



# GREENHILL PETROLEUM CORPORATION

1490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

Incorporated in Delaware, U.S.A.

March 16, 1992

Oil Conservation Division  
State of New Mexico  
Energy, Minerals and Natural Resources Department  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Re: Lovington San Andres  
Lea County, New Mexico

Attention: Mr. David Catanach

Dear Mr. Catanach:

Enclosed please find the C-108's and attachments whereby Greenhill Petroleum proposes to convert the following wells from producers to injection wells in the Lovington San Andres Unit. These wells are as follows:

Lovington San Andres Well Number 8, 11, 20, 23, 38, 42, 69

Please contact me in the event you have any additional questions.

Very truly yours,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92.206

Enclosures

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage  
Application qualifies for administrative approval? ☐ yes ☐ no
- II. Operator: GREENHILL PETROLEUM CORPORATION  
Address: 11490 Westheimer, Suite 200, Houston, Texas 77077  
Contact party: Mike Newport Phone: (713) 589-8484
- 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 R-2278  
If yes, give the Division order number authorizing the project \_\_\_\_\_.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- \* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- \* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification
- I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- Name: Michael J. Newport Title Land Manager-Permian Basin
- Signature: \_\_\_\_\_ Date: 3-2-94
- \* 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. \_\_\_\_\_

## 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.

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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.

24	Texas Grade	Pennsoll				
	Texas	Pennsoll	Amerind oil	21	22	23
		Texas				V
	Yates	Southern Rhine	Calman oil	Amerind		
20	Tipperary	29	Amerind	Standard oil	28	27
	Monterich, Tex.		Bill Kilmer	Standard oil		
26	Texas	Southern Rhine	Texas	Amerind	Union Texas	
17	18	32	Texas	33	34	35
	19		25	Amerind		
27	Conoco	Texas	Conoco Texas	Tipperary	Pennsoll	Amerind
	Texas					
	Yates Pennsoll Kilmer		Conoco	Yates	Phillips	
	Pennsoll	Union	Union	Escon	Pennsoll	
	Brady	Jackson	Falken			
	Union Producing	Academy Energy	Pennsoll	open	10	11
	Columbus	Chevron	Consolidated oil & Gas			
	Hunt oil	Columbus	Hunt			
	Chevron	Hunt		16	15	14
	Amoco					

[illegible]





		R30E		R37E	
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998	999	1000	1001	1002	1003



VII

1. The proposed average and maximum daily rate and volume to be injected are 2000 PSI and 1500 BWPD.
2. The system will be a closed system.
4. The sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water is attached hereto as Exhibit "A".

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
GREENHILL ROBERT NO. 7
CASE NO. 10154

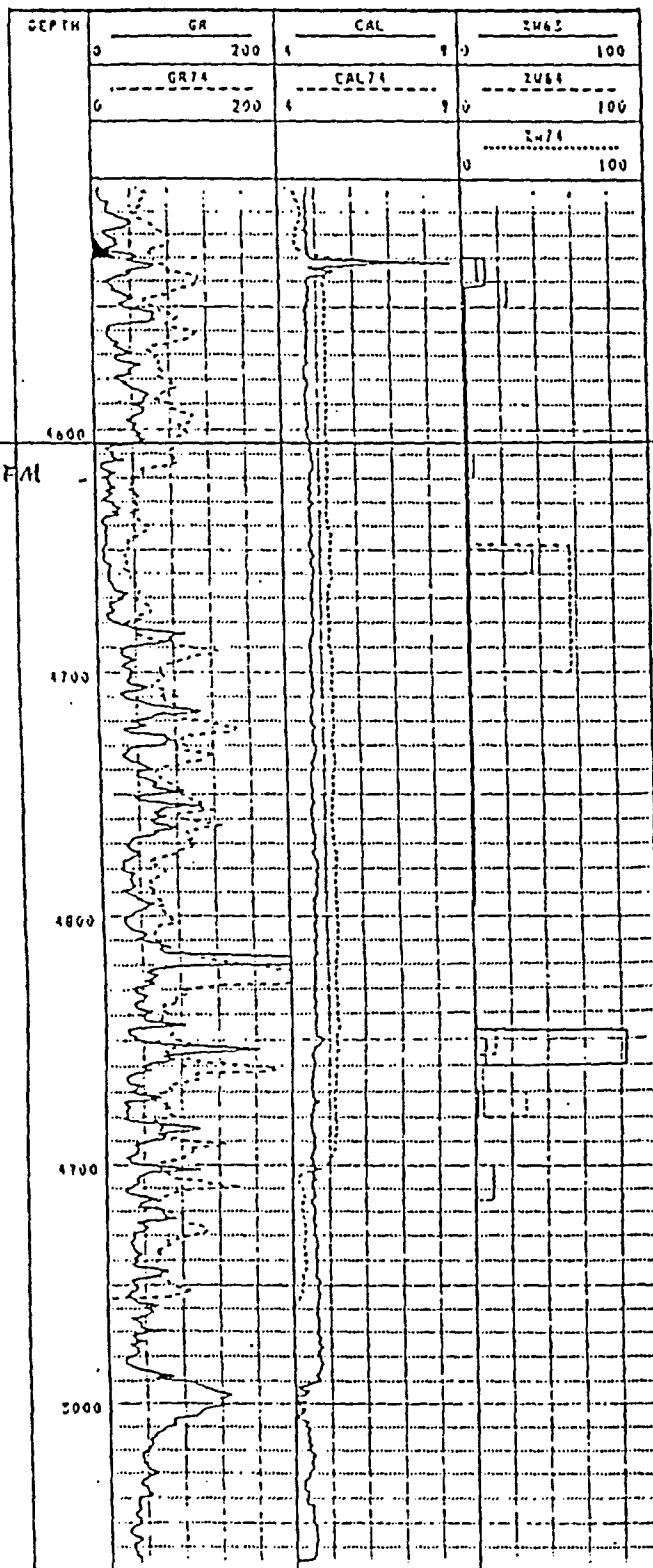
VIII GEOLOGIC DATA

The zone of interest for this application to inject is the San Andres Formation. In the area of the Lovington San Andres Field, the San Andres formation is approximately 1350' of dolomite; however, only the upper 400' - 500' is productive. The top of the San Andres formation occurs between 4580' and 4670' (log depth) in the Lovington San Andres Field. Attached is a type log from the Lovington San Andres Field. The well log (LSAU #14) is an injection well and shows three main zones within the field unit where water has been injected.

The only known underground source of drinking water in the Lovington San Andres Field area is the Ogallala Formation. The approximate base of the formation is 200'. No source is known to be immediately underlying the proposed injection interval.

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
GREENHILL EXHIBIT NO. <u>8</u>
CASE NO. <u>10154</u>

CYFRESS PETROLEUM CONSULTANTS	
WELL NAME	3-ELLY DEL LSA #11
LOCATION	1664 FSL 410 FAL 1-125-35E L9-
WELL DATA	DATE OF 8-27-10 287 1/2 4330
LOGS	WRIGHT SURVEYS SUBJECT TRACER 5-25-83
LOG PARAMETERS-	
DATA FILE NAME: LSA14.LGI	
DATE OF PLOT: 5/24/1989	



INJECTION  
PROFILES

INJECTION -  
PROFILES

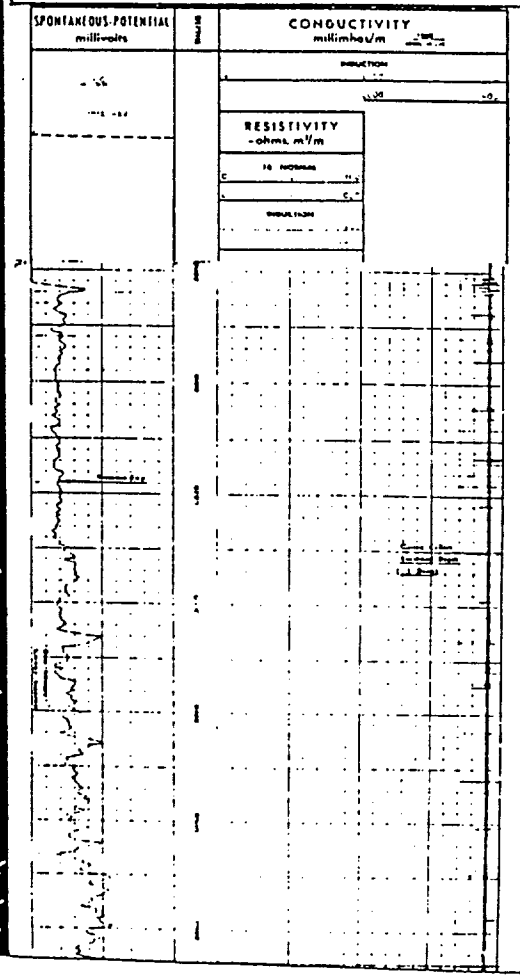
INJECTION  
PROFILES

Case 2593

Unbride 1-12 State  
12 12 SE  
1/11/36 E

COMPANY: <i>AMERICAN</i> WELL: <i>1-12</i> LOCATION: <i>12 12 SE</i> DATE: <i>1/11/36</i>		WELL: <i>1-12</i> LOCATION: <i>12 12 SE</i> DATE: <i>1/11/36</i>
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SPONTANEOUS POTENTIAL millivolts	CONDUCTIVITY millimhos/cm
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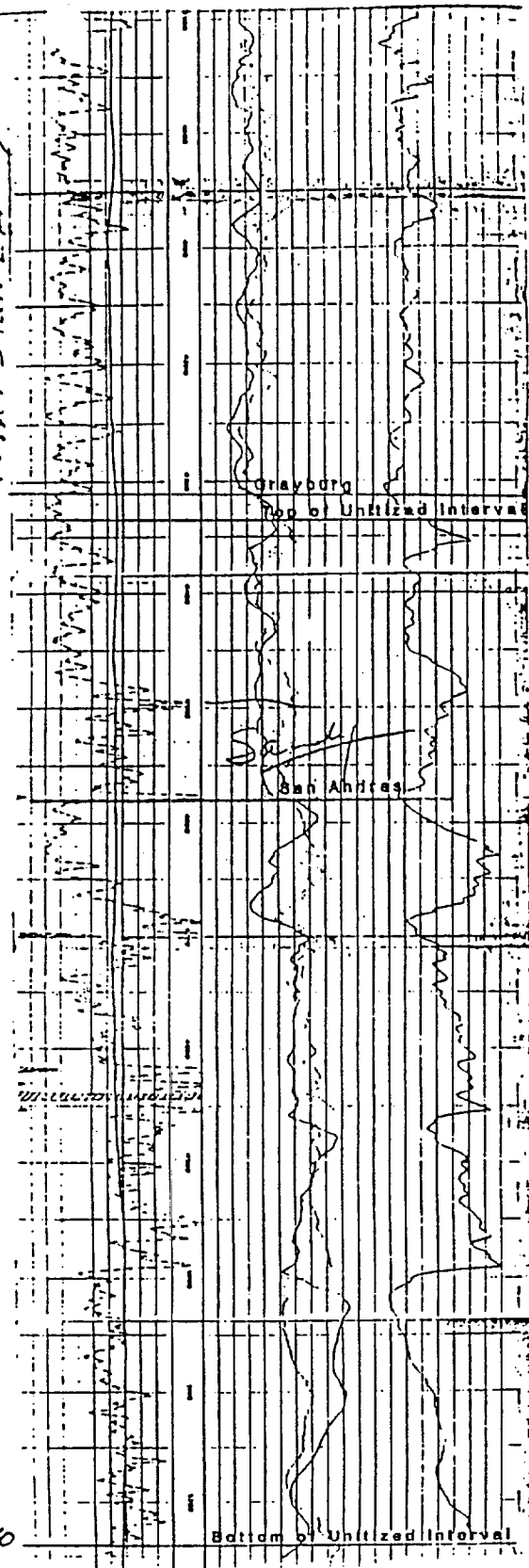


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IX

PROPOSED STIMULATION PROGRAM  
FOR CONVERSIONS FROM PROCEDURES TO INJECTION WELLS  
LOVINGTON SAN ANDRES UNIT  
LEA COUNTY, NEW MEXICO

1. MIRU PU w/reverse unit. Check and report pressure on casing strings. Inspect wellhead connections for condition and pressure rating. Insure all casing valves are at least 2000 psig W. P. Pull and lay down rods and pump.
2. Rig up and pressure test BOP to 3000 psig for 5 min. Pull tubing and TAC. Lay down TAC.
3. PU bit, casing scraper and collars and TIH to 200' above casing shoe. Scrape casing to 10 ft. above shoe. Do not go below casing shoe with scraper. POOH and lay down scraper. TIH to 10 ft. above casing shoe and circulate hole clean with clean water. Rotate and clean out bottom of open-hole interval below casing shoe.
4. Spot enough 20% NEFE HCl acid to cover the open-hole interval. Slowly pull bit above top of acid and POOH.
5. Rig up perforating contractor. String shoot water flood intervals w/400 grains per foot primacord. TIH with bit and tubing and circulate open hole interval clean to TD w/water. POOH laying down workstring.
6. PU new 2 3/8" IPC tubing string w/new water flood packer and TIH to 20' above casing shoe. Circulate inhibited fresh water into tubing-casing annulus and set packer. Pressure test annulus to 500 psig for 5 min. Release pressure. RD BOP and install waterflood and wellhead.
7. Pressure test annulus per NMOCD requirements. Release rig.
8. Rig up acid contractor and treat below packer with 15 tons CO<sub>2</sub> and 3000 gal. 20% NEFE HCl acid using diverter in 3 stages. Flow well back to recover load and clean-up formation. SI well.
9. Install wellhead filter cartridge housing and filter. Hook up new water injection line.
10. Put well on injection. When rate and pressure stabilize, run water injection survey.

BEFORE EXAMINER CATANACH  
OIL CONSERVATION DIVISION

GREENHILL EXHIBIT NO. 9

81

P. O. BOX 1468  
MONAHAN, TEXAS 79756  
PH. 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

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

RESULT OF WATER ANALYSES

TO: Mr. Dan Westover  
12777 Jones Road, Suite 375, Houston, TX

LABORATORY NO. 1189311  
SAMPLE RECEIVED 11-27-89  
RESULTS REPORTED 12-4-89

COMPANY Greenhill Petroleum Corporation LEASE Lovington San Andres Unit  
FIELD OR POOL Lovington  
SECTION BLOCK SURVEY COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Produced water - taken from injection pump discharge. 11-27-89  
NO. 2  
NO. 3  
NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0160			
pH When Sampled	6.8			
pH When Received	6.90			
Bicarbonate as HCO <sub>3</sub>	1,464			
Supersaturation as CaCO <sub>3</sub>	70			
Undersaturation as CaCO <sub>3</sub>	---			
Total Hardness as CaCO <sub>3</sub>	5,700			
Calcium as Ca	1,540			
Magnesium as Mg	450			
Sodium and/or Potassium	5,369			
Sulfate as SO <sub>4</sub>	2,358			
Chloride as Cl	9,730			
Iron as Fe	0.32			
Barium as Ba	0			
Turbidity, Electric	72			
Color as Pt	56			
Total Solids, Calculated	20,910			
Temperature °F.	67			
Carbon Dioxide, Calculated	381			
Dissolved Oxygen, - chemets	0.000			
Hydrogen Sulfide	480			
Resistivity, ohms/m at 77° F.	0.420			
Suspended Oil	15			
Filtrable Solids as mg/l	22.9			
Volume Filtered, ml	850			

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The above results show no direct or indirect evidence of air contamination in this study, therefore indicating effective control against this condition is being accomplished. Our microscopic study of the filtrable solids showed them to be essentially all a very fine paraffin, therefore indicating no particular significance to the higher quantity we have encountered as compared to recent studies. We have identified no evidence of any other development of concern and therefore see no need to make any changes at this time.

By Waylan C. Martin, M.A.

# 03 PRECIPITATION

## Calcium Carbonate Scale Prediction Lovington San Andres Unit Paragon Engineering Services

Water "A": 50% Lovington WSW.1 + 50% WSW. #2, Analysis No. 1188285  
Water "B": Calculated produced water analysis assuming injection water  
is 56% produced & 44% source. Analysis No. 1188290  
Analysis: Martin Water Laboratories, Inc.  
Date Reported: 12/07/88.

### Hypothetical Composition of Mixed Waters mg/l

% Water "A"	100	80	44	40	20	0
% Water "B"	0	20	56	60	80	100
<b>Components:</b>						
<b>CATIONS</b>						
Calcium, Ca	138.50	646.18	1560.00	1661.54	2169.21	2676.89
Magnesium, Mg	15.50	122.82	316.00	337.46	444.79	552.11
Iron, Fe	1.09	1.74	2.90	3.03	3.68	4.32
Barium, Ba	0.00	0.00	0.00	0.00	0.00	0.00
Sodium, Na	150.00	1931.43	5138.00	5494.29	7275.71	9057.14
<b>ANIONS</b>						
Chloride, Cl	323.00	3555.86	9375.00	10021.57	13254.43	16487.29
Sulfate, SO <sub>4</sub>	99.50	655.04	1655.00	1766.11	2321.64	2877.18
Carbonate, CO <sub>3</sub>	0.00	0.00	0.00	0.00	0.00	0.00
Bicarbonate, HCO <sub>3</sub>	223.00	766.57	1745.00	1853.71	2397.29	2940.86
Tot. Dissolved Solids	950.59	7679.63	19791.90	21137.71	27866.75	34595.79
Measured pH Values	7.00		6.70			
1/H <sup>+</sup> = 10 <sup>-pH</sup>	10000000		5011872.34			
H <sup>+</sup> = 1/10 <sup>-pH</sup>	.0000001	.0000001355	.0000001995	.000000207	.000000242	.000000278
1/H <sup>+</sup> = 10 <sup>-pH</sup>		7377619.17		4839445.40	4129154.49	3600678.77
Calculated pH Values		6.87		6.68	6.62	6.56

### Calcium Carbonate Solubility Calculation.

1. Calculate molar ionic strength of water, (u).  
(u) = sum of (mg/l x Conv. Factor) for all ions.

	Conv. Factor						
Ca	.00005	.006925	.032309	.078000	.083077	.108461	.133845
Mg	.000082	.001271	.010071	.025912	.027672	.036472	.045273
Ba	.000015	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Na	.000022	.003300	.042491	.113036	.120874	.160066	.199257
Cl	.000014	.004522	.049782	.131250	.140302	.185562	.230822
SO <sub>4</sub>	.000021	.002090	.013756	.034755	.037088	.048754	.060421
CO <sub>3</sub>	.000033	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
HCO <sub>3</sub>	.000008	.001784	.006133	.013960	.014830	.019178	.023527
u =		.02	.15	.40	.42	.56	.69



Calcium Carbonate Stability Index (Cont.)

Water: "A"	100	80	44	40	20	0
Water: "B"	0	20	56	60	80	100

2. Determine K from Stiff & Davis graph for (u); pCa and pAlk are calculated by this program from the equations below.

$$pCa = \log(1/\text{mols Ca}^{++}/\text{Liter})$$

$$pAlk = \log(1/\text{Equiv. Total Alk}/\text{Liter})$$

Temperature: 80F (26.7C)  
120F (49C)

Look Up K:

K for 80F	2.06	2.60	3.07	3.08	3.21	3.29
K for 120F	1.68	2.16	2.56	2.58	2.70	2.78

Calculated pCa	2.46	1.79	1.41	1.38	1.27	1.18
Calculated pAlk	2.44	1.90	1.54	1.52	1.41	1.32

3. Calculate the Stiff & Davis CaCO<sub>3</sub> Stability Index (SI).

$$SI = pH - (K + pCa + pAlk)$$

(K + pCa + pAlk)

At 80F =	6.96	6.29	6.02	5.98	5.88	5.78
At 120F =	6.58	5.85	5.51	5.48	5.37	5.27

CaCO<sub>3</sub> SI =

At 80F =	<u>1.04</u>	<u>1.57</u>	<u>1.68</u>	<u>1.70</u>	<u>1.73</u>	<u>1.77</u>
At 120F =	<u>1.42</u>	<u>1.05</u>	<u>1.19</u>	<u>1.20</u>	<u>1.24</u>	<u>1.28</u>

SI = Calcium Carbonate Stability Index. A positive value indicates the water has a tendency to precipitate CaCO<sub>3</sub> under these conditions. A negative SI indicates the water is non-scaling.

