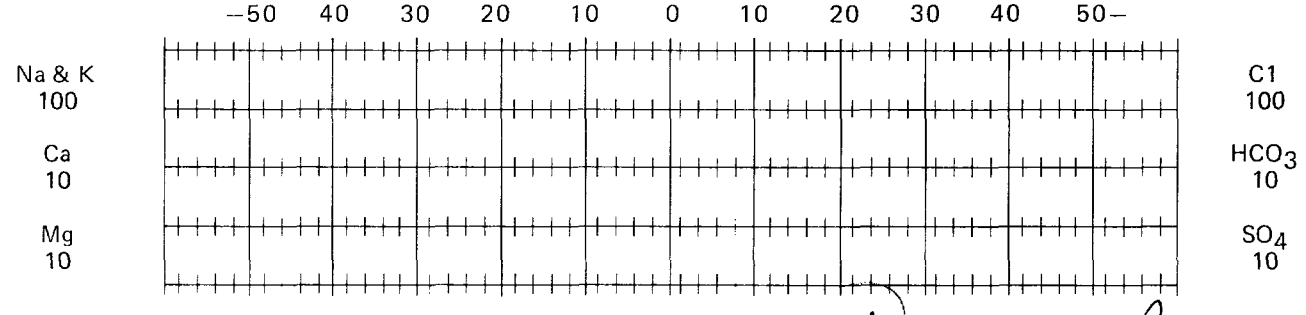
OPERATOR	*J.L. McGill*	DATE SAMPLED	*1-30-83*
WELL	*SW/SW of Sec 12, 9-S, 37E*	DATE RECEIVED	*1-31-83*
FIELD		SUBMITTED BY	*Midland*
FORMATION	*Ogalala*	WORKED BY	*Enrique Lopez*
COUNTY	*Lea*	SAMPLE DESCRIPTION:	
STATE	*New Mexico*		*Ivan Brown*
DEPTH			

PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY	*0.98* AT *68.5* °F		TOTAL DISSOLVED SOLIDS		PPM
pH	*8.1*		RESISTIVITY		PPM
IRON	*None*		SULFATE	*163*	PPM
HYDROGEN SULFIDE	*None*		BICARBONATE	*212*	PPM
HARDNESS			CHLORIDE	*265*	PPM
CALCIUM	*118*		SODIUM CHLORIDE		PPM
MAGNESIUM	*65*	PPM	SODIUM		PPM
SODIUM & POTASSIUM	*71*	PPM	POTASSIUM		PPM
PHOSPHATE					

REMARKS:

for Stiff type plot (in meq./1.)



ANALYST *Vithal Pai*

LOCATION

YOUR EXT. NO.

THE WESTERN COMPANY

WATER ANALYSIS

ANALYSIS NO.

GENERAL INFORMATION

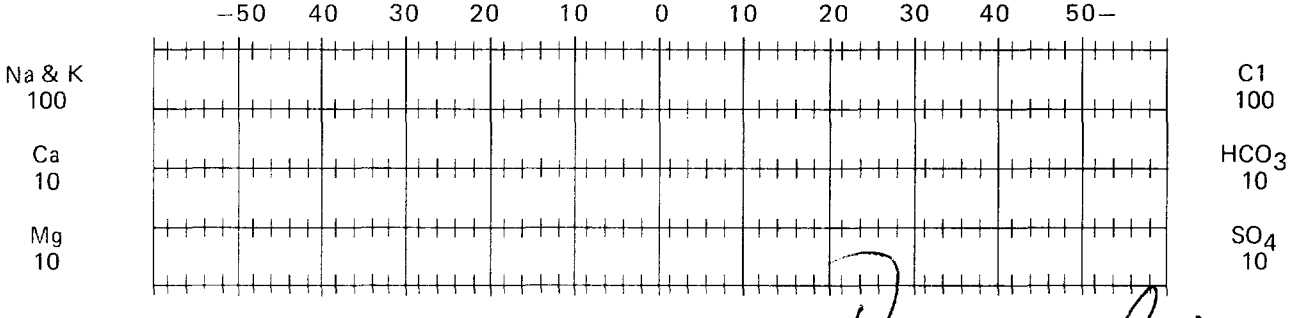
OPERATOR	J.L. McGill	DATE SAMPLED	1-30-83
WELL	SW/SW Sec7, T-9-5, R-38E	DATE RECEIVED	1-31-83
FIELD		SUBMITTED BY	Midland
FORMATION	Ogalala	WORKED BY	Enrique Lopez
COUNTY	Lea	SAMPLE DESCRIPTION:	
STATE	New Mexico		Ted Gandy Water Well
DEPTH			

PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY	0.98 AT 68 °F		TOTAL DISSOLVED SOLIDS		PPM
pH	8.6		RESISTIVITY		PPM
IRON	Faint trace		SULFATE	281	PPM
HYDROGEN SULFIDE	None		BICARBONATE	286	PPM
HARDNESS			CHLORIDE	245	PPM
CALCIUM	8		SODIUM CHLORIDE		PPM
MAGNESIUM	2	PPM	SODIUM		PPM
SODIUM & POTASSIUM	388	PPM	POTASSIUM		PPM
PHOSPHATE					

REMARKS:

for Stiff type plot (in meq./1.)