Note: All calculations above are made and stored in the computer to eleven significant figures. Only eight decimal places are shown in this print out.

# CO<sub>2</sub> I<sub>s</sub> Across System

Calculation of Oddo & Thomson CaCO<sub>3</sub> Scaling Index - I<sub>s</sub>  
Two Phase System (Water & Gas)  
Oddo and Thomson Method  
Lovington San Andres Unit  
Paragon Engineering Services

Water: Calculated produced water composition. See CaCO<sub>3</sub> calculation.

Analysis: Martin Water Laboratories, Inc. No. 1188286

Date Reported: 12/07/88.

Approximate Location in System: Reservoir

$$I_s = D + (1.549 \times 10^{-2} \times T) - (4.26 \times 10^{-6} \times T^2) \\ - (7.44 \times 10^{-5} \times P) + 0.919u - 2.52(u)^{0.5} + 5.89$$

P = 2000.00 psia  
X = .05 Mole Fraction CO<sub>2</sub>  
Ca = .066755 Moles/l  
Alk = .048211  
D = -5.80922 log[(C)(Alk)<sup>2</sup>/(P)(X)]  
T = 120.00 Temp, F  
u = .69 Molar Ionic Strength

C = Ca(mg/l)/40100 = .066755  
Alk = (HCO<sub>3</sub> + CO<sub>3</sub>(mg/l))/61000 = .0482108  
D = log(((C)(Alk)<sup>2</sup>/((P)(X)))) = -5.80922

Variable	Value	x Constant	=	Product
D	-5.80922	1.00	=	-5.81
T	120.00	.01549	=	1.86
(T)(T)	14400.00	-.000004	=	-.06
P	2000.00	-.000074	=	-.15
u	.69	.919	=	.63
(u) <sup>0.5</sup>	.8306624	-2.52	=	-2.09
				5.89

Sum = I<sub>s</sub> = .27

# "A"

## WATER ANALYSIS REPORT

---

Company : GREENHILL PETROLEUM  
 Address : LOVINGTON, NM  
 Lease : SENE SEC 2 TI7S R36E  
 Well : S. A. #44  
 Sample Pt. : WINDMILL

Date : 8-22-90  
 Date Sampled : 8-22-90  
 Analysis No. : 1

ANALYSIS		mg/L		* meq/L
-----		----		-----
1. pH	7.5			
2. H2S	0			
3. Specific Gravity	1.001			
4. Total Dissolved Solids		2222.8		
5. Suspended Solids		NR		
6. Dissolved Oxygen		NR		
7. Dissolved CO2		NR		
8. Oil In Water		NR		
9. Phenolphthalein Alkalinity (CaCO3)				
10. Methyl Orange Alkalinity (CaCO3)				
11. Bicarbonate	HCO3	244.0	HCO3	4.0
12. Chloride	Cl	917.6	Cl	25.9
13. Sulfate	SO4	325.0	SO4	6.8
14. Calcium	Ca	720.0	Ca	35.9
15. Magnesium	Mg	0.5	Mg	0.0
16. Sodium (calculated)	Na	15.7	Na	0.7
17. Iron	Fe	0.0		
18. Barium	Ba	0.0		
19. Strontium	Sr	0.0		
20. Total Hardness (CaCO3)		1800.0		

### PROBABLE MINERAL COMPOSITION

---

*milli equivalents per Liter		Compound	Equiv wt X meq/L	= mg/L
+-----+	+-----+	-----	-----	-----
36 *Ca <-----	*HCO3	4	Ca(HCO3)2	81.0 4.0 324
-----	/----->	-----	CaSO4	68.1 6.8 461
0 *Mg ----->	*SO4	7	CaCl2	55.5 25.2 1396
-----	<-----/	-----	Mg(HCO3)2	73.2
.1 *Na ----->	*Cl	26	MgSO4	60.2
+-----+	+-----+		MgCl2	47.6 0.0 2
Saturation Values Dist. Water 20 C			NaHCO3	84.0
CaCO3	13 mg/L		Na2SO4	71.0
CaSO4 * 2H2O	2090 mg/L		NaCl	58.4 0.7 40
BaSO4	2.4 mg/L			

REMARKS:

---

Petrolite Oilfield Chemicals Group

Respectfully submitted,  
 D. SWEATT

# "A"

## WATER ANALYSIS REPORT

Company : GREENHILL PETROLEUM  
 Address : LOVINGTON, NM  
 Lease : SENE SEC 36 T16S R36E  
 Well : PAD 18 35  
 Sample Pt. : WINDMILL

Date : 8-22-90  
 Date Sampled : 8-22-90  
 Analysis No. : 2

ANALYSIS		mg/L		* meq/L
1. pH		7.6		
2. H2S		0		
3. Specific Gravity		1.001		
4. Total Dissolved Solids		2086.2		
5. Suspended Solids		NR		
6. Dissolved Oxygen		NR		
7. Dissolved CO2		NR		
8. Oil In Water		NR		
9. Phenolphthalein Alkalinity (CaCO3)				
10. Methyl Orange Alkalinity (CaCO3)				
11. Bicarbonate	HCO3	244.0	HCO3	4.0
12. Chloride	Cl	1035.2	Cl	29.2
13. Sulfate	SO4	200.0	SO4	4.2
14. Calcium	Ca	350.0	Ca	17.5
15. Magnesium	Mg	224.9	Mg	18.5
16. Sodium (calculated)	Na	32.1	Na	1.4
17. Iron	Fe	0.0		
18. Barium	Ba	0.0		
19. Strontium	Sr	0.0		
20. Total Hardness (CaCO3)		1800.0		

### PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/L
17 *Ca <----- *HCO3	Ca(HCO3)2	81.0	4.0 324
----- /----->	CaSO4	68.1	4.2 283
19 *Mg -----> *SO4	CaCl2	55.5	9.3 516
----- <----- /	Mg(HCO3)2	73.2	
1 *Na -----> *Cl	MgSO4	60.2	
	MgCl2	47.6	18.5 881
Saturation Values Dist. Water 20 C	NaHCO3	84.0	
CaCO3 13 mg/L	Na2SO4	71.0	
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	1.4 82
BaSO4 2.4 mg/L			

REMARKS:

Petrolite Oilfield Chemicals Group

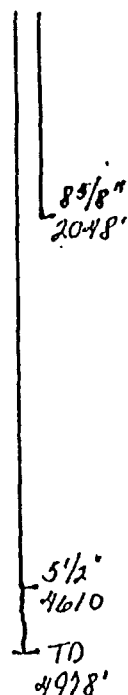
Respectfully submitted,  
 D. SWEATT

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR	2130' <del>N</del> 1980' <del>W</del>	LEASE		
8	2150' FNL & 366' FEL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
7-24-44



Surface Casing

Size: 8-5/8" Cemented with 500 SX

TOC: Surface feet determined by calc

Hole size:

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 500 SX

TOC: 1886 feet determined by 80% calc

Hole size: 7-7/8"

Total Depth: 4978'

Injection Interval

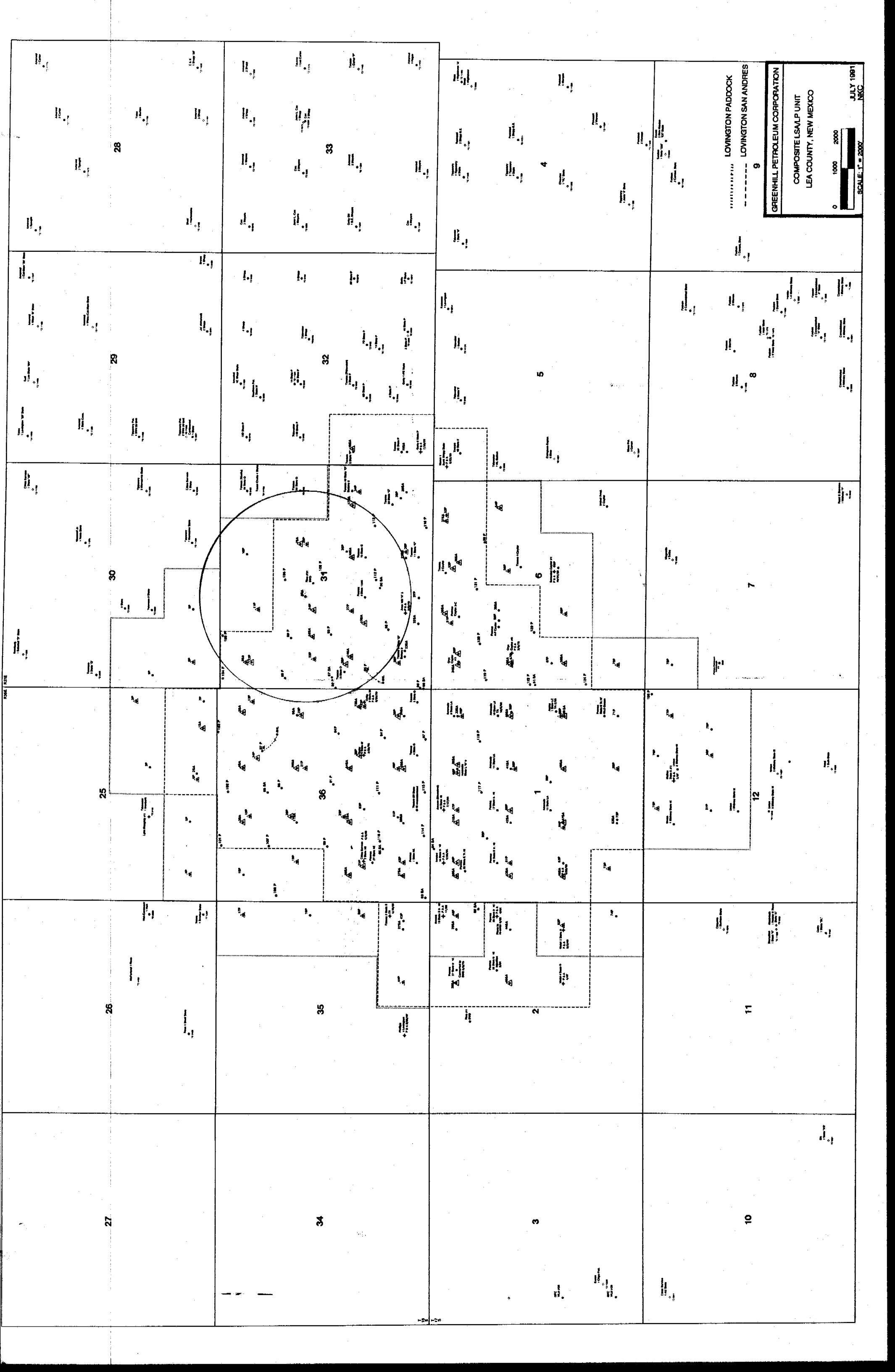
4610 feet to 4978 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with JPC set in a packer  
at 4560 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: San Andres
  - Name of Field or Pool (If applicable) Lovington San Andres
  - Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
  - Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
- 
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

(Above) Grayburg



## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#11	1980 FNL & 1980 FWL	36	T16S	R36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Size: 13 " Cemented with 25 SXTOC: Surface feet determined by calcHole size: 15

## Intermediate Casing

Size: 8 5/8 " Cemented with 500 SXTOC: 555 feet determined by 50% calcHole Size: 10 1/4

## Long String

Size: 5 1/2 " Cemented with 200 SXTOC: 649 feet determined by 80% calcHole Size: 6 1/4Total Depth: 4996'

## Injection Interval

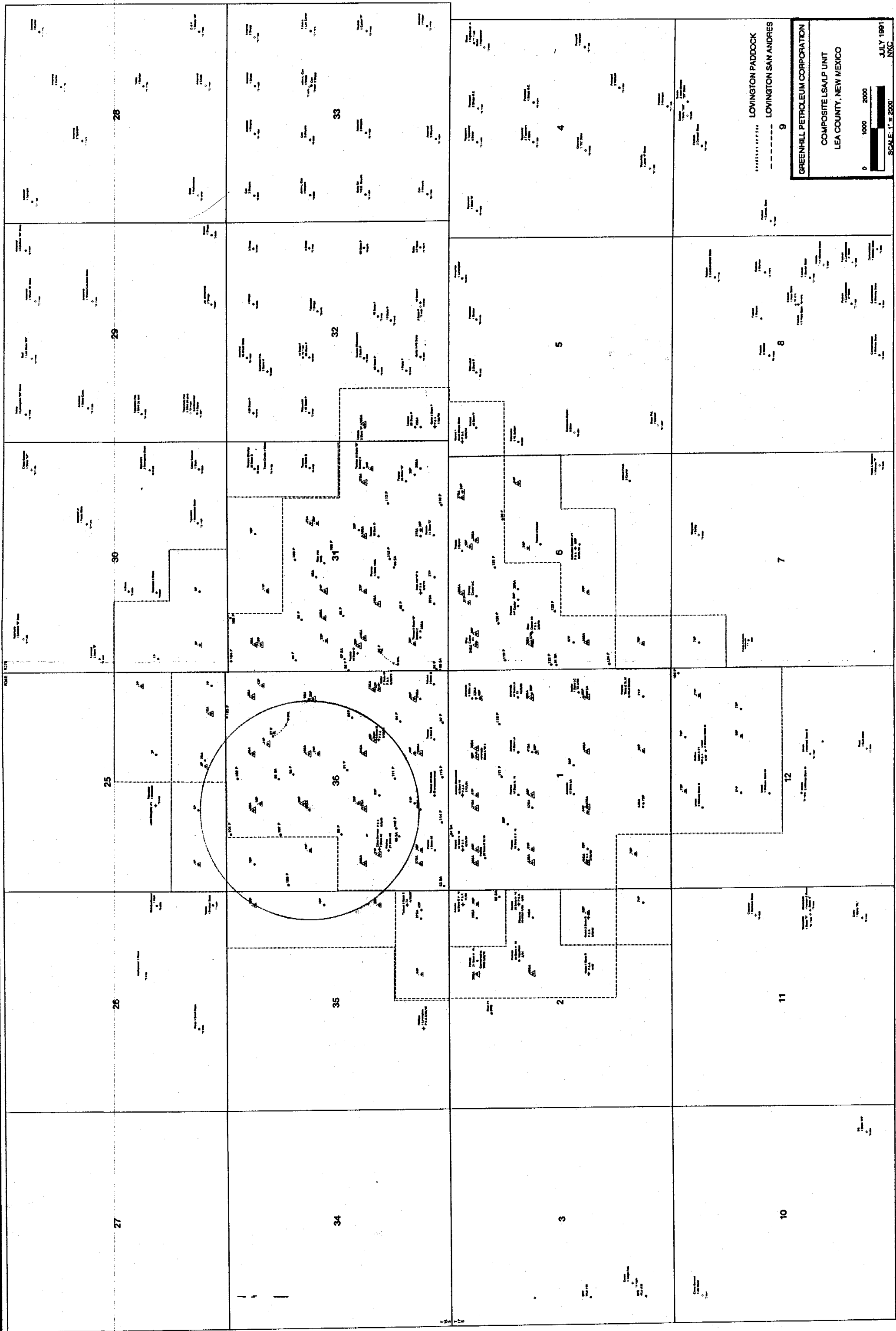
4575 feet to 5130 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
(material)  
packer at 4525 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (IF applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
1/40





INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#20	660 FSL & 660 FEL	31	T16S	R37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Surface Casing

Size: 13 " Cemented with 20 SK

TOC: Surface feet determined by calc

Hole size: 15

Intermediate Casing

Size: 8 5/8 " Cemented with 475 SK

TOC: 784 feet determined by 50% calc

Hole Size: 10 1/2

Long String

Size: 5 1/2 " Cemented with 450 SK

TOC: 1340 feet determined by 80% calc

Hole Size: 7

Total Depth: 4945'

Injection Interval

4580 feet to 4945 feet  
(perforated or open-hole, indicate which)

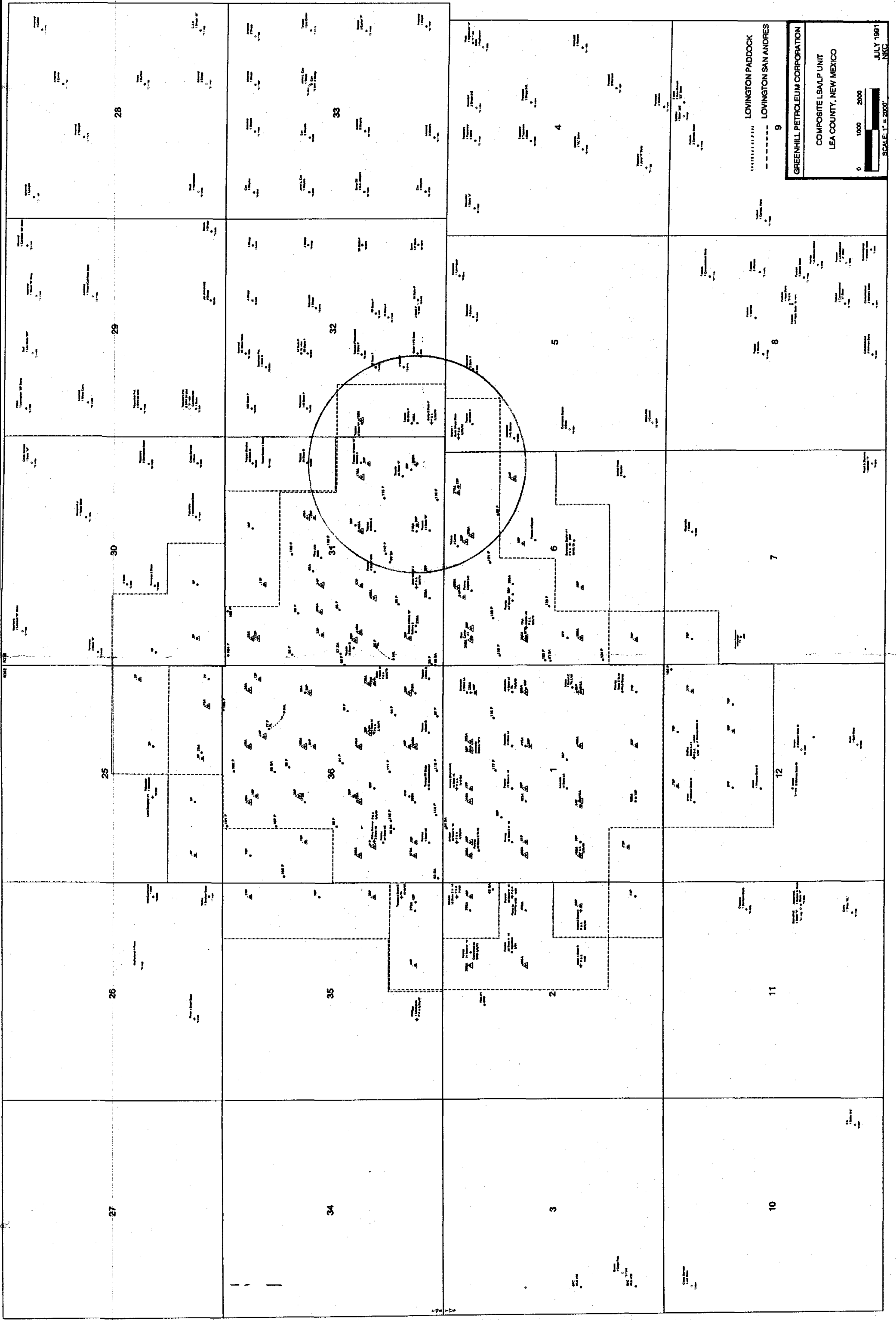
Tubing size 2 3/4 lined with IPC set in a  
(material)  
packer at 4530 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (IF applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
1/6/45

13'  
20'  
8 5/8 "  
2099'  
5 1/2 "  
4580'  
4945'



## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#23	660 FSL & 900 FWL	31	T16S	R37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Size: 13 " Cemented with 200 SXTOC: Surface feet determined by Circ. calcHole size: 14

## Intermediate Casing

Size: 9 5/8 " Cemented with 500 SXTOC: 1773 feet determined by 50% calcHole Size: 11 1/4

## Long String

Size: 7 " Cemented with 200 SXTOC: 2735 feet determined by 80% calcHole Size: 8 1/4Total Depth: 5081'

## Injection Interval

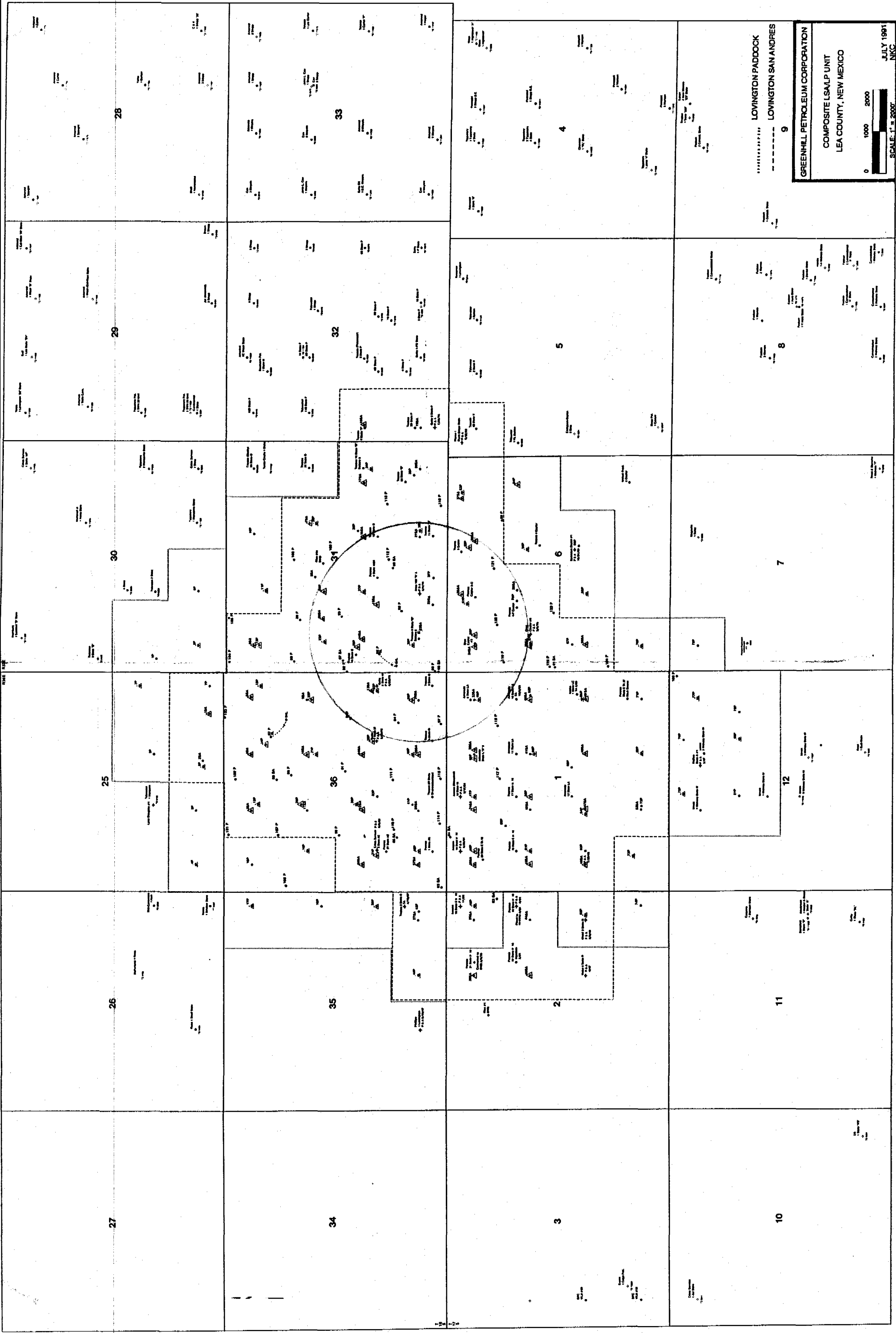
4530 feet to 5081 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
(material)  
packer at 4480 feet.  
(brand & model)  
(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) Lovington San Andres
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
6/2/39



INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
38	1650' FNL & 1980' FWL	6	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
9-16-39

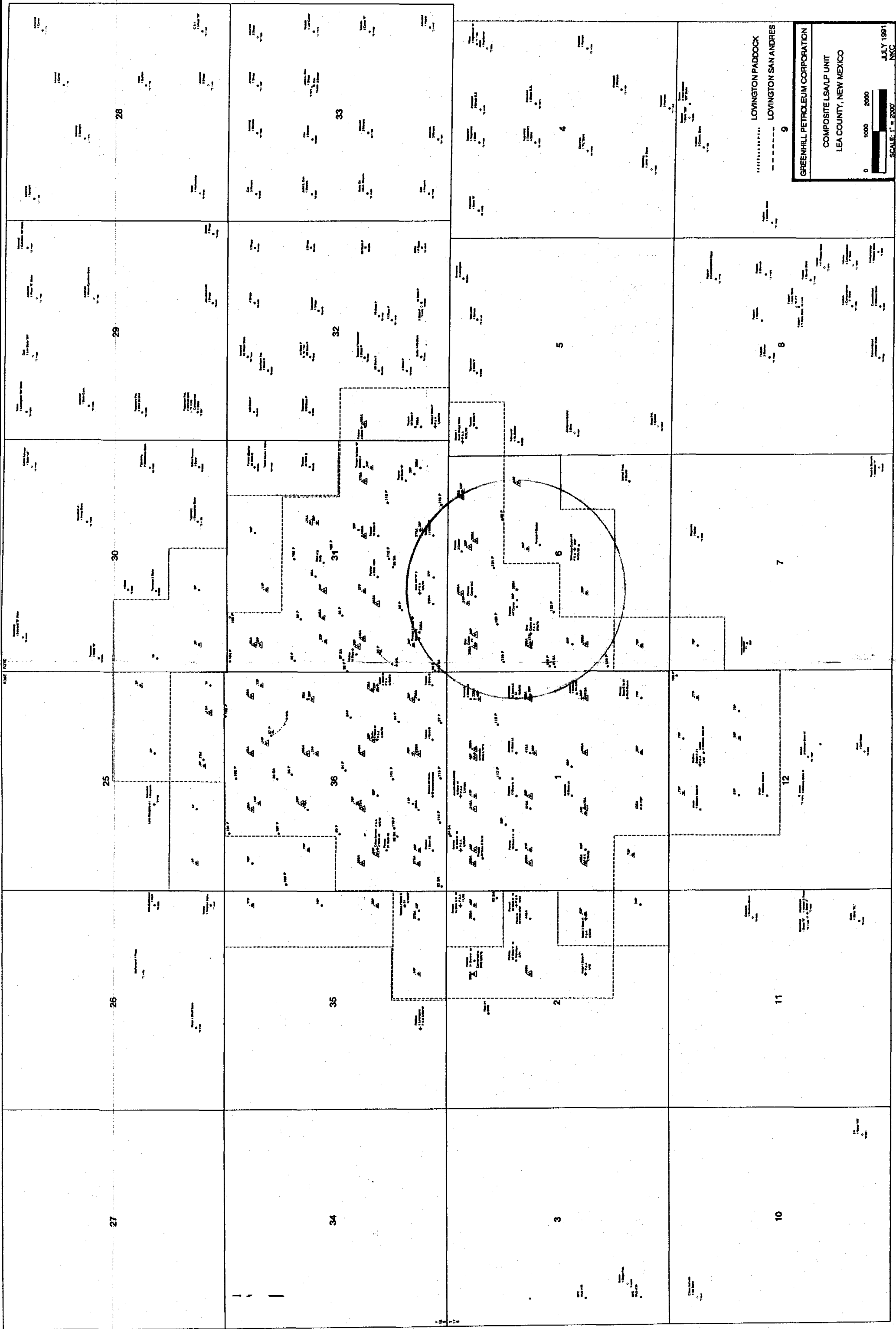
<div style="display: flex; align-items: center;"> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 100px; margin-right: 5px;"></div> <div style="display: flex; flex-direction: column; justify-content: space-around;"> <div>310'</div> <div>13"</div> <div>2950'</div> <div>12"</div> <div>4590'</div> <div>7"</div> <div>4945'</div> <div>TD</div> </div> </div>	<p><u>Surface Casing</u></p> <p>Size: <u>13</u> " Cemented with <u>250</u> SX</p> <p>TOC: <u>Surface</u> feet determined by <u>circ</u></p> <p>Hole size: <u>17-1/4"</u> <u>15</u></p>
	<p><u>Intermediate Casing</u></p> <p>Size: <u>9-5/8</u> " Cemented with <u>350</u> SX</p> <p>TOC: <u>1804</u> feet determined by <u>calc</u></p> <p>Hole Size: <u>12"</u> <u>10 3/4</u></p>
	<p><u>Long String</u></p> <p>Size: <u>7</u> " Cemented with <u>300</u> SX</p> <p>TOC: <u>2707</u> feet determined by <u>calc</u></p> <p>Hole Size: <u>8-3/4"</u> <u>8 1/4</u></p> <p>Total Depth: <u>4945'</u></p>
<p><u>Injection Interval</u></p> <p><u>4590</u> feet to <u>4945</u> feet (perforated or open-hole, indicate which)</p>	

Tubing size 2 3/8 lined with IPC set in a  
(material)  
packer at 4540 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Underlying-Grayburg



INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#42	1980' FNL & 1980' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

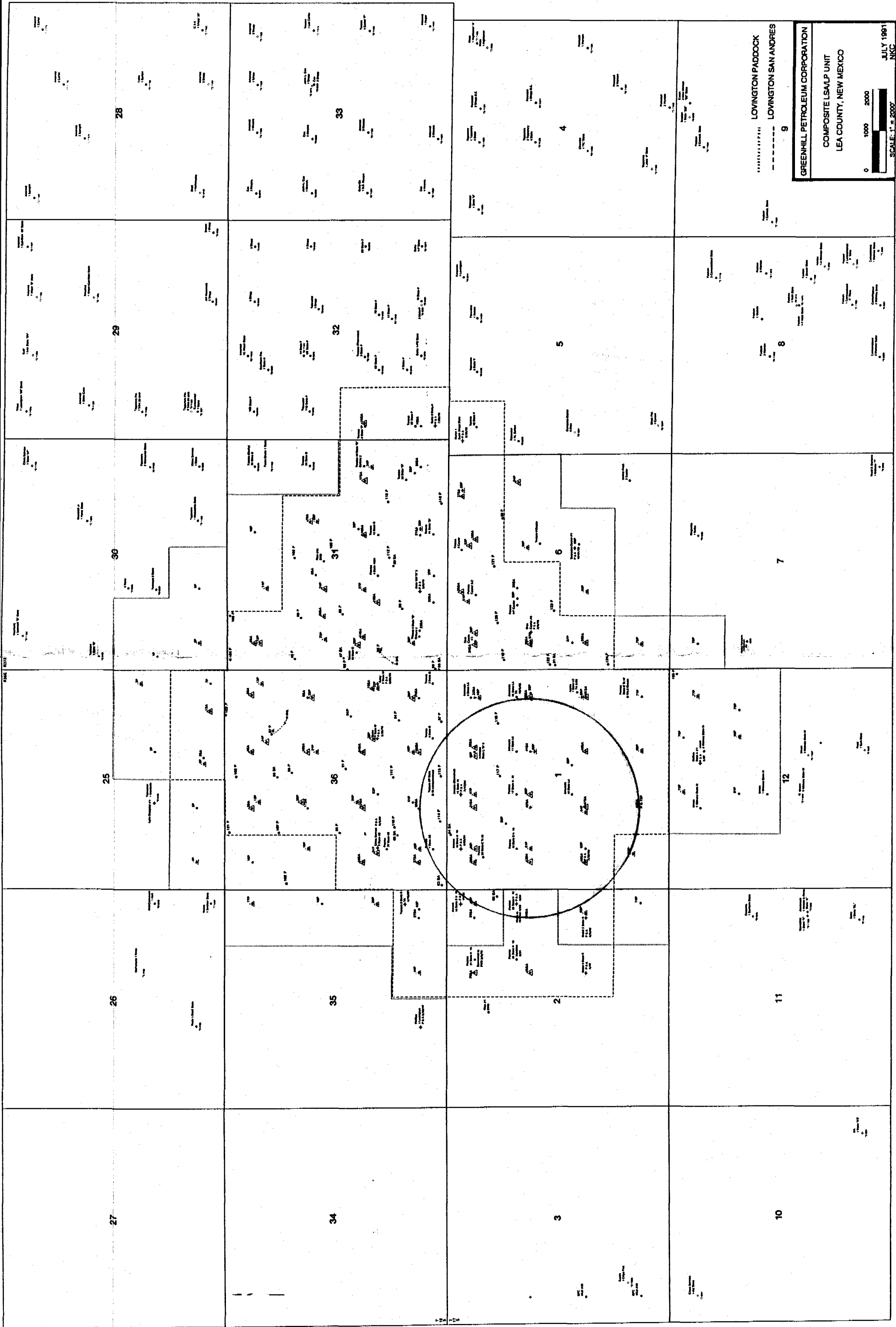
Completed  
4-1-39

<div>299' 13"</div> <div>3095' 9 5/8"</div> <div>4536' 7"</div> <div>4938' TD</div>	<u>Surface Casing</u>	
	Size: 13 "	Cemented with 200 SX
	TOC: Surface	feet determined by calc
	Hole size: 17-1/4"	
	<u>Intermediate Casing</u>	
	Size: 9-5/8 "	Cemented with 535 SX
	TOC: 1517	feet determined by calc
	Hole Size: 12"	
	<u>Long String</u>	
	Size: 7 "	Cemented with 300 SX
TOC: 2887 feet determined by calc		
Hole Size: 8-3/4"		
Total Depth: 4938'		
<u>Injection Interval</u>		
4536 feet to 4938 feet (perforated or open-hole, indicate which)		

Tubing size 2 3/8 lined with IPC set in a  
(material)  
packer at 4480 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg





## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#42	1980' FNL & 1980' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
4-1-39

299'  
13"  
  
3595'  
9 5/8"  
  
4536'  
7"  
  
4938'  
TD

## Surface Casing

Size: 13 " Cemented with 200 SXTOC: Surface feet determined by calcHole size: 17-1/4"

## Intermediate Casing

Size: 9-5/8 " Cemented with 535 SXTOC: 1517 feet determined by calcHole Size: 12"

## Long String

Size: 7 " Cemented with 300 SXTOC: 2887 feet determined by calcHole Size: 8-3/4"Total Depth: 4938'

## Injection Interval

4536 feet to 4938 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
(material)  
packer at 4480 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

# INJECTION WELL DATA SHEET

GREENHILL PETROLEUM CORPORATION		Lovington Paddock Unit	
OPERATOR		LEASE	
69	2173 FSL & 2173 FEL	6	T17S-R37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP RANGE

## Tubular Data

### Surface Casing

Size: 13 3/8" ~ Cemented with 350 SX

TOC: surface feet determined by circ.

Hole size: 17 1/2"

### Intermediate Casing

Size: 8 5/8" ~ Cemented with 1150 SX

TOC: 820 feet determined by TS

Hole Size: 11

### Long String

Size: 5 1/2" ~ Cemented with 600 SX

TOC: 1500 feet determined by TS

Hole Size: 7 7/8"

Total Depth: 6270

### Injection Interval

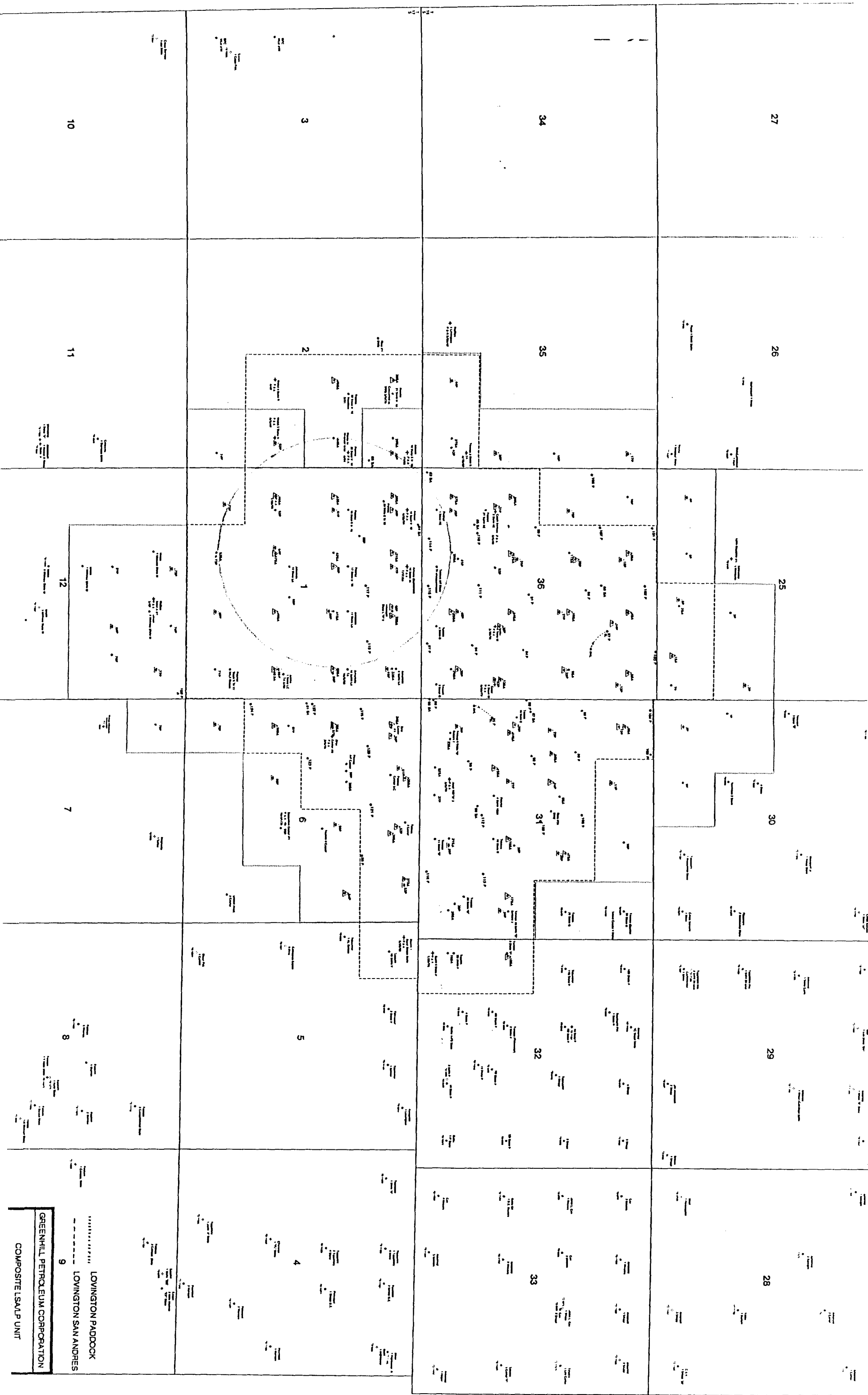
6104 feet to 6262 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8" lined with IPC set in a  
(material)  
packer at 6050 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation Paddock
- Name of Field or Pool (If applicable) Lovington Paddock
- Is this a new well drilled for injection? NO  
If no, for what purpose was the well originally drilled? production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Above Glorietta



# INJECTION WELL DATA SHEET

TEXACO		State P Unit		
OPERATOR		LEASE		
6-D	1650 FWL & 1650 FSL	32	T16S-R37E	
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

### Surface Casing

Size: 13 3/8" Cemented with 350 SX  
 TOC: surface feet determined by circ.  
 Hole size: 17 3/4"

### Intermediate Casing

Size: 8 5/8" Cemented with 1200 SX  
 TOC: 1120 feet determined by C-104  
 Hole Size: 11

### Long String

Size: 5 1/2" Cemented with 732 SX  
 TOC: 4080 feet determined by C-104  
 Hole Size: 7 7/8"  
 Total Depth: 8420'

### Injection Interval

----- feet to ----- feet  
 (perforated or open-hole, indicate which)

Tubing size ----- lined with ----- set in a  
 ----- (material)  
 ----- packer at ----- feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation -----
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

# INJECTION WELL DATA SHEET

TEXACO	State "P" Unit			
OPERATOR	LEASE			
4-D	1650 FWL & 990 FSL	32	T 16S-R37E	
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

### Surface Casing

Size: 13 3/8" Cemented with 350 SX

TOC: surface feet determined by circ.