ANALYST Vithal Pai

FORM 052-1025 (3/81)

LOCATION	

YOUR EXT. NO.	

THE WESTERN COMPANY

WATER ANALYSIS

ANALYSIS NO.	

GENERAL INFORMATION

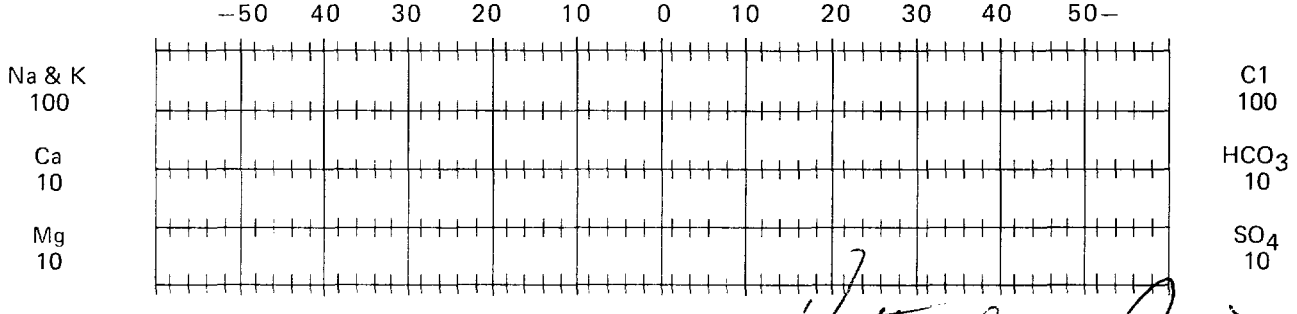
OPERATOR	J.L. McGill	DATE SAMPLED	1-30-83
WELL	SE/SE Sec 7, T9S, R-38-E	DATE RECEIVED	1-31-83
FIELD		SUBMITTED BY	Midland
FORMATION	Ogalala	WORKED BY	Enrique Lopez
COUNTY	Lea	SAMPLE DESCRIPTION:	
STATE	New Mexico		Ted Gandy Water Well
DEPTH			

PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY	.95	AT 68.5 °F	TOTAL DISSOLVED SOLIDS		PPM
pH	7.9		RESISTIVITY		PPM
IRON	None		SULFATE	122	PPM
HYDROGEN SULFIDE	None		BICARBONATE	321	PPM
HARDNESS			CHLORIDE	71	PPM
CALCIUM	62		SODIUM CHLORIDE		PPM
MAGNESIUM	43	PPM	SODIUM		PPM
SODIUM & POTASSIUM	74	PPM	POTASSIUM		PPM
PHOSPHATE					

REMARKS:

for Stiff type plot (in meq./1.)



ANALYST Vittal Pai

APPLICANTS AFFIRMATIVE STATEMENT

Section XII - The only underground source of drinking water in this general area is the Ogallala Formation, occurring at a depth of 100 to 300 feet from the surface. The top of the San Andres Formation, proposed injection zone, is at 4135 feet. Since Permian time there has not been tectonic activity, nor upheaval of any significance, that would disturb the competence or stability of the strata overlying the San Andres Formation. I have examined available geologic and engineering data of this general area and I find no evidence of open faults or any other hydrologic connection between the proposed disposal zone and any underground source of drinking water.

J. L. McGill

P 220 603 804

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO
KATHERINE GILMORE
STREET AND NO.
1031 Andrews Hwy.
P.O., STATE AND ZIP CODE
Midland, Tx. 79702

POSTAGE	$
CERTIFIED FEE	.75¢
SPECIAL DELIVERY	¢
RESTRICTED DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED	.60¢
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES	$2.06
POSTMARK OR DATE	

CONSULT POSTMASTER FOR FEES
OPTIONAL SERVICES
RETURN RECEIPT SERVICE

PS Form 3800, Apr. 1976

P 220 603 805

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO
R.S. Cooley
STREET AND NO.
P.O. Box 254
P.O., STATE AND ZIP CODE
Midland, Tx. 79702

POSTAGE	$
CERTIFIED FEE	.75¢
SPECIAL DELIVERY	¢
RESTRICTED DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED	.60¢
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES	$ 2.06
POSTMARK OR DATE	