Hole size: 17 3/4"

### Intermediate Casing

Size: 8 5/8" Cemented with 1250 SX

TOC: surface feet determined by 60% calc.

Hole Size: 11

### Long String

Size: 5 1/2" Cemented with 532 SX

TOC: 6090 feet determined by 60% calc.

Hole Size: 7 5/8"

Total Depth: 8414

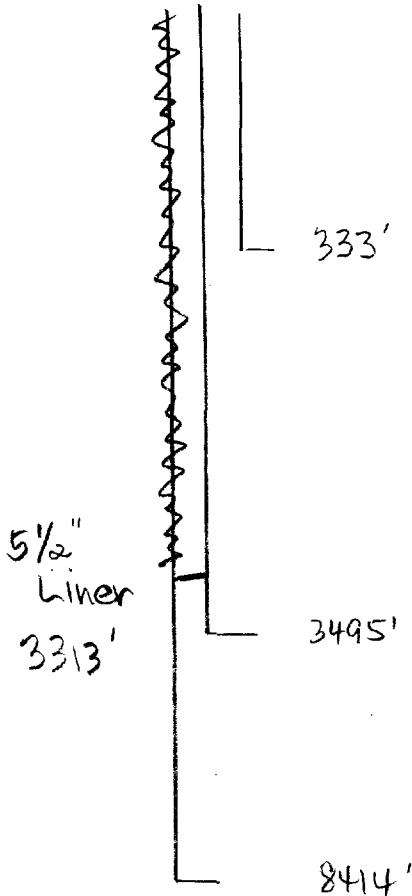
### Injection Interval

----- feet to ----- feet  
(perforated or open-hole, indicate which)

Tubing size ----- lined with ----- set in a  
(material)  
----- packer at ----- feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

1. Name of the injection formation -----
2. Name of Field or Pool (If applicable) Paddock
3. Is this a new well drilled for injection? -----  
If no, for what purpose was the well originally drilled? -----
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used). -----
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. -----



# INJECTION WELL DATA SHEET

GREENHILL PETROLEUM CORPORATION

Lovington Paddock Unit

OPERATOR

LEASE

72

660 FSL & 2080 FWL

1

T17S-R36E

WELL NO.

FOOTAGE LOCATION

SEC.

TOWNSHIP

RANGE

## Tubular Data

### Surface Casing

Size: 13 7/8" Cemented with 300 SX

TOC: surface feet determined by circ.

Hole size: 17 1/2

### Intermediate Casing

Size: 8 5/8" Cemented with 1500 SX

TOC: 679 feet determined by temp. survey

Hole Size: 11"

### Long String

Size: 5 1/2" Cemented with 500 SX

TOC: 3864 feet determined by temp. survey

Hole Size: 7 7/8

Total Depth: 6242'

### Injection Interval

----- feet to ----- feet  
(perforated or open-hole, indicate which)

Tubing size ----- lined with ----- set in a  
----- (material)  
----- packer at ----- feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation -----
- Name of Field or Pool (If applicable) Lovington Paddock
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Above Glorieta

# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#3	660 FNL & 1980 FEL	36	T16S	R36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

### Surface Casing

Size: 8 5/8 " Cemented with 450 SX  
 TOG: Surface feet determined by calc.  
 Hole size: 11

### Intermediate Casing

Size:        " Cemented with        SX  
 TOG:        feet determined by         
 Hole Size:       

### Long String

Size: 5 1/2 " Cemented with 375 SX  
 TOG: 2575 feet determined by 80% calc  
 Hole Size: 7 7/8  
 Total Depth: 4625'

### Injection Interval

4618 feet to 5090 feet  
 (perforated or open-hole, indicate which)

Tubing size 2 3/8" lined with IPC set in a  
 (material)  
waterflood tension packer packer at 4598' feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
 11/19/45  
 deepen to 5090

2082  
 4618  
 4625 TD

# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation  
OPERATOR

Lovington San Andres Unit  
LEASE

#7 1980 FNL & 1980 FEL 31 T16S R37E  
WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE

## Tubular Data

### Surface Casing

Size: 8 5/8" Cemented with 485 SX

TOG: Surface feet determined by calc.

Hole size: 10 1/4

### Intermediate Casing

Size: " Cemented with SX

TOG: feet determined by

Hole Size:

### Long String

Size: 5 1/2" Cemented with 375 SX

TOG: 1711 feet determined by 80% calc.

Hole Size: 7 1/4

Total Depth: 4955'

### Injection Interval

4620 feet to 4990 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8" lined with IPC set in a  
(material)  
packer at 4530 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Underlying - Grayburg

Completed  
1/5/49

deepen to 4955'  
4990

8 5/8"  
2043'

5 1/2"  
4620'  
TD 4955'



# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#10	1980' FNL & 1980' FEL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

### Surface Casing

Size: 13" Cemented with 250 SX  
 TOC: Surface feet determined by Circulation  
 Hole size: 17-1/4"

### Intermediate Casing

Size: 9-5/8" Cemented with 250 SX  
 TOC: 2246 feet determined by Calc  
 Hole Size: 12"

### Long String

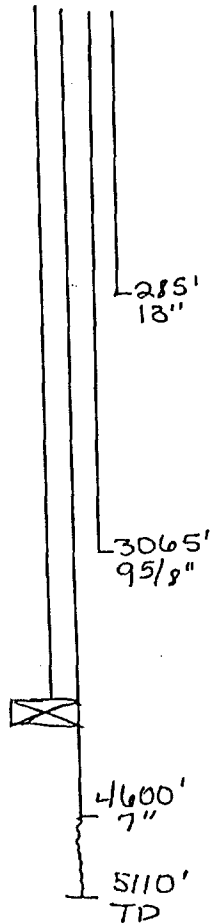
Size: 7" Cemented with 225 SX  
 TOC: 3189 feet determined by Calc  
 Hole Size: 8-3/4"

Total Depth: 5110'

### Injection Interval

4600 feet to 5110 feet  
 (perforated or open-hole, indicate which)

Completed  
4-4-39



Tubing size 2-3/8" lined with IPC set in a  
 (material)  
Water Flood-tension packer packer at 4580 feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Underlying-Grayburg

# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#12	1980' FSL & 1980' FWL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
7-5-45

Deepened  
7/87

### Surface Casing

Size: \_\_\_\_\_" Cemented with \_\_\_\_\_ SX

TOC: \_\_\_\_\_ feet determined by \_\_\_\_\_

Hole size: \_\_\_\_\_

### Intermediate Casing

Size: 8-5/8" Cemented with 500 SX

TOC: \_\_\_\_\_ surface feet determined by calc 80%

Hole Size: 11"

### Long String

Size: 5-1/2" Cemented with 450 SX

TOC: 2435 feet determined by calc 80%

Hole Size: 7-7/8"

Total Depth: 5055'

### Injection Interval

4580 feet to 5055 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
(material)  
water flood-tension packer packer at 4560 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation

Lovington San Andres

OPERATOR		LEASE		
#13	1760' FSL & 440' FEL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
12-16-39

299'  
13"  
  
 3003'  
8 5/8"  
  
 4518'  
5 1/2"  
  
 5068'  
TO

### Surface Casing

Size: 13 ~ Cemented with 225 SX

TOC: Surface feet determined by calc

Hole size: ?

### Intermediate Casing

Size: 8-5/8 ~ Cemented with 250 SX

TOC: 2235 feet determined by calc

Hole Size: 11"

### Long String

Size: 5-1/2 ~ Cemented with 150 SX

TOC: 2818 feet determined by calc

Hole Size: 6-3/4"

Total Depth: 5068

### Injection Interval

4518 feet to 5068 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a  
(material)  
waterflood tension packer at 4445 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation

Lovington San Andres

OPERATOR

LEASE

15

1650' FSL &amp; 1650' FWL

31

16S

37E

WELL NO.

FOOTAGE LOCATION

SEC.

TOWNSHIP

RANGE

Tubular DataSurface Casing

Size: 13 ~ Cemented with 200 SX

TOC: Surface feet determined by calc

Hole size: 17-1/4"

Intermediate Casing

Size: 9-5/8 ~ Cemented with 400 SX

TOC: 1818 feet determined by calc

Hole Size: 12"

Long String

Size: 7 ~ Cemented with 200 SX

TOC: 3840 feet determined by calc

Hole Size: 8-3/4"

Total Depth: 5110'

Injection Interval4531 feet to 5110 feet  
(perforated or open-hole, indicate which)Tubing size 2-3/8" lined with IPC set in a  
(material)

Waterflood tension packer at 4510 feet.

(brand &amp; model)

(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) Lovington San Andres
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. NO
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Underlying-Grayburg

# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#17	660 FNL & 330 FEL	31	T-16S	R37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

### Surface Casing

Size: 8 5/8 " Cemented with 450 SX  
 TOC: Surface feet determined by calc  
 Hole size: 10 1/4

### Intermediate Casing

Size:        " Cemented with        SX  
 TOC:        feet determined by         
 Hole Size:       

### Long String

Size: 5 1/2 " Cemented with 400 SX  
 TOC: 1832 feet determined by 80% calc  
 Hole Size: 7 1/4  
 Total Depth: 4935'

### Injection Interval

4623 feet to 5090 feet  
 (perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
 (material)  
water flood tension packer packer at 4603 feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
 9/17/46

deepen to  
 5090

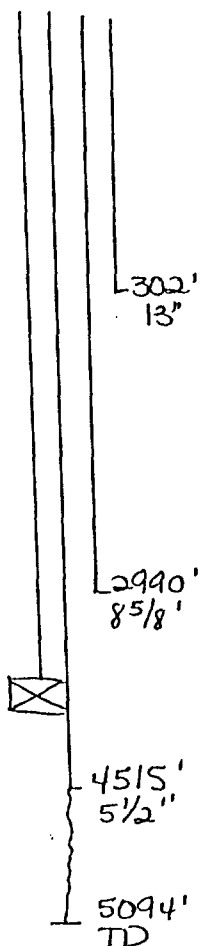
8 5/8"  
 2050'  
 4623'  
 5 1/2"  
 TD 4935

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#25	1980' FEL & 660' FSL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
10-18-39

Surface CasingSize: 13 " Cemented with 200 SXTOC: Surface feet determined by circHole size: 17-1/4"Intermediate CasingSize: 8-5/8 " Cemented with 400 SXTOC: 1765 feet determined by calcHole Size: 11"Long StringSize: 5-1/2 " Cemented with 200 SXTOC: 3424 feet determined by calcHole Size: 7-7/8"Total Depth: 5094'Injection Interval4515 feet to 5090 feet  
(perforated or open-hole, indicate which)

Tubing size 2- /8 lined with IPC set in a  
waterflood tension packer at 4495 feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#31	660' FNL & 1980' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
12-22-39

Deepened  
6-20-87

### Surface Casing

Size: 13 " Cemented with 200 SX

TOC: Surface feet determined by circ

Hole size: 17-1/4"

291'  
13"

### Intermediate Casing

Size: 8-5/8 " Cemented with 500 SX

TOC: 2021 feet determined by calc

3109'  
8 3/8"

Hole Size: 11"

### Long String

Size: 5-1/2 " Cemented with 325 SX

4541' TOC: 2890 feet determined by calc 80%

5 1/2"

Hole Size: 7-7/8"

4960'  
TD

Total Depth: 5125

### Injection Interval

5125'  
TD

4541 feet to 5125 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a  
(material)  
water flood tension packer at 4499 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Underlying-Grayburg

# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#35	339' FNL & 1890' FWL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
5-4-39

Deepen to 5040

	<u>Surface Casing</u>
	Size: <u>13</u> " Cemented with <u>200</u> SX
	TOC: <u>Surface</u> feet determined by <u>circ</u>
	Hole size: <u>17-1/4"</u>
	<u>Intermediate Casing</u>
	Size: <u>9-5/8"</u> " Cemented with <u>400</u> SX
	TOC: <u>1644</u> feet determined by <u>calc</u>
	Hole Size: <u>12"</u>
	<u>Long String</u>
	Size: <u>7</u> " Cemented with <u>300</u> SX
TOC: <u>1789</u> feet determined by <u>calc</u>	
Hole Size: <u>8-3/4"</u>	
Total Depth: <u>4942'</u>	
<u>Injection Interval</u>	
<u>4570</u> — feet to <u>5040</u> — feet (perforated or open-hole, indicate which)	

Tubing size 2 3/8 " — lined with IPC (material) set in a  
 \_\_\_\_\_ packer at 4520 feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Underlying-Grayburg



# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#37	330' FNL & 990' FEL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
7-24-46

Deepen to 5030

	<u>Surface Casing</u>
	Size: <u>13</u> " Cemented with <u>20</u> SX
	TOC: <u>Surface</u> feet determined by <u>circ</u>
	Hole size: <u>15</u> "
	<u>Intermediate Casing</u>
	Size: <u>7-5/8</u> " Cemented with <u>500</u> SX
	TOC: <u>Surface</u> feet determined by <u>calc</u>
	Hole Size: <u>9-3/4</u> "
	<u>Long String</u>
	Size: <u>5-1/2</u> " Cemented with <u>290</u> SX
TOC: <u>Surface</u> feet determined by <u>calc</u>	
Hole Size: <u>6-1/4</u> "	
Total Depth: <u>4943'</u>	
<u>Injection Interval</u>	
<u>4560</u> — feet to <u>5030</u> — feet (perforated or open-hole, indicate which)	

Tubing size 2 3/8 — lined with — IPC set in a  
(material)  
packer at 4510 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Underlying-Grayburg

# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#39	1985 FNL & 610 FWL	6	T17S	R37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

### Surface Casing

Size: 13 " Cemented with 200 SX

TOC: Surface feet determined by circulation

Hole size: 15"

### Intermediate Casing

Size: 9 5/8 " Cemented with 500 SX

TOC: 1506 feet determined by 50% calc

Hole Size: 12"

### Long String

Size: 7 " Cemented with 200 SX

TOC: 3265 feet determined by 80% calc

Hole Size: 8 3/4"

Total Depth: 4945'

### Injection Interval

4522 feet to 4975 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
(material)  
packer at 4570 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
10/28/39

# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation  
OPERATOR

Lovington San Andres Unit  
LEASE

#43  
WELL NO.

1980 FNL & 660 FWL  
FOOTAGE LOCATION

1  
SEC.

T17S  
TOWNSHIP

R36E  
RANGE

## Tubular Data

### Surface Casing

Size: 13" Cemented with 200 SX

TOC: Surface feet determined by circulation

Hole size: 17 1/2"

### Intermediate Casing

Size: 8 5/8" Cemented with 600 SX

TOC: 199 feet determined by 50% calc

Hole Size: 11"

### Long String

Size: 5 1/2" Cemented with 350 SX

TOC: 2679 feet determined by 80% calc

Hole Size: 7 7/8"

Total Depth: 4990'

### Injection Interval

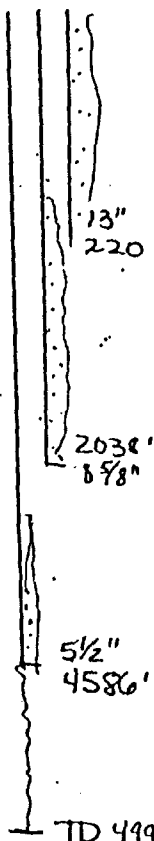
4546 feet to 5030 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8" lined with IPC set in a  
(material)  
packer at 4536 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Underlying - Grayburg



Completed  
6/19/41

Deepen to 5030'

# INJECTION WELL DATA SHEET

GREENHILL PETROLEUM CORPORATION

Lovington San Andres

OPERATOR

LEASE

53

660 FSL & 1980 FWL

1

T17S-R36E

WELL NO.

FOOTAGE LOCATION

SEC.

TOWNSHIP

RANGE

## Tubular Data

### Surface Casing

Size: 13" ~ Cemented with 300 SX

TOC: surface feet determined by calc.

Hole size: 17 1/2"

### Intermediate Casing

Size: 9 5/8" ~ Cemented with 500 SX

TOC: 1743 feet determined by 60% calc.

Hole Size: 12 1/4"

### Long String

Size: 7 5/8" ~ Cemented with 50 SX

TOC: 3147 feet determined by 60% calc.

Hole Size: 8 3/4"

Total Depth: 5000'

### Injection Interval

TOC 4324' 60% calc. feet to ----- feet

83/4' (perforated or open-hole, indicate which)

Tubing size ----- lined with ----- set in a  
(material)  
----- packer at ----- feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation -----
- Name of Field or Pool (If applicable) Lovington Grayburg San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? prod.
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
underlying-Grayburg

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation  
OPERATORLovington San Andres  
LEASE

#58	2310' FNL & 1309' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular DataSurface CasingSize: 13 " Cemented with 180 SXTOC: Surface feet determined by circHole size: 17-1/4"Intermediate CasingSize: 8-5/8 " Cemented with 400 SXTOC: 860 feet determined by calcHole Size: 11"Long StringSize: 5-1/2 " Cemented with 200 SXTOC: 3479 feet determined by calcHole Size: 7-7/8"Total Depth: 4990'Injection Interval4570 feet to 5070 feet  
(perforated or open-hole, indicate which)Tubing size 2- /8 lined with IPC set in a  
(material)  
packer at 4550 feet.(brand & model)  
(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) Lovington San Andres
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.  
NO
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

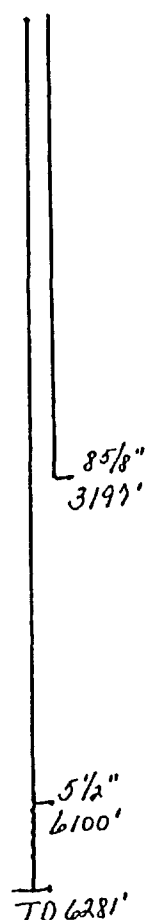
Underlying-Grayburg

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
# 5	660' FSL & 1980' FWL	25	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
9-24-54



Surface Casing

Size: 8-5/8 " Cemented with 1550 SX

TOC: Surface feet determined by calc

*Circ*

Hole size: 11"

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by calc

Hole size:

Long String

Size: 5-1/2" Cemented with 450 SX

TOC: 2876 feet determined by temp  
survey

Hole size: 7-7/8"

Total Depth: 6281'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation: -
2. Name of Field or Pool (If applicable) Paddock
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such  
perforated intervals and give plugging details (sacks of cement or  
bridge plug(s) used.  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas  
zones (pools) in this area.  
Above Glorieta

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
# 10	660' FNL & 2440' FEL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Surface Casing

Spud Date  
8-11-54

Size: 8-5/8" Cemented with 1500 SX  
TOC: Surface feet determined by calc  
Hole size: 11"

Intermediate Casing

1 1/2"  
3912

Size: " Cemented with SX  
TOC: feet determined by  
Hole Size:

Long String

5 1/2"  
6105

Size: 5-1/2" Cemented with 300 SX  
TOC: 4610 feet determined by temp survey  
Hole Size: 7-7/8"  
Total Depth: 6260'

TD  
6260'

Injection Interval

feet to feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
(material)  
packer at 6050 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

# INJECTION WELL DATA SHEET

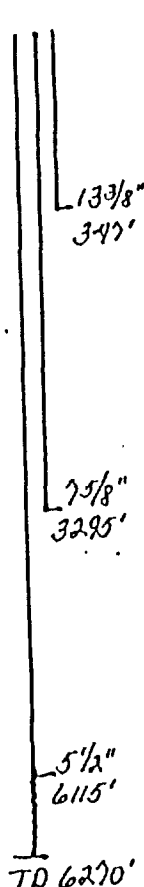
16

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#11	940' FNL & 1980' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Spud Date  
9-01-53

Converted to  
Injection  
12/66



### Surface Casing

Size: 13-3/8 " Cemented with 330 SX

TOC: Surface feet determined by calc

Hole size: 17-1/4"

### Intermediate Casing

Size: 7-5/8" Cemented with 2230 SX

TOC: Surface feet determined by calc

Hole size: 11"

### Long String

Size: 5-1/2" Cemented with 350 SX

TOC: 4208 feet determined by 70% calc

Hole size: 7-7/8"

Total Depth: 6270'

### Injection Interval

6115 feet to 6270 feet  
(perforated or open-hole, indicate which)

Tubing size 2" lined with IPC set in a - packer  
at 6034 feet. (Or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta



INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#6	660 FNL & 660 FWL	31	T16S	R37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Surface Casing

Size: 16 " Cemented with 100 SX  
 TOC: Surface feet determined by calc.  
 Hole size: 18

Intermediate Casing

Size: 8 5/8 " Cemented with 150 SX  
 TOC: 1271 feet determined by calc 50%  
 Hole Size: 11

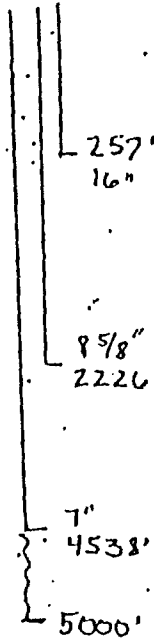
Long String

Size: 7 " Cemented with 200 SX  
 TOC: 2229 feet determined by 80% calc  
 Hole Size: 8  
 Total Depth: 5000'

Injection Interval

4538 feet to 5000 feet  
 (perforated or open-hole, indicate which)

Completed  
6/15/45  
  
 Converted to  
Injection  
3/28/63



Tubing size 2 3/8 lined with IPC set in a  
 (material)  
 packer at 4434 feet.  
 (brand & model)  
 (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) Lovington San Andres
3. Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation

Lovington Paddock

OPERATOR	LEASE			
12	781' FNL & 660' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Surface Casing

Size: 13 3/8 " Cemented with 350 SX

TOC: Surface feet determined by calc

Hole size: 17 1/4

Intermediate Casing

Size: 9 5/8 " Cemented with 2600 SX

TOC: Surface feet determined by calc

Hole Size: 12 1/4

Long String

Size: 7 " Cemented with 450 SX

TOC: 2675 feet determined by 70%

Hole Size: 8 1/4

Total Depth: 6250'

Injection Interval

6115 feet to 6248 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
AD 1 PC (material)  
packer at 6100 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## 20

Lovington Paddock

### Tubular Data

Spud Date  
10-27-53

Size: 8-5/8 " Cemented with 975 SX

TOC: Surface feet determined by calc *Circ*

Hole size: //

Size: Cemented with SX

TOC:            feet determined by

Hole size:

Size: 5-1/2" Cemented with 400 SX

TOC: 3918 feet determined by temp  
survey

Hole size: 7 7/8

Total Depth: 6270'

-        feet to        -        feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Paddock
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No

---

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

INJECTION WELL DATA SHEET

21

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#4	660 FNL & 1980 FEL	36	T16S	R36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Surface Casing

Size: 13 " Cemented with 200 SX

TOC: Surface feet determined by Circ. calc.

Hole size: 14 3/4

Intermediate Casing

Size: 9 5/8 " Cemented with 500 SX

TOC: Surface feet determined by calc

Hole Size: 11 1/4

Long String

Size: 7 " Cemented with 300 SX

TOC: 1910' feet determined by 80% calc.

Hole Size: 8 1/4

Total Depth: 5012'

Injection Interval

4634 feet to 5012 feet  
(perforated or open-hole, indicate which)

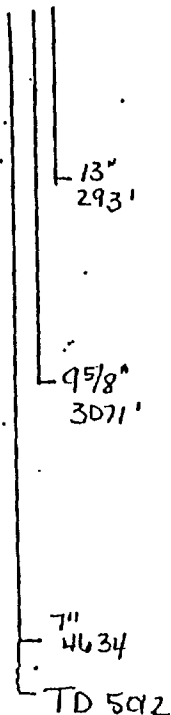
Tubing size 2 3/8 lined with IPC set in a  
(material)  
packer at 4586 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (IF applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
1/3/39

Converted to  
Injection  
3/28/63



## INJECTION WELL DATA SHEET

23

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#16	660' FNL & 660' FWL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
8-08-54

Surface Casing

Size: 8-5/8" Cemented with 1500 SX

TOC: Surface feet determined by ~~calc~~ *Circ*

Hole size: //

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 450 SX

TOC: 3930 feet determined by 70% calc

Hole size: 7 7/8

Total Depth: 6280'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

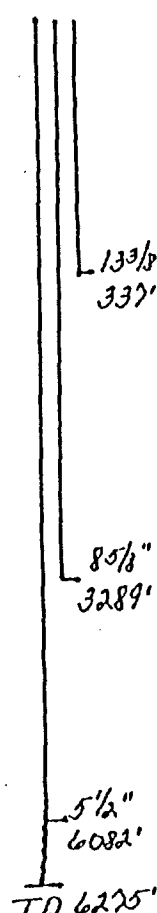
- Name of the injection formation:
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#18	2310' FNL & 330' FEL	35	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
3-17-56

Surface Casing

Size: 13-3/8" Cemented with 300 SX

TOC: Surface feet determined by calc

Hole size:

Intermediate Casing

Size: 8-5/8" Cemented with 2150 SX

TOC: Surface feet determined by calc

Hole size:

Long String

Size: 5-1/2" Cemented with 400 SX

TOC: 2650 feet determined by temp survey

Hole size:

Total Depth: 6275'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: -
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

26

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#19	1980' FNL & 990' FWL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
4-27-54

Converted  
to Injection  
3/74

8 5/8"  
3247'

5 1/2"  
6065'

TO 6275'

Surface Casing

Size: 8-5/8" Cemented with 1800 SX

TOC: Surface feet determined by calc *Circ*

Hole size: //

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 585 SX

TOC: 3964 feet determined by temp  
survey

Hole size: 7 1/2"

Total Depth: 6275'

Injection Interval

6065 feet to 6275 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a - packer  
at 6076 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such  
perforated intervals and give plugging details (sacks of cement or  
bridge plug(s) used.  
No
- Give the depth to and name of any overlying and/or underlying oil or gas  
zones (pools) in this area.  
Above Glorieta

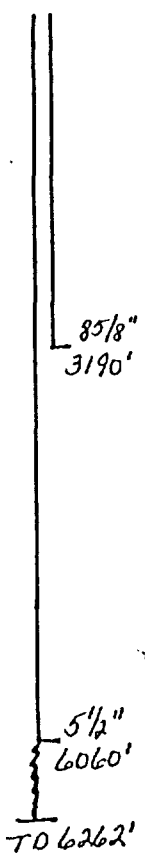
INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#20	1830' FNL & 2130' FWL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
3-24-54

Converted  
to Injection  
3/74



Surface Casing

Size: 8-5/8" Cemented with 1800 SX

TOC: Surface feet determined by calc *Circ*

Hole size: //

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 500 SX

TOC: 3535 feet determined by temp survey

Hole size: *7 7/8*

Total Depth: 6262'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Paddock
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta



I

29

## INJECTION WELL DATA SHEET

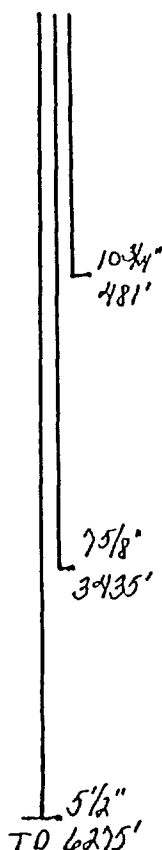
Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#21	2190' FNL & 1980' FEL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
7-26-53

Converted  
to Injection  
2/73

5 1/2" liner  
3312-6275  
w/1480 SX  
spud to f w/ 50 SX

Surface Casing

Size: 10-3/4" Cemented with 500 SX

TOC: Surface feet determined by calc CIRC

Hole size: 15

Intermediate Casing

Size: 7-5/8" Cemented with 1000 SX

TOC: Surface feet determined by calc

Hole size: 9 7/8

Long String

Size: 5-1/2" Cemented with 630 SX

TOC: 3638 feet determined by temp. survey

Hole size: 6 7/8

Total Depth: 6275'

Injection Interval

6103 feet to 6226 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a packer  
at 6043 feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation: Paddock
2. Name of Field or Pool (If applicable) Paddock
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR	2321.9	LEASE		
#23	2392' FNL & 750' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

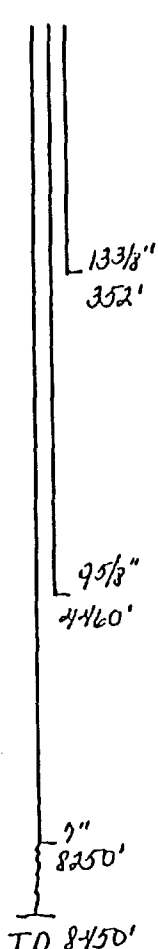
Spud Date  
3-29-52

Converted  
to Injection  
2/73

CIBP 6310'

Cmt. to 6300'

17" / 14" in  
4171-8250

Surface Casing

Size: 13-3/8" Cemented with 350 SX

TOC: Surface feet determined by calc

Hole size: ✓

Intermediate Casing

Size: 9-5/8" Cemented with 2250 SX

TOC: Surface feet determined by calc

Hole size:

Long String

Size: 7" Cemented with 500 SX

TOC: 2250 feet determined by temp survey ?

Hole size:

Total Depth: 8450'

Injection Interval

6120 feet to 6170 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a - packer  
at 6089 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
24	2310' FNL & 1968" FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Size: 8 5/8 " Cemented with 950 SXTOC: Surface feet determined by calc.Hole size: //

## Intermediate Casing

Size:        " Cemented with        SXTOC: Surface feet determined by calc.Hole Size:       

## Long String

Size: 5 1/2 " Cemented with 400 SXTOC: 4077 feet determined by temp surveyHole Size: 7 7/8Total Depth: 6257'

## Injection Interval

6111 feet to 6280 feet  
 (perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
Baker AD-1 PC (material)  
6050 packer at        feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

Drilled Date  
 12-53  
 Deepen to 6280

8 5/8 "  
 2072'  
 5 1/2 "  
 6133'  
 TD 6257'

## INJECTION WELL DATA SHEET

35

Rice Engineering		Abo SWD (State "O")		
OPERATOR		LEASE		
13	2310' FNL & 2626' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
1-18-53

Converted to  
SWD (Inject  
thru 9730-10260)

Surface Casing

Size: 13-3/8" Cemented with 246 SX

TOC: Surface feet determined by <sup>calc</sup> ~~calc~~

Hole size: 18"

Intermediate Casing

Size: 9-5/8" Cemented with <sup>1200</sup> ~~1400~~ SX

TOC: <sup>Surface</sup> ~~352~~ feet determined by <sup>calc</sup> ~~50% calc~~

Hole size: 12-1/4"

Long String

Size: 5-1/2" Cemented with 1982 SX

TOC: <sup>247</sup> ~~247~~ feet determined by 80% calc

Hole size: 7-7/8"

Total Depth: 12,251

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

cmt bond log 1964  
top good cmt 3765  
sqzd several intervals  
above and below this  
point.

682 at shoe  
1700 thru out tool  
at 8988

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation:
- Name of Field or Pool (If applicable) East Lovington (Penn)
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Abo (Above)

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation

Lovington Paddock

OPERATOR		LEASE		
#25	2130' FNL & 1980' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular DataSpud Date  
11-16-54Converted  
to Inj.  
12/54Surface Casing

Size: 8-5/8" Cemented with 1550 SX

TOC: Surface feet determined by <sup>circ</sup>cale

Hole size: 11

Intermediate Casing

8 5/8"

3215'

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 450 SX

TOC: 4160 feet determined by temp  
survey

Hole size: 7 7/8

TD 6270'

Total Depth: 6270'

Injection Interval6107 feet to 6270 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a - packer  
at 6043 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such  
perforated intervals and give plugging details (sacks of cement or  
bridge plug(s) used.  
No
- Give the depth to and name of any overlying and/or underlying oil or gas  
zones (pools) in this area.  
Above Glorieta

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation	Lovington San Andres Unit			
OPERATOR	LEASE			
#43	1980 FNL & 660 FWL	1	T17S	R36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Surface Casing

Size: 13 " Cemented with 200 SX  
TOC: Surface feet determined by circulation  
Hole size: 17 1/2

Intermediate Casing

Size: 8 5/8 " Cemented with 600 SX  
TOC: 199 feet determined by 50% calc  
Hole Size: 11 "

Long String

Size: 5 1/2 " Cemented with 350 SX  
TOC: 2679 feet determined by 80% calc  
Hole Size: 7 7/8 "

Total Depth: 4990'

Injection Interval

4546 feet to 5030 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
(material)  
packer at 4536 feet.

(brand & model)

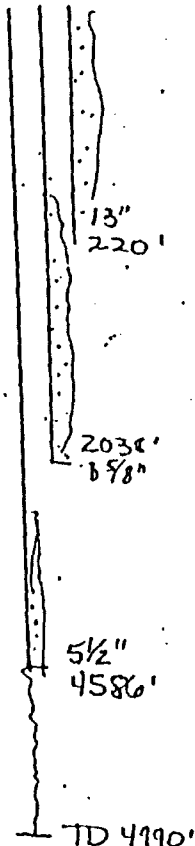
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation \_\_\_\_\_
- Name of Field or Pool (IF applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
IF no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
6/19/41

Deepen to 5030'



## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
15	1650' ESL & 1650' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
6-1-39

Deepened  
7-23-86

Surface Casing

Size: 13" Cemented with 200 SX

TOC: Surface feet determined by calc

Hole size: 17-1/4"

Intermediate Casing

Size: 9-5/8" Cemented with 500  
400 SX

TOC: 1818 feet determined by calc

Hole Size: 12"

Long String

Size: 7" Cemented with 300  
200 SX

TOC: 3840 feet determined by calc

Hole Size: 8-3/4"

Total Depth: 5110'

Injection Interval

4531 feet to 5110 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a  
(material)

Waterflood tension packer at 4510 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (IF applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

I

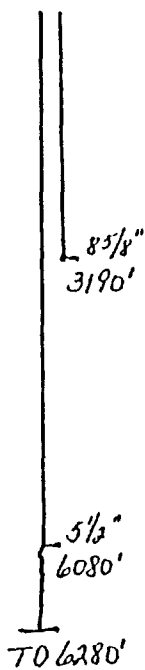
22

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#15	810' FNL & 2130' FWL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
4-13-54

Surface Casing

Size: 8-5/8" Cemented with 1800 SX

TOC: Surface feet determined by calc

Hole size: //

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 585 SX

TOC: 3765 feet determined by temp survey

Hole size: 7 1/2

Total Depth: 6280'

Injection Interval

6080 feet to 6280 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a - - - - - packer  
at 6018 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta



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INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#17	660 FNL & 330 FEL	31	T-16S	R37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Surface Casing

Size: 8 5/8 " Cemented with 450 SX  
 TOC: Surface feet determined by calc  
 Hole size: 10 1/4

Intermediate Casing

Size:        " Cemented with        SX  
 TOC:        feet determined by         
 Hole Size:       

Long String

Size: 5 1/2 " Cemented with 400 SX  
 TOC: 1832 feet determined by 80% calc  
 Hole Size: 7 1/4

Total Depth: 4935'

Injection Interval

4623 feet to 5090 feet  
 (perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
 (material)  
water flood tension packer packer at 4603 feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (IF applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Underlying - Grayburg

Completed  
 9/17/46  
 deepen to  
 5090

8 5/8"  
 2050'  
 4623'  
 5 1/2"  
 TO 4935'

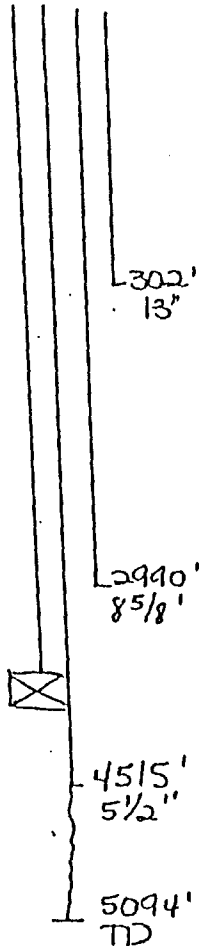
41

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#25	1980' FEL & 660' FSL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
10-18-39



Surface Casing

Size: 13 " Cemented with 200 SX

TOC: Surface feet determined by circ

Hole size: 17-1/4"

Intermediate Casing

Size: 8-5/8 " Cemented with 500 400 SX

TOC: 1765 feet determined by calc

Hole Size: 11"

Long String

Size: 5-1/2 " Cemented with 200 SX

TOC: 3424 feet determined by calc

Hole Size: 7-7/8"

Total Depth: 5094'

Injection Interval

4515 feet to 5090 feet  
(perforated or open-hole, indicate which)

Tubing size 2- /8 lined with IPC set in a  
(material)  
waterflood tension packer at 4495 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (IF applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#31	660' FNL & 1980' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
12-22-39

Deepened  
6-20-87

Surface Casing

Size: 13 " Cemented with 200 SX

TOC: Surface feet determined by circ

Hole size: 17-1/4"

291'  
13" Intermediate Casing

Size: 8-5/8 " Cemented with 500 SX

TOC: 2021 feet determined by calc

3109'  
8 3/8" Hole Size: 11"

Long String

Size: 5-1/2 " Cemented with 325 SX

4541'  
5 1/2" TOC: 2890 feet determined by calc 80%

Hole Size: 7-7/8"

4960'  
TD Total Depth: 5125

Injection Interval

5125'  
TD 4541 feet to 5125 feet  
(perforated or open-hole; indicate which)

Tubing size 2-3/8" lined with IPC set in a  
(material)  
water flood tension packer at 4499 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

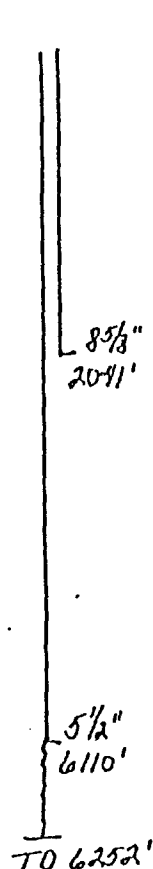
- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#26	2130' FSL & 2160' FEL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
8-26-53

Surface Casing

Size: 8-5/8" Cemented with 975 SX

TOC: Surface feet determined by calc

Hole size:

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 400 SX

TOC: 4077 feet determined by temp  
survey

Hole size:

Total Depth: 6252'

Injection Interval6140 feet to 6252 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a - packer  
at 6000 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such  
perforated intervals and give plugging details (sacks of cement or  
bridge plug(s) used.  
No
- Give the depth to and name of any overlying and/or underlying oil or gas  
zones (pools) in this area.  
Above Glorieta

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#16	2310 FEL & 1980 FSL	31	T16S	R37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Surface Casing

Size: 13 " Cemented with 200 SK

TOG:                      feet determined by                     

Hole size: 15 1/4

Intermediate Casing

Size: 8 5/8 " Cemented with 500 SK

TOG:                      feet determined by                     

Hole Size: 10 1/4

Long String

Size: 5 1/2 " Cemented with 200 SK

TOG: 2343 feet determined by 80% cal

Hole Size: 6 3/4

Total Depth: 4950'

Injection Interval

4605 feet to 4950 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
(material)  
packer at 4557 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
12/6/39

Converted to  
Injection  
3/16/63

13"  
294'

8 5/8"  
3005'

5 1/2"  
4605'  
4950'

INJECTION WELL DATA SHEET

Texaco OPERATOR		State "O" LEASE		
12 WELL NO.	1650' ESL & 2310' FEL FOOTAGE LOCATION	31 SEC.	16S TOWNSHIP	37E RANGE

Tubular Data

Completed  
8-08-52

<div>13 3/8 236'</div> <div>8 5/8 3250</div> <div>5 1/2 8444 TD</div>	<u>Surface Casing</u>	
	Size: 13-3/8 "	Cemented with 245 SX
	TOC: Surface	feet determined by calc
	Hole size: 18"	
	<u>Intermediate Casing</u>	
	Size: 8-5/8 "	Cemented with 1800 SX
	TOC: Surface	feet determined by calc
	Hole Size: 12-1/4"	
	<u>Long String</u>	
	Size: 5-1/2 "	Cemented with 700 SX
	TOC: 3984	feet determined by 80% calc
	Hole Size: 7-7/8"	
Total Depth: 8444'		

Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
(material)  
\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation \_\_\_\_\_
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
\_\_\_\_\_
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Drinkard

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#60	1283' FSL & 2527' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
1-31-90

Surface Casing

Size: 13-3/8 ~ Cemented with 450 SX

TOC: Surface feet determined by circ

Hole size: 17-1/2"

Intermediate Casing

Size: 8-5/8 ~ Cemented with 600 SX

TOC: 215 feet determined by calc

Hole Size: 11" 12 1/4

Long String

Size: 5-1/2 ~ Cemented with 1450 SX

TOC: Surface feet determined by calc

Hole Size: 7-7/8"

Total Depth: 5400'

395'

13 3/4"

2053'

8 5/8"

5340'

5 1/2"

5400'

TD

Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
(material)  
\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Underlying-Grayburg

## INJECTION WELL DATA SHEET

Penroc		State 182 "A"		
OPERATOR		LEASE		
4	1650' FSL. & 2289' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data.