CONSULT POSTMASTER FOR FEES
OPTIONAL SERVICES
RETURN RECEIPT SERVICE

PS Form 3800, Apr. 1976

P 220 603 802

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO
BRAZOS PETROLEUM CO.
STREET AND NO.
P.O. Box 1782
P.O., STATE AND ZIP CODE
Midland, Tx. 79702

POSTAGE	$
CERTIFIED FEE	.75¢
SPECIAL DELIVERY	¢
RESTRICTED DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED	.60¢
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES	$2.06
POSTMARK OR DATE	

CONSULT POSTMASTER FOR FEES
OPTIONAL SERVICES
RETURN RECEIPT SERVICE

PS Form 3800, Apr. 1976

P 220 603 794

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO
YATES PETROLEUM CORP.
STREET AND NO.
207 South 4th Street
P.O., STATE AND ZIP CODE
ARTESIA NM 88210

POSTAGE	$
CERTIFIED FEE	.75¢
SPECIAL DELIVERY	¢
RESTRICTED DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED	.60¢
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES	$ 2.06
POSTMARK OR DATE	

CONSULT POSTMASTER FOR FEES
OPTIONAL SERVICES
RETURN RECEIPT SERVICE

PS Form 3800, Apr. 1976

P 220 603 803

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO
GENE MILFORD
STREET AND NO.
P.O. Box 427
P.O., STATE AND ZIP CODE
Midland, Tx. 88267

POSTAGE	$
CERTIFIED FEE	.75¢
SPECIAL DELIVERY	¢
RESTRICTED DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED	.60¢
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES	$2.06
POSTMARK OR DATE	

CONSULT POSTMASTER FOR FEES
OPTIONAL SERVICES
RETURN RECEIPT SERVICE

PS Form 3800, Apr. 1976

P 265 194 757

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO
W.H. Gilmore
STREET AND NO.
1031 Andrews Hwy.
P.O., STATE AND ZIP CODE
Midland, Texas 79701

POSTAGE	$
CERTIFIED FEE	.75¢
SPECIAL DELIVERY	¢
RESTRICTED DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED	.60¢
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES	$ 2.06
POSTMARK OR DATE	

CONSULT POSTMASTER FOR FEES
OPTIONAL SERVICES
RETURN RECEIPT SERVICE

PS Form 3800, Apr. 1976

J. L. McGILL
Petroleum Engineer - P.E. 48745
2818 W. DENGAR
915-697-1539 MIDLAND, TEXAS 79701

March 11, 1983

Oil Conservation Division
P. O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

Attention: Mr. Oscar Simpson

Re: Proposed Gandy SWD Well
Sec. 12, T-9-S, R-37-E
Lea County, New Mexico

Gentlemen:

I transmitted a Form 108 on the above referenced well with supporting exhibits to you under cover letter dated March 9, 1983. I inadvertently neglected to send a copy of the application to Mr. Ted Gandy of Crossroad, New Mexico, whom is the surface owner of the tract where the proposed disposal well is located. The copy of said application is being transmitted today under certified mail. Enclosed herewith is a copy of the certified mail receipt as sent to Mr. Gandy.

Yours truly,

J. L. McGill

JLM/jra

Enclosure

P 220 603 806

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO
MR. TED GANDY

STREET AND NO.
Rt. 1

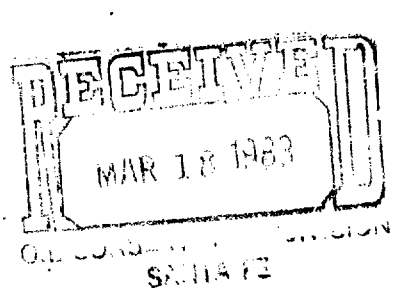
P.O., STATE AND ZIP CODE
CrossRoads NM 88114

POSTAGE		$
CONSULT POSTMASTER FOR FEES — OPTIONAL SERVICES: CERTIFIED FEE		.75¢ ¢
SPECIAL DELIVERY		¢
RESTRICTED DELIVERY		¢
RETURN RECEIPT SERVICE: SHOW TO WHOM AND DATE DELIVERED		.60¢ ¢
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		¢
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢
TOTAL POSTAGE AND FEES		$ 2.06

POSTMARK OR DATE

PS Form 3800, Apr. 1976

OIL CONSERVATION DIVISION
DISTRICT I



OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

DATE March 14, 1983

RE: Proposed MC
Proposed DHC
Proposed NSL
Proposed NSP
Proposed SWD X
Proposed WFX
Proposed PMX

Gentlemen:

I have examined the application for the:

J. L. McGill	Federal Heep	No. 1-H	12-9-37
Operator	Lease and Well No.	Unit, S - T - R	

and my recommendations are as follows:

O.K.-----J.S.

Yours very truly,

/mc