Workover Aug  
Sept - 68, sqzd From  
6400, 15000, 4600 with  
total 1200 SX TOC  
4000 by TS

13 3/8"  
299'

Surface Casing

Size: 13-3/8" Cemented with 300' SX

TOC: Surface feet determined by calc

Hole size: 16"

Intermediate Casing

Size: 9-5/8" Cemented with 1200' SX

TOC: Surface feet determined by calc

Hole size: 12"

9 5/8"  
3360'

Long String

Size: 7" Cemented with 404' SX

TOC: 3798 feet determined by 80% calc

Hole size: 8"

7"  
8460' TO

Total Depth: 8460'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Above Drinkard



## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation

Lovington Paddock

OPERATOR	LEASE			
# 27	1960' FWL & 1980' FSL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Completion  
6-16-53Converted to  
Injection  
6/67

Size: 13-3/8" Cemented with 350 SX

TOC: Surface feet determined by calc

Hole size: 17-1/4"

## Intermediate Casing

Size: 8-5/8" Cemented with 900 SX

TOC: 656 feet determined by 50% calc

Hole Size: 11"

## Long String

Size: 5-1/2" Cemented with 250 SX

TOC: 4692 43/6 feet determined by 75% calc

Hole Size: 7-7/8"

Total Depth: 6275'

## Injection Interval

6080 feet to 6275 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC (material) set in a

(brand & model) packer at 6000 feet.  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Above Glorieta

INJECTION WELL DATA SHEET

<u>Greenhill Petroleum Corporation</u>		<u>Lovington San Andres Unit</u>		
OPERATOR		LEASE		
<u>#14</u>	<u>1980 FSL &amp; 818 FWL</u>	<u>31</u>	<u>T16S</u>	<u>R37E</u>
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
8/7/39  
  
Converted to  
Injection  
3/15/63

<div style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 10px;"> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">10 3/4"</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">314'</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">7 5/8"</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">3000'</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">5 1/2"</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">4530'</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">5087'</div> </div>	<u>Surface Casing</u>
	Size: <u>10 3/4"</u> Cemented with <u>250</u> SX
	TOC: <u>Surface</u> feet determined by <u>calc</u>
	Hole size: <u>12 1/4</u>
	<u>Intermediate Casing</u>
	Size: <u>7 5/8"</u> Cemented with <u>500</u> SX
	TOC: <u>363.7</u> feet determined by <u>50% calc</u>
	Hole Size: <u>9 1/4</u>
	<u>Long String</u>
	Size: <u>5 1/2"</u> Cemented with <u>200</u> SX
TOC: <u>604'</u> feet determined by <u>80% calc</u>	
Hole Size: <u>6 1/4</u>	
Total Depth: <u>5087'</u>	

Injection Interval

4530 feet to 5087 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
(material)  
packer at 4468.11 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (IF applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
IF no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#28	2108' FSL & 624' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
5-02-53

Surface Casing

Size: 9-5/8" Cemented with 850 SX

TOC: Surface feet determined by calc

Hole size: 12 1/4

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 500 SX

TOC: 3869 feet determined by 70% calc

Hole size: 7 1/2

Total Depth: 6252'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer

at - feet. (Or describe any other casing-tubing seal).

Other Data

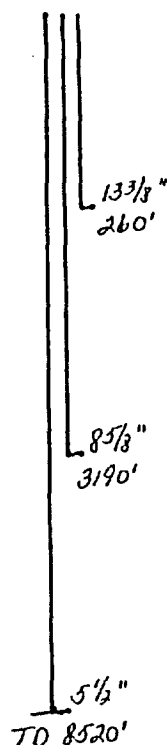
1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Paddock
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Texaco		State "0"		
OPERATOR		LEASE		
10	440' FWL & 3080' FNL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
4-13-52

Surface Casing

Size: 13-3/8" Cemented with <sup>275</sup> 225 SX  
TOC: Surface feet determined by calc<sup>CIRC</sup>

Hole size: 18"

Intermediate Casing

Size: 8-5/8" Cemented with 700 SX  
TOC: <sup>surface</sup> 1046 feet determined by <sup>CIRC</sup> 50% calc

Hole size: 11"

Long String

Size: 5-1/2" Cemented with 775 SX  
TOC: 4298 feet determined by 80% calc

Hole size: 7-7/8"

Total Depth: 8520'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer

at - feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

(Above) Drinkard

# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR	<i>H30</i>	LEASE		
#33	1650' FSL & 400' FEL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completion  
2-2-53

Deepened for  
Inj. 12/66  
6150-6237'

Converted to  
Injection 12/66

### Surface Casing

Size: ~~8-5/8"~~ *10 3/4"* Cemented with 250 SX

TOC: Surface feet determined by ~~calc~~ *Circ*

Hole size: *13 3/8"*

### Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

### Long String

Size: 7" Cemented with 400 SX

TOC: 3636 feet determined by 80% calc

Hole size: 8-3/4"

Total Depth: 6237'

### Injection Interval

6040 feet to 6237 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a - packer  
at 5972 feet. (Or describe any other casing-tubing seal).

### Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

55

P?

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#32	1750' FSL & 1650' FEL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
3-19-53

Surface Casing

Size: 8-5/8" Cemented with 1000 SX

TOC: Surface feet determined by calc Circ

Hole size: //

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 300 SX

TOC: 4400 feet determined by temp survey

Hole size: 7 1/8"

Total Depth: 6229'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation:
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

<u>Greenhill Petroleum Corp.</u>	<u>Lovington Paddock</u>			
OPERATOR	LEASE			
<u>84</u>	<u>1100 FEL &amp; 2285 FSL</u>	<u>36</u>	<u>T16S-R36E</u>	
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Size: 13 7/8 " Cemented with 500 SXTOC: Surface feet determined by calcHole size: 17 1/2

## Intermediate Casing

Size: 8 5/8 " Cemented with 1200 SXTOC: Surface feet determined by 50% calcHole Size: 11

## Long String

Size: 5 1/2 " Cemented with 1040 SXTOC: 788 feet determined by 80% calcHole Size: 7 7/8Total Depth: 6470

## Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
 (perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
 \_\_\_\_\_ (material)  
 \_\_\_\_\_ packer at \_\_\_\_\_ feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

## Other Data

1. Name of the injection formation \_\_\_\_\_
2. Name of Field or Pool (if applicable) Lovington Paddock
3. Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? prod
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
 \_\_\_\_\_
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
(Above) Glorieta

comp. - 4/5/90

13 7/8  
3508 5/8  
30195 1/2  
645470  
6470

# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation

Lovington San Andres

OPERATOR

LEASE

#541

1980' FSL & 1980' FEL

36

16S

36E

WELL NO.

FOOTAGE LOCATION

SEC.

TOWNSHIP

RANGE

## Tubular Data

Spud 1-7-63

May 89  
w/ 4 1/2" CS  
120' to 1546' & 1608'  
346' 1100'

### Surface Casing

Size: 7-5/8" Cemented with 240 SX

TOC: Surface feet determined by catc Circ

Hole size: 9-7/8"

### Intermediate Casing

Size: " Cemented with SX

TOC: feet determined by

Hole Size:

### Long String

Size: 4-1/2" Cemented with 235 SX

TOC: 2314 feet determined by Temp survey

Hole Size: 6-3/4"

Total Depth: 5110'

### Injection Interval

4662 feet to 5037 feet  
(perforated or open-hole, indicate which)

Tubing size 2" lined with IPC set in a  
(material)  
? packer at 4579 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable)
- Is this a new well drilled for injection? Yes  
If no, for what purpose was the well originally drilled?
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.



INJECTION WELL DATA SHEET

Greenhill Petroleum Corp.      State "R" Livingston Padlock Unit  
OPERATOR      LEASE

83      2310 FWL c 1650 FSL      Sec 36      T14S-R36E  
WELL NO.      FOOTAGE LOCATION      SEG.      TOWNSHIP      RANGE

Tubular Data

Surface Casing

Size: 13 1/8 " Cemented with 245 SX  
TOC: surface feet determined by calc  
Hole size: 18

Intermediate Casing

Size: 8 5/8 " Cemented with 1200 SX  
TOC: surface feet determined by 50% calc  
Hole Size: 11

Long String

Size: 5 1/2 " Cemented with 900 SX  
TOC: 3551 feet determined by 80% calc  
Hole Size: 7 7/8  
Total Depth: 8454

Injection Interval

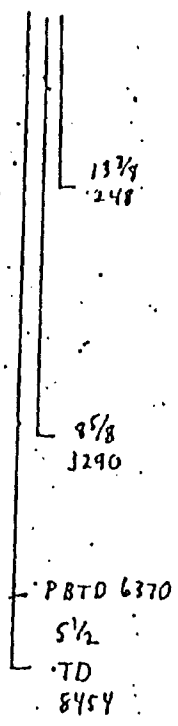
\_\_\_\_\_ feet to \_\_\_\_\_ feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
\_\_\_\_\_ (material)  
\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation \_\_\_\_\_
2. Name of Field or Pool (IF applicable) Lovington Abo
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
\_\_\_\_\_
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Gloria

Completed  
10/31/52  
CIBP  
Set 6400  
New PBD 6370 1/20/86





INJECTION WELL DATA SHEET

59

P

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#29	2130' FSL & 2130' FWL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
10-11-53

Converted to  
Injection 10/75

Surface Casing

Size: 8-5/8" Cemented with 975 SX

TOC: Surface feet determined by ~~gate~~ *Circ*

Hole size: 11"

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 275 SX

TOC: <sup>5205</sup>~~4574~~ feet determined by <sup>Tamp. Survey</sup>~~80% gate~~

Hole size: 7-7/8"

Total Depth: 6256'

Injection Interval

6072 feet to 6256 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a - packer

at 5992 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

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INJECTION WELL DATA SHEET

<del>Cities Service</del> <u>Penroc</u>		State AE		
OPERATOR		LEASE		
2Y	1420' FSL & 990' FWL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

<div style="border-left: 2px solid black; height: 100px; position: relative;"> <div style="position: absolute; left: -10px; top: 30%; transform: translateY(-50%);">13 3/8"</div> <div style="position: absolute; left: -10px; top: 35%; transform: translateY(-50%);">303'</div> <div style="position: absolute; left: -10px; top: 65%; transform: translateY(-50%);">8 5/8"</div> <div style="position: absolute; left: -10px; top: 70%; transform: translateY(-50%);">3328'</div> <div style="position: absolute; left: -10px; top: 90%; transform: translateY(-50%);">5 1/2"</div> <div style="position: absolute; left: -10px; top: 95%; transform: translateY(-50%);">TD 8510'</div> </div>	<p><u>Surface Casing</u></p> <p>Size: 13-3/8" Cemented with 350 SX</p> <p>TOC: Surface feet determined by <sup>circ.</sup>calc</p> <p>Hole size: 17-1/2"</p> <p><u>Intermediate Casing</u></p> <p>Size: 8-5/8" Cemented with 1800 SX</p> <p>TOC: Surface feet determined by calc</p> <p>Hole size: 12-1/4"</p> <p><u>Long String</u></p> <p>Size: 5-1/2" Cemented with 1330 SX</p> <p>TOC: <sup>3605</sup><del>1265</del> feet determined by <sup>temp. survey</sup><del>80% calc</del></p> <p>Hole size: 7-7/8"</p> <p>Total Depth: 8510'</p> <p><u>Injection Interval</u></p>
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- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation:
  - Name of Field or Pool (If applicable) Lovington Abo
  - Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
  - Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
- 
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.
- (Above) Drinkard

## INJECTION WELL DATA SHEET

Cities Service		State AE		
OPERATOR		LEASE		
2	3630' FNL & 4290' FEL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

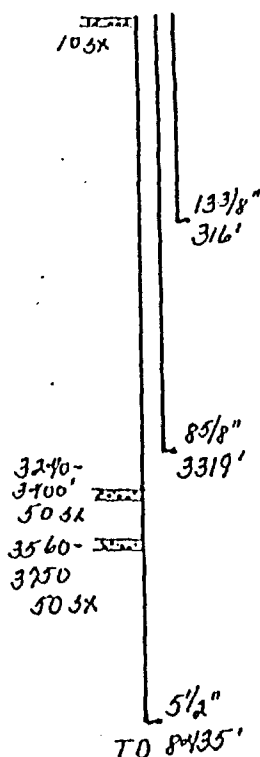
Tubular Data

Completed  
1-09-53

P&A 6-6-69

5 1/2" csg. cut and  
pulled down from  
3200'

Cont. ret. at 3488  
w 555 SX below

Surface Casing

Size: 13-3/8" Cemented with 325 SX

TOC: Surface feet determined by calc

Hole size: 17-1/2"

Intermediate Casing

Size: 8-5/8" Cemented with 2164 SX

TOC: Surface feet determined by calc

Hole size: 11"

Long String

Size: 5-1/2" Cemented with 650 SX

TOC: 5600 feet determined by temp  
survey

Hole size: 7-7/8"

Total Depth: 8435'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal):

Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

(Above) Drinkard

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation

Lovington Paddock

OPERATOR		LEASE		
31	1650' FSL & 890' FWL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEG.	TOWNSHIP	RANGE

Tubular DataSpud Date  
12-16-53

Deepen to 6295

13 3/8" 340'

8 5/8" 3316'

5 1/2" 6080'

TD 6204'

Surface Casing

Size: 13 3/8" Cemented with 350 SX

TOC: Surface feet determined by calc

Hole size: 17 1/4"

Intermediate Casing

Size: 8 5/8" Cemented with 2300 SX

TOC: Surface feet determined by calc

Hole Size: 11"

Long String

Size: 5 1/2" Cemented with 400 SX

TOC: 4350 feet determined by temp survey

Hole Size: 7 7/8"

Total Depth: 6204'

Injection Interval

6080 feet to 6295 feet

(perforated or open-hole, indicate which)

Tubing size 2 3/8" lined with IPC set in a  
Baker AD-1 PC (material) 6050 feet.  
(brand & model) packer at  
(or describe any other casing-tubing seal).

Other Data

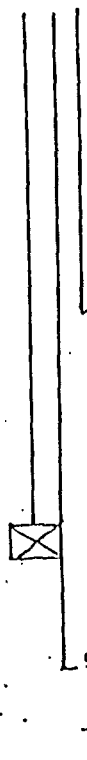
- Name of the injection formation Paddock
- Name of Field or Pool (IF applicable) Paddock
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#59	1980' FSL & 660' FWL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
6-29-65



Surface Casing

Size: 8-5/8 " Cemented with 825 SX

TOC: Surface feet determined by circ

Hole size: 11"

Intermediate Casing

Size: 8 7/8 " Cemented with 825 SX

TOC:                      feet determined by                     

Hole Size:                     

Long String

Size: 4-1/2 " Cemented with 450 SX

TOC: 3581 feet determined by temp survey

Hole Size: 7-7/8"

Total Depth: 5060

Injection Interval

4666 feet to 5034 feet  
(perforated or open-hole, indicate which)

Tubing size 2" lined with IPC set in a  
(material)  
Halliburton R-3 Tension packer at 4619 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (IF applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
IF no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

INJECTION WELL DATA SHEET

Penroc		State of AR		
OPERATOR		LEASE		
1	4950' FNL & 4290' FEL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
11-1-52

<div style="border-left: 1px solid black; padding-left: 5px;"> <div style="margin-bottom: 10px;">13 7/8 314'</div> <div style="margin-bottom: 10px;">8 5/8 3350'</div> <div>5 1/2" 708430</div> </div>	<u>Surface Casing</u>
	Size: 13-3/8" Cemented with 350 SX
	TOC: Surface feet determined by calc
	Hole size: 17-1/4"
	<u>Intermediate Casing</u>
	Size: 8-5/8" Cemented with 1900 SX
	TOC: Surface feet determined by calc
	Hole Size: 11"
	<u>Long String</u>
	Size: 5-1/2" Cemented with 400 SX
TOC: 6251 feet determined by 80% calc	
Hole Size: 7-7/8"	
Total Depth: 8430'	

Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
 \_\_\_\_\_ (material)  
 \_\_\_\_\_ packer at \_\_\_\_\_ feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation \_\_\_\_\_
2. Name of Field or Pool (if applicable) Lovington Abo
3. Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
 \_\_\_\_\_
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Drinkard



## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#26	660 FSL & 1980 FWL	36	T16S	R36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Size: 13 " Cemented with 200 SXTOC: Surface feet determined by CircHole size: 15"

## Intermediate Casing

Size: 8 5/8 " Cemented with 400 SXTOC: 390 feet determined by 70% calcHole Size: 9 7/8"

## Long String

Size: 5 1/2 " Cemented with 200 SXTOC: 3200' est. feet determined by calcHole Size: 6 3/4"Total Depth: 5128'

## Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
 (perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
 \_\_\_\_\_ (material)  
 \_\_\_\_\_ packer at \_\_\_\_\_ foot.  
 (brand & model)  
 (or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (IF applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production.
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
12/3/39

13"  
296'  
8 5/8"  
3010'  
5 1/2"  
4520'  
TD 5128'

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#41	810' FSL & 2130' FWL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular DataSurface Casing

Size: 8-5/8" Cemented with 875 SX

TOC: Surface feet determined by calc

Hole size:

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 275 SX

TOC: 4700 feet determined by temp  
survey

Hole size:

Total Depth: 6260'

Injection Interval- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

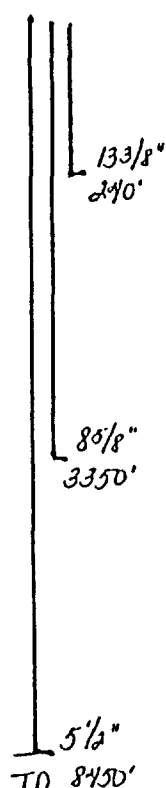
- Name of the injection formation:
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such  
perforated intervals and give plugging details (sacks of cement or  
bridge plug(s) used.  
No
- Give the depth to and name of any overlying and/or underlying oil or gas  
zones (pools) in this area.  
Above Glorieta

SI  
7/6/79

74

## INJECTION WELL DATA SHEET

Texaco		State "R"		
OPERATOR		LEASE		
5	330' FSL & 2310' FWL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular DataCompleted  
6-30-52Surface Casing

Size: 13-3/8" Cemented with 245 SX

TOC: Surface feet determined by calc

Hole size: 18"

Intermediate Casing

Size: 8-5/8" Cemented with 800 SX

TOC: 900 feet determined by 50% calc

Hole size: 12-1/4"

Long String

Size: 5-1/2" Cemented with 800 SX

TOC: 4093 feet determined by 80% calc

Hole size: 7-7/8"

Total Depth: 8450'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation:
- Name of Field or Pool (If applicable) Lovington Abo
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).

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

(Above) Drinkard

INJECTION WELL DATA SHEET

75  
P

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#40	1980' FEL & 810' FSL	36	16S	' 36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
10-07-53

	<u>Surface Casing</u>
	Size: 8-5/8" Cemented with 850 SX
	TOC: Surface feet determined by calc
	Hole size: 11"
	<u>Intermediate Casing</u>
	Size: Cemented with SX
	TOC: feet determined by
	Hole size:
	<u>Long String</u>
	Size: 5-1/2" Cemented with 265 SX
TOC: 4565 feet determined by 80% calc	
Hole size: 7 7/8"	
Total Depth: 6252'	
<u>Injection Interval</u>	
6009 feet to 6252 feet (perforated or open-hole, indicate which)	

Tubing size 2-3/8 lined with IPC set in a - packer  
at 5881 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

76

Texaco		Skelly "Q" State		
OPERATOR		LEASE		
4	330' FSL & 1650' FEL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
4-23-52

13 3/8"
   
 265'
   
 8 5/8"
   
 33 4/3'
   
 5 1/2"
   
 TO 8435'

Surface Casing

Size: 13-3/8" Cemented with 265 SX  
 TOC: Surface feet determined by <sup>CIRC</sup> calc  
 Hole size: 18"

Intermediate Casing

Size: 8-5/8" Cemented with 800 SX  
 TOC: <sup>Surface</sup> ~~798~~ feet determined by <sup>CIRC</sup> 50% calc  
 Hole size: 11"

Long String

Size: 5-1/2" Cemented with 800 SX  
 TOC: 4077 feet determined by 80% calc  
 Hole size: 7-7/8"

Total Depth: 8435'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
 at - feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).

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

(Above) Drinkard

## INJECTION WELL DATA SHEET

77  
P

Greenhill Petroleum Corporation

Lovington Paddock

OPERATOR	LEASE			
#39	810' FSL & 660' FEL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular DataSurface Casing

Size: 8-5/8" Cemented with 900 SX

TOC: Surface feet determined by calc *Circ*

Hole size: //

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 275 SX

TOC: 4632 feet determined by temp survey

Hole size: 7 7/8

Total Depth: 6229'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer

at - feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation:
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#24	660' FEL & 660' FSL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEG.	TOWNSHIP	RANGE

## Tubular Data

Completed  
9-8-39

	<u>Surface Casing</u>
	Size: <u>13</u> " Cemented with <u>250</u> SX
	TOC: <u>Surface</u> feet determined by <u>circ</u>
	Hole size: <u>17-1/4" 15</u>
	<u>Intermediate Casing</u>
	Size: <u>8-5/8</u> " Cemented with <u>500</u> SX
	TOC: <u>1458</u> feet determined by <u>calc</u>
	Hole Size: <u>12-1/4" 7 3/4</u>
	<u>Long String</u>
	Size: <u>5-1/2</u> " Cemented with <u>250</u> SX
TOC: <u>3145</u> feet determined by <u>calc</u>	
Hole Size: <u>7-7/8" 6 1/4</u>	
Total Depth: <u>5075'</u>	

## Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
(material)  
\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation \_\_\_\_\_
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

## INJECTION WELL DATA SHEET

Texaco	Skelly "Q" State			
OPERATOR	LEASE			
3	330' FSL & 330' FEL	36	16S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Size: 13 " Cemented with 275 SX

TOC: Surface feet determined by calc <sup>Circ</sup>

Hole size: 18"

## Intermediate Casing

Size: 8-5/8 " Cemented with 1750 SX

TOC: Surface feet determined by calc <sup>Circ</sup>

Hole Size: 12-1/4"

## Long String

Size: 5-1/2 " Cemented with 739 SX

TOC: 4037 feet determined by Haliburton

Hole Size: 7-7/8"

Total Depth: 8442'

## Injection Interval

feet to feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
(material)  
\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation \_\_\_\_\_
- Name of Field or Pool (If applicable) Lovington Abo
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
\_\_\_\_\_
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Drinkard



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# INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#38	810' FSL & 665' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
6-28-53

Converted to  
Injection 1-71

### Surface Casing

Size: 9-5/8" Cemented with 900 SX

TOC: Surface feet determined by <sup>Circ</sup>calc

Hole size: 12-1/4"

### Intermediate Casing

Size: 9 5/8" Cemented with SX

TOC: feet determined by

Hole size:

### Long String

Size: 5-1/2" Cemented with 500 SX  
3527 (casing set deeper than on original calc.)

TOC: ~~3316~~ feet determined by 80% calc

Hole size: 7-7/8"

Total Depth: 6252'

### Injection Interval

6040 feet to 6220 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a - packer  
at 5966 feet. (Or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (if applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Texaco		State "0" Battery 2		
OPERATOR		LEASE		
9	660' FSL & 815' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
12-8-51

13 3/8"  
315'

9 5/8"  
5135'

5 1/2"  
TO 8500'

Surface Casing

Size: 13-3/8" Cemented with 300 650 SX

TOC: Surface feet determined by calc

Hole size: 18"

Intermediate Casing

Size: 9-5/8" Cemented with 4500 SX

TOC: Surface feet determined by calc

Hole size: 12-1/4"

Long String

Size: 5-1/2" Cemented with 650 SX

TOC: 4959 feet determined by 80% calc

Hole size: 7-7/8"

Total Depth: 8500

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

(Above) Drinkard

350 SYD shoe  
4150 SX Thill  
DU Tool at  
4510

## INJECTION WELL DATA SHEET

<u>Greenhill Petroleum Corporation</u>		<u>Lovington San Andres Unit</u>		
OPERATOR		LEASE		
<u>#22</u>	<u>330 FSL &amp; 1650 FWL</u>	<u>31</u>	<u>T16S</u>	<u>R73E</u>
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular DataSurface CasingSize: 13 " Cemented with 200 SXTOC: Surface feet determined by calcHole size: 15 1/2Intermediate CasingSize: 9 5/8 " Cemented with 500 SXTOC: 1369 feet determined by 50% calcHole Size: 11 1/4Long StringSize: 7 " Cemented with 200 SXTOC: 3161 feet determined by 80% calcHole Size: 8 3/4Total Depth: 5086Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
 (perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
 \_\_\_\_\_ (material)  
 \_\_\_\_\_ packer at \_\_\_\_\_ feet.  
 (brand & model)  
 (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) Lovington San Andres
3. Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
 11/19/55

Deepened to 4917  
 6/8/66

Deepened to 5086  
 2/4/86

13"  
 299'

9 5/8"  
 3002'

7"  
 4525'

TD 4760'

Deepened  
 4917  
 6-8-66

TD 5086  
 2-4-86

# INJECTION WELL DATA SHEET

84

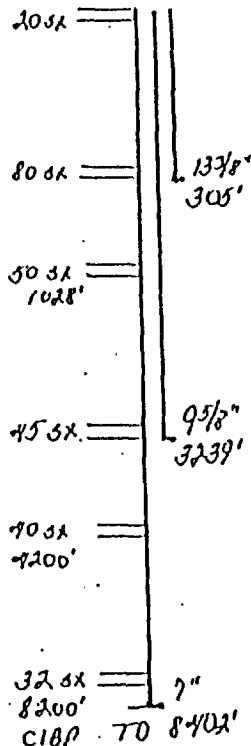
Arco	State 182 "A"			
OPERATOR	LEASE			
3	1959.54' FWL & 660' FSL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
4-12-52

P&A'd 2-4-76

cut & pulled  
9 5/8 from 1028  
cut & pull  
" from 4200  
perf at 5000  
92.120 SX.



## Surface Casing

Size: 13-3/8" Cemented with 325 SX

TOC: Surface feet determined by calc

Hole size: 17-1/4"

## Intermediate Casing

Size: 9-5/8" Cemented with 1200 SX

TOC: feet determined by

Hole size: 12-1/4"

## Long String

Size: 7" Cemented with 500 SX

TOC: 5261 feet determined by 80% calc.

Hole size: 8-3/4"

Total Depth: 8402'

## Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation:
- Name of Field or Pool (If applicable) Lovington Abo
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).

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

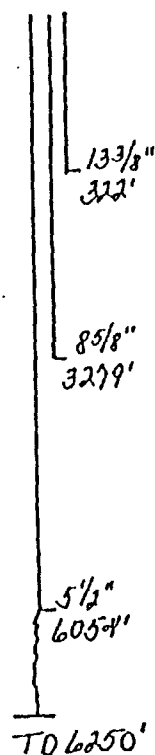
(Above) Drinkard

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#37	330' FSL & 2290' FWL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
8-6-53

Surface Casing

Size: 13-3/8" Cemented with 350 SX

TOC: Surface feet determined by ~~calc~~<sup>circ</sup>

Hole size: 17 1/2

Intermediate Casing

Size: 8-5/8" Cemented with 930 SX

TOC: 1235 feet determined by temp survey

Hole size: 11

Long String

Size: 5-1/2" Cemented with 250 SX

TOC: 4290 feet determined by temp survey

Hole size: 7 7/8

Total Depth: 6250'

Injection Interval

6054 feet to 6250 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation: Paddock
2. Name of Field or Pool (If applicable) Paddock
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

INJECTION WELL DATA SHEET

86

Texaco		State "0"		
OPERATOR		LEASE		
11	330' FSL & 2310' FEL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Surface Casing

Size: 13-3/8" Cemented with 240 SX

TOC: Surface feet determined by calc

Hole size: 18"

Intermediate Casing

Size: 8-5/8" Cemented with 800 SX

TOC: 899 feet determined by 50% calc

Hole size: 12-1/4"

Long String

Size: 5-1/2" Cemented with 850 SX

TOC: 3809 feet determined by 80% calc

Hole size: 7-7/8"

Total Depth: 8440'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet: (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

(Above) Drinkard

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#21	2310 FEL & 660 FSL	31	T16S	R31E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Size: 13 " Cemented with <sup>200</sup>~~175~~ SKTOC: Surface feet determined by <sup>circ.</sup>~~calc~~

Hole size: 15

## Intermediate Casing

Size: 8 5/8 " Cemented with <sup>500</sup>~~400~~ SK

TOC: 1784 feet determined by 50% calc

Hole Size: 10 1/4 9 7/8

## Long String

Size: 5 1/2 " Cemented with <sup>200</sup>~~150~~ SK

TOC: 1626 642 feet determined by 80% calc

Hole Size: 6 1/4

Total Depth: 5032'

## Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
(material)  
\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation \_\_\_\_\_
- Name of Field or Pool (if applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
9/20/39

302'  
3010'  
4570'  
5032'

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#36	660' FSL & 2160' FEL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
12-3/53

Converted to  
Injection 1/71

Surface Casing

Size: 8-5/8" Cemented with 1475 SX

TOC: Surface feet determined by <sup>circ.</sup> ~~gate~~

Hole size: 11"

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 400 SX

TOC: 4077 feet determined by temp  
survey

Hole size: 7-7/8"

Total Depth: 6245'

Injection Interval

6050 feet to 6245 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a - packer  
at 5974 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such  
perforated intervals and give plugging details (sacks of cement or  
bridge plug(s) used.  
No
- Give the depth to and name of any overlying and/or underlying oil or gas  
zones (pools) in this area.  
Above Glorieta



## INJECTION WELL DATA SHEET

Texaco	State "0"			
OPERATOR	LEASE			
23	990' FSL & 660' FEL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
11-6-54

Surface Casing  
 Size: 8-5/8" Cemented with 1575 SX  
 TOC: Surface feet determined by calc  
 Hole size: 11"  
Intermediate Casing  
 Size: Cemented with SX  
 TOC: feet determined by  
 Hole size:  
Long String  
 Size: 5-1/2" Cemented with 875 SX  
 TOC: 3673 feet determined by 80% calc  
 Hole size: 7-7/8"  
 Total Depth: 8440'  
Injection Interval  
 - feet to - feet  
 (perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
 at - feet. (Or describe any other casing-tubing seal).

Other Data

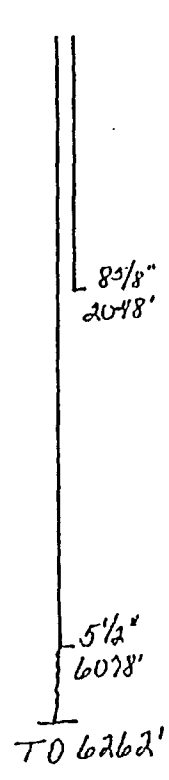
1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Lovington Drinkard
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
(Above) Glorieta

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#35	810' FSL & 810' FEL	31	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
3-20-54



Surface Casing

Size: 8-5/8" Cemented with 975 SX  
 TOC: Surface feet determined by <sup>Circ</sup>calc  
 Hole size: 11

Intermediate Casing

Size: Cemented with SX  
 TOC: feet determined by  
 Hole size:

Long String

Size: 5-1/2" Cemented with 585 SX  
 TOC: 3225 feet determined by temp survey  
 Hole size: 7 7/8

Total Depth: 6262'

Injection Interval

6078 feet to 6262 feet  
 (perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with 2 3/8 set in a packer  
 at 6000 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
 If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
 No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
 Above Glorieta

66 92

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation  
OPERATORLovington San Andres  
LEASE

#35

339' FNL &amp; 1890' FWL

6

17S

37E

WELL NO.

FOOTAGE LOCATION

SEC.

TOWNSHIP.

RANGE.

## Tubular Data

Completed  
5-4-39

## Surface Casing

Size: 13" Cemented with 200 SX

TOC: Surface feet determined by circ

Hole size: 17-1/4"

## Intermediate Casing

Size: 9-5/8" Cemented with 400 SX

TOC: 1644 feet determined by calc

Hole Size: 12"

## Long String

Size: 7" Cemented with 200 ~~300~~ SX

TOC: 1789 feet determined by calc

Hole Size: 8-3/4"

Total Depth: 4942'

## Injection Interval

4570 — feet to 5040 — feet  
(perforated or open-hole, indicate which)

Tubing size 2 7/8" — lined with JPC — set in a  
(material)  
packer at 4520 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation — San Andres
- Name of Field or Pool (IF applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#19	1980 FNL & 2310 FEL	32	T16S	R37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Size: 13 3/8 " Cemented with 200 SXTOC: Surface feet determined by calcHole size: 17 1/4

## Intermediate Casing

Size: 8 5/8 " Cemented with 300 SXTOC: 1193 feet determined by 50% calcHole Size: 11

## Long String

Size: 5 1/2 " Cemented with 300 SXTOC: 2982 feet determined by 80% calcHole Size: 7 7/8Total Depth: 4946'

## Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
 (perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
 \_\_\_\_\_ (material)

\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
 1/5/46

319'  
 8 5/8"  
 2113'  
 5 1/2"  
 4617'  
 4946' TD

# INJECTION WELL DATA SHEET

94

Texaco	State "P"			
OPERATOR	LEASE			
5	330' FSL & 330' FWL	32	16S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
1-18-52

P&A'd 7-26-76

### Surface Casing

Size: 8-5/8" Cemented with 1000 SX

TOC: Surface feet determined by calc

Hole size: 11"

### Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

### Long String

Size: 5-1/2" Cemented with 520 SX

TOC: 3405 feet determined by 80% calc

Hole size: 7-7/8"

Total Depth: 6238'

### Injection Interval

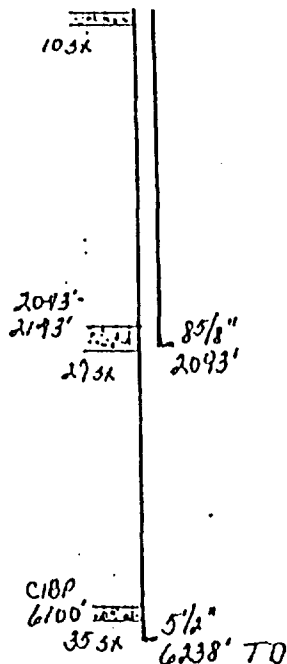
- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

### Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Lovington Paddock
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

(Above) Glorieta



5 1/2" casing  
shot and pulled  
from 3115'

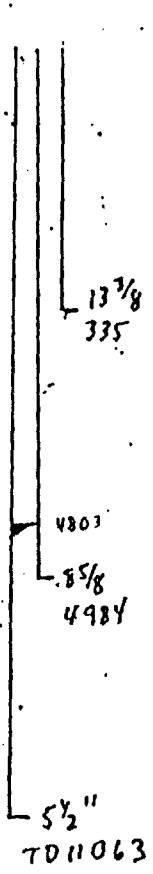
INJECTION WELL DATA SHEET

Texaco		State "V"		
OPERATOR		LEASE		
1	660' FWL & 660' FNL	5	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
6-20-52

5 1/2" liner  
4803 - 11063  
TOC 7010 file  
  
6-20-55  
5 1/2" liner from  
6648 - 6650 w 280 SX  
TOC 5740



Surface Casing

Size: 13-3/8 " Cemented with 350. SX  
TOC: Surface feet determined by calc  
Hole size: 17-1/4"

Intermediate Casing

Size: 8-5/8 " Cemented with 3167 3000 SX  
TOC: Surface feet determined by calc  
Hole Size: 11"

Long String

Size: 5-1/2 " Cemented with 732 SX  
liner behind intermediate  
TOC: feet determined by  
Hole Size: 7-7/8"

Total Depth: 11,063'

Injection Interval

feet to feet  
(perforated or open-hole, indicate which)

Tubing size lined with set in a  
(material)  
packer at feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation
2. Name of Field or Pool (if applicable) East Lovington (Penn)
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Abo

## INJECTION WELL DATA SHEET

E. F. Moran Inc.

Shipp State "A"

OPERATOR	LEASE
1	330' FNL & 330' FWL
WELL NO..	FOOTAGE LOCATION
	SEC. TOWNSHIP RANGE

Tubular DataSurface Casing

Size: 10-3/4" Cemented with 175 SX

TOC: Surface feet determined by <sup>circ.</sup> calc

Hole size: 13-3/4"

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 400 SX

TOC: 2485 feet determined by 80% calc

Hole size: 7-7/8"

Total Depth: 4934'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer

at - feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation: NA
  2. Name of Field or Pool (If applicable) Lovington
  3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
  4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
- 
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.
-

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#53	330' FNL & 840' FEL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
10-52

Surface Casing

Size: 13-3/8" Cemented with 250 SX

TOC: Surface feet determined by calc

Hole size:

Intermediate Casing

Size: 8-5/8" Cemented with 2100 SX

TOC: 808 feet determined by temp survey

Hole size:

Long String

Size: 5-1/2" Cemented with 230 SX

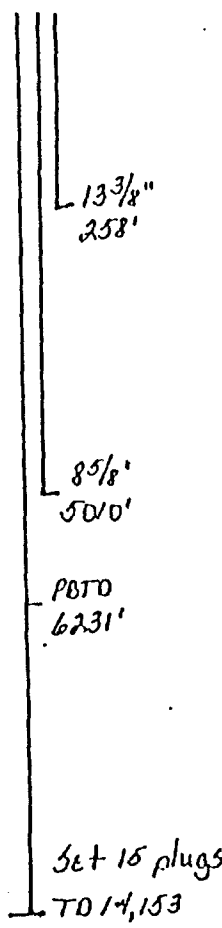
TOC: 4116 feet determined by temp survey

Hole size:

Total Depth: 14,153'

Injection Interval

6144 feet to 6194 feet  
(perforated or open-hole, indicate which)



Tubing size 2-3/8" lined with IPC set in a packer  
at 6094 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta



## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres Unit		
OPERATOR		LEASE		
#36	660 FNL & 2040 FEL	6	T17S	R37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Size: 13 " Cemented with 200 SX  
 TOC: Surface feet determined by circulation  
 Hole size: 14 3/4"

## Intermediate Casing

Size: 8 5/8 " Cemented with 500 SX  
 TOC: 1774 feet determined by 50% calc.  
 Hole Size: 10 1/4

## Long String

Size: 5 1/2 " Cemented with 200 SX  
 TOC: 3127 feet determined by 80% calc.  
 Hole Size: 6 3/4"  
 Total Depth: 4955'

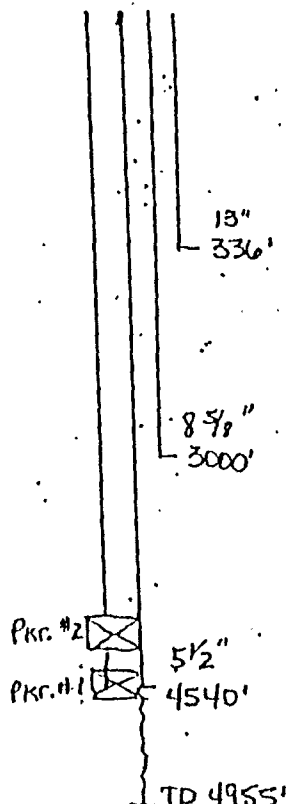
## Injection Interval

4540 feet to 4955 feet  
 (perforated or open-hole, indicate which)

Completed  
9/12/39

Pkr. #1  
3/22/63

Pkr. #2  
1/25/79



Pkr. #1  
 Tubing size 2 3/8 lined with IPC set in a  
 (material)  
Baker "A" Pension packer at 4456 feet.  
 (brand & model)  
 (or describe any other casing-tubing seal). Pkr. #2 Howco R-3 set @ 4435'.

## Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (IF applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

INJECTION WELL DATA SHEET

Enhill Petroleum Corporation		Lovington Paddock		
OPERATOR	LEASE			
510' FNL & 2190' FEL	6	17S	37E	
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

d Date  
31-53

8 5/8" 3128'  
  
5 1/2" 6090'  
TD 6250'

Surface Casing  
Size: 8 5/8" Cemented with \_\_\_\_\_ SX  
TOC: Surface feet determined by calc  
Hole size: 11  
Intermediate Casing  
Size: \_\_\_\_\_" Cemented with \_\_\_\_\_ SX  
TOC: \_\_\_\_\_ feet determined by \_\_\_\_\_  
Hole Size: \_\_\_\_\_  
Long String  
Size: 5 1/2" Cemented with 400 SX  
TOC: 4220 feet determined by temp survey  
Hole Size: 7 7/8  
Total Depth: 6250'

Injection Interval  
6090 feet to 6250 feet  
(perforated or open-hole, indicate which)

Casing size 2 3/8" lined with IPC set in a  
Baker AD- 1 PC (material) 6000 feet.  
(brand & model)  
or describe any other casing-tubing seal).

Other Data  
Name of the injection formation Paddock  
Name of Field or Pool (If applicable) Paddock  
Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production  
Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.  
No

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

## INJECTION WELL DATA SHEET

100

Texaco		C. S. Caylor		
OPERATOR		LEASE		
3	330' FNL & 2310' FEL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular DataCompleted  
6-17-52Surface Casing

Size: 13-3/8" Cemented with 240 SX

TOC: Surface feet determined by calc

 13 3/8"  
240'

Hole size: 18"

Intermediate Casing

Size: 8-5/8" Cemented with 800 SX

TOC: 905 feet determined by 50% calc

Hole size: 12-1/4"

 8 5/8"  
335 1/2'
Long String

Size: 5-1/2" Cemented with 450 SX

TOC: 3270 feet determined by temp  
survey.

Hole size: 7-7/8"

Total Depth: 8435'

Injection Interval
 - feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).

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

(Above) Drinkard

# INJECTION WELL DATA SHEET

Penroc	C. S. Caylor			
OPERATOR	LEASE			
3	660' FNL & 1827 FNL 3393' FET	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
5-18-52

<div> <div>13 3/8"</div> <div>286'</div> </div>	<u>Surface Casing</u>
	Size: 13-3/8" Cemented with 300 SX
	TOC: Surface feet determined by calc
<div> <div>8 5/8"</div> <div>3300'</div> </div>	Hole size: 18"
	<u>Intermediate Casing</u>
	Size: 8-5/8" Cemented with 800 SX
<div> <div>5 1/2"</div> <div>TD 8440'</div> </div>	TOC: 849 feet determined by 50% calc
	Hole size: 12-1/4"
	<u>Long String</u>
	Size: 5-1/2" Cemented with 800 SX
	TOC: 4082 feet determined by 80% calc
	Hole size: 7-7/8"
	Total Depth: 8440'
	<u>Injection Interval</u>
	- feet to - feet (perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation:
- Name of Field or Pool (If applicable) Lovington Abo
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).

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

(Above) Drinkard

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## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR	(1740 FNL)	LEASE		
#51	3540' FEL & 480' FNL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completion  
9-23-53

Converted to  
Injection 12/66

Surface Casing

Size: 8-5/8" Cemented with 950 SX

TOC: Surface feet determined by calc

Hole size: 11

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 275 SX

TOC: 4050 feet determined by 70% calc

Hole size: 7 7/8

Total Depth: 6245'

Injection Interval

6080 feet to 6245 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a packer  
at 5981 feet. (Or describe any other casing-tubing seal).

Other Data

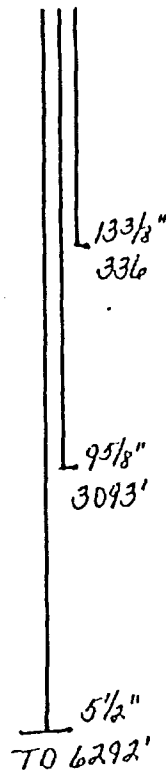
- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#50	660' FNL & 902' FWL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
7-31-53

Surface Casing

Size: 13-3/8" Cemented with 300 SX

TOC: Surface feet determined by calc <sup>Circ</sup>

Hole size: 17 1/4

Intermediate Casing

Size: 9-5/8" Cemented with 1550 SX

TOC: Surface feet determined by calc <sup>Circ</sup>

Hole size: 12 1/2

Long String

Size: 5-1/2" Cemented with 500 SX <sup>450</sup>

TOC: <sup>4150</sup>~~4100~~ feet determined by temp survey

Hole size: 8 3/4

Total Depth: 6292'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with IPC set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation:
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details. (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovinton San Andres Unit		
OPERATOR		LEASE		
#34	660 FNL & 615 FWL	6	T17S	R37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Surface Casing

Size: 13 " Cemented with 200 SX  
 TOC: Surface feet determined by circulation  
 Hole size: 17 1/4 15

Intermediate Casing

Size: 9 5/8 " Cemented with 500 SX  
 TOC: 1956 feet determined by 50% calc  
 Hole Size: 12"

Long String

Size: 7 " Cemented with 200 SX  
 TOC: 3264 feet determined by 80% calc  
 Hole Size: 8 3/4"

Total Depth: 4950'

Injection Interval

4521 foot to 4950 foot  
 (perforated or open-hole, indicate which)

Packer #1  
 Tubing size 2" lined with IPC set in a  
 (material)  
Baker "A" Pension packer at 4498 foot.

(or describe any other casing-tubing seal). Packer #2 - 2 3/8" plastic lined tbg.  
 set in a 7" Guiberson Packer @ 4470'.

Other Data

1. Name of the injection formation San Andres
2. Name of Field or Pool (IF applicable) Lovington San Andres
3. Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg





## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation  
OPERATOR

Lovington San Andres Unit  
LEASE

#33  
WELL NO.

660 FNL & 660 FEL  
FOOTAGE LOCATION

1  
SEC.

T17S  
TOWNSHIP

R36E  
RANGE

### Tubular Data

## Surface Casing

Size: 13 ". Cemented with 200 SX

TOC: 94 feet determined by 70% calc

Hole size: 17 1/4"

13"

313'

### Intermediate Casing

Size: 8 5/8 ~ Cemented with 250 SX

TOC: 2352 feet determined by 70% calc

Hole Size: 11"

85/8"

31091

### Long String

Size: 5 1/2" Cemented with 200 SX

TOC: 3702 feet determined by 70% calc

Hole Size: 7 7/8"

5 1/2"

4591

-TD 47004

Total Depth: 4900'

### Infection Interval

                     feet to                      feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
 \_\_\_\_\_ (material)  
 \_\_\_\_\_ packer at \_\_\_\_\_ feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

### Other Data

1. Name of the injection formation \_\_\_\_\_
2. Name of Field or Pool (If applicable) Lovington San Andres
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Underlying-Grayburg

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INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#49	760 FNL & 660 FEL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
8-18-53

Converted to  
Injection 12/66

	<u>Surface Casing</u>
	Size: 13-3/8" Cemented with 300 SX
	TOC: Surface feet determined by calc <sup>CIRC</sup>
	Hole size: 17-1/2"
13 3/8"	<u>Intermediate Casing</u>
297'	Size: 8-5/8" Cemented with 1500 SX
	TOC: <sup>390</sup> Surface feet determined by <sup>TS</sup> calc
	Hole size: 11"
8 5/8"	<u>Long String</u>
3723'	Size: 5-1/2" Cemented with 550 SX
	TOC: <sup>3724</sup> 3019- feet determined by <sup>TS</sup> 80%-calc
	Hole size: 7-7/8"
5 1/2"	Total Depth: 6240'
6015'	<u>Injection Interval</u>
TD 6240'	6015 feet to 6140 feet (perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a - packer  
at 5921 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

INJECTION WELL DATA SHEET

Amerada Hess		State L "A"		
OPERATOR		LEASE		
9	660' FNL & 1880' FEL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
-24-52

<div>17 3/8 215'</div> <div>1 5/8 3743'</div> <div>5 1/2 9335'</div> <div>8440' TD</div>	<u>Surface Casing</u>	
	Size:	13-3/8" Cemented with 225 SX
	TOC:	Surface feet determined by calc
	Hole size:	17-1/2"
	<u>Intermediate Casing</u>	
	Size:	8-5/8" Cemented with 1500 SX
	TOC:	1295 Surface feet determined by TS calc
	Hole Size:	11"
	<u>Long String</u>	
	Size:	5-1/2" Cemented with 600 SX
TOC: 5597 feet determined by temp survey		
Hole Size: 7-7/8"		
Total Depth: 8440'		
<u>Injection Interval</u>		
- feet to - feet (perforated or open-hole, indicate which)		

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
(material)  
\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation \_\_\_\_\_
- Name of Field or Pool (IF applicable) Lovington Abo
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Drinkard

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation      Lovington San Andres Unit  
 OPERATOR      LEASE

#32      660 FNL & 1980 FEL      1      T17S      R36E  
 WELL NO.      FOOTAGE LOCATION      SEC.      TOWNSHIP      RANGE

## Tubular Data

## Surface Casing

Size: 10 3/4" Cemented with 180 SXTOC: Surface feet determined by circulationHole size: 13 3/4"

## Intermediate Casing

Size: 7 5/8" Cemented with 265 SXTOC: 2200' feet determined by 50% calcHole Size: 9 7/8"

## Long String

Size: 5 1/2" Cemented with 200 SXTOC: 2326' feet determined by 80% calcHole Size: 6 3/4"Total Depth: 4900'

## Injection Interval

4589 feet to 4900 feet  
(perforated or open-hole, indicate which)Completed  
1/1/40

Tubing size 2 3/8" lined with IPC set in a  
Baker "A" Pension packer at 4548 feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

## Other Data

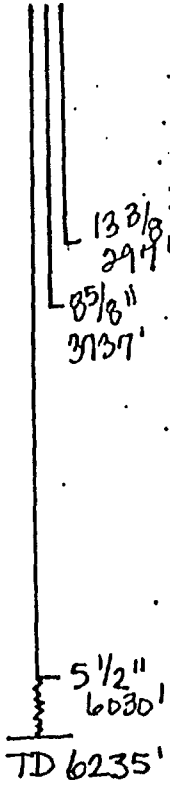
1. Name of the injection formation San Andres
2. Name of Field or Pool (IF applicable) Lovington San Andres
3. Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR	LEASE			
48	660' FNL & 2080' FEL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Open to 6260



Surface Casing  
Size: 13 3/8 " Cemented with 300 SX  
TOC: Surface feet determined by calc  
Hole size: 17 1/2

Intermediate Casing  
Size: 8 5/8 " Cemented with 1500 SX  
TOC: 602 feet determined by temp survey  
Hole Size: 11

Long String  
Size: 5 1/2 " Cemented with 550 SX  
TOC: 3712 feet determined by temp survey  
Hole Size: 7 7/8  
Total Depth: 6235'

Injection Interval  
6030 feet to 6260 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC (material) set in a  
Baker AD - 1 PC packer at 5980 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Packer
- Name of Field or Pool (IF applicable) Paddock
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

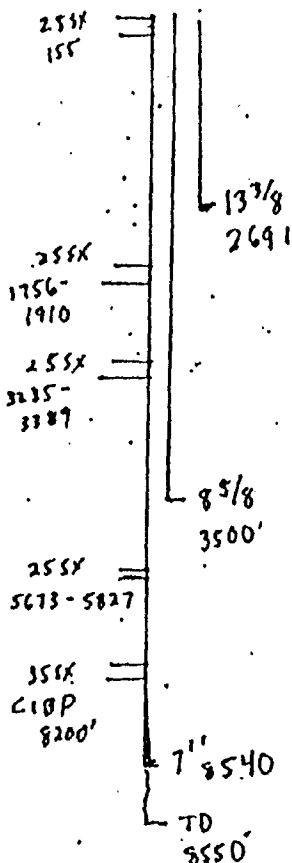
# INJECTION WELL DATA SHEET

Amoco	State "E" TR 18			
OPERATOR	LEASE			
15	330' FNL & 2310" FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
12-4-52

P&A'd  
7-17-84



### Surface Casing

Size: 13-3/8" Cemented with 275 SX

TOC: Surface feet determined by calc

Hole size: 17-1/2"

### Intermediate Casing

Size: 8-5/8" Cemented with 500 SX

TOC: 223 feet determined by 50% calc

Hole Size: 12-1/4"

### Long String

Size: 5-1/2" Cemented with 450 SX

TOC: 1855 feet determined by temp survey

Hole Size: 8-3/4"

Total Depth: 8550'

### Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a  
(material)  
packer at - feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

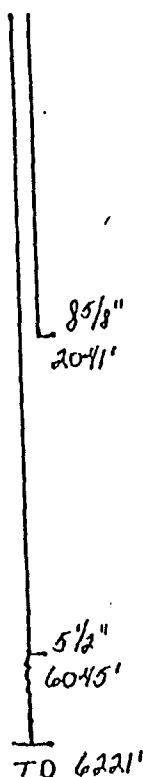
- Name of the injection formation -
- Name of Field or Pool (If applicable) Lovington Abo
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
-
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Drinkard

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#47	1930' FWL & 660' FNL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
9-04-54

Surface Casing

Size: 8-5/8" Cemented with <sup>1200</sup>1000 SX

TOC: Surface feet determined by <sup>circ</sup>calc

Hole size:

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with <sup>300</sup>102 SX

TOC: <sup>4147</sup>5053 feet determined by <sup>TS</sup>calc

Hole size: 7-7/8"

Total Depth: 6221'

Injection Interval

6045 feet to 6221 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a packer  
at 5957 feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation: Paddock
2. Name of Field or Pool (If applicable) Paddock
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

INJECTION WELL DATA SHEET

Amoco	State "E" TR 18			
OPERATOR	LEASE			
16	330' FNL & 990' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
2-25-53

P&A'd  
4-26-84

CIBP set  
@ 8103'  
Pumped 15 sx  
Set retainer  
@ 4261'  
Pumped 346 sx  
Set retainer  
@ 1326'  
Pumped 900 sx  
Spotted 15 sx  
cement surface  
plug

Surface Casing

Size: 13-3/8" Cemented with 300 SX  
TOC: Surface feet determined by calc  
Hole size: 17-1/2"

Intermediate Casing

Size: 9-5/8" Cemented with 300 SX  
TOC: 1536 feet determined by TS  
Hole Size: 12-1/4"

Long String

Size: 7" Cemented with 500 SX  
TOC: 4550 feet determined by temp survey  
Hole Size: 8-3/4"

Total Depth: 8517'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a  
(material)  
packer at - feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation -
- Name of Field or Pool (if applicable) Lovington Abo
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
-
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Drinkard



INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation

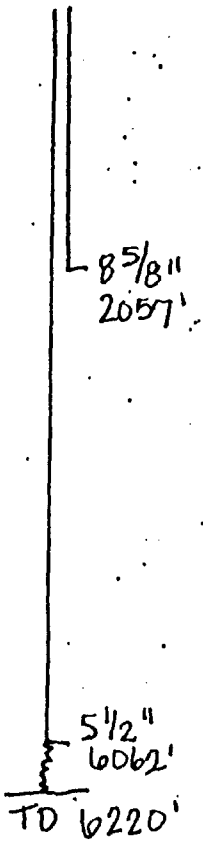
Lovington Paddock

OPERATOR		LEASE		
46	660' FNL & 990' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
11-20-54

Deepen to 6300'



Surface Casing

Size: 8 5/8 " Cemented with 1250 SX  
TOC: Surface            feet determined by calc  
Hole size: 12 1/4

Intermediate Casing

Size:            " Cemented with            SX  
TOC:            feet determined by             
Hole Size:           

Long String

Size: 5 1/2 " Cemented with 350 SX  
TOC: ~~3077~~ 3700 feet determined by temp survey  
Hole Size: 7 7/8"  
Total Depth: 6220'

Injection Interval

6034 feet to 6300 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
Baker AD - 1 PC (material)  
packer at 6000 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Paddock
- Name of Field or Pool (IF applicable) Paddock
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Penroc	State "E" TR 18			
OPERATOR	LEASE			
23	880' FNL & 790' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
3-17-73

	<u>Surface Casing</u>
	Size: 11-3/4" Cemented with 635 SX
	TOC: Surface feet determined by calc
	Hole size: 17-1/2"
	<u>Intermediate Casing</u>
	Size: 8-5/8" Cemented with 2800 SX
	TOC: Surface feet determined by calc
	Hole size: 11"
	<u>Long String</u>
	Size: 5-1/2" Cemented with 1000 SX
	TOC: 2908 feet determined by 80% calc
	Hole size: 7-7/8"
	Total Depth: 8450'
	<u>Injection Interval</u>
	- feet to - feet (perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation:
- Name of Field or Pool (If applicable) Lovington Abo
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

(Above) Drinkard

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#30	660 FNL & 660 FWL	1	T17S	R36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Surface Casing

Size: 13 " Cemented with 200 SX  
 TOC: Surface feet determined by circulation  
 Hole size: 17 1/4

Intermediate Casing

Size: 8 5/8 " Cemented with 500 SX  
 TOC: 1597 feet determined by 50% calc.  
 Hole Size: 12 "

Long String

Size: 5 1/2 " Cemented with 300 SX  
 TOC: 2910 feet determined by 80% calc.  
 Hole Size: 7 7/8 "

Total Depth: 4970

Injection Interval

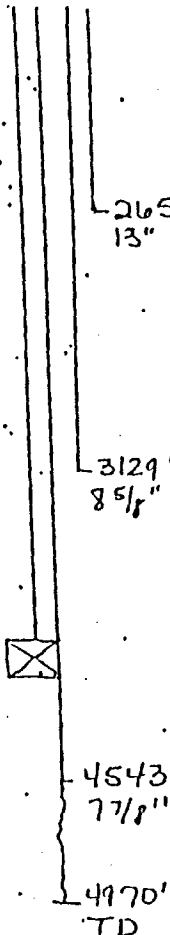
4543 feet to 4970 feet  
 (perforated or open-hole, indicate which)

Tubing size 2 " lined with IPC set in a  
 (material)  
Baker Model A packer at 4485 feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying - Grayburg

Completed  
12/2/39

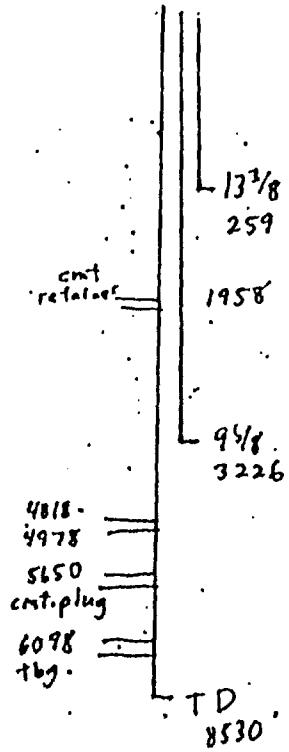


INJECTION WELL DATA SHEET

Amoco	State "E" TR 18			
OPERATOR	LEASE			
18	330' FNL & 330' FEL	2	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
6-12-53  
  
P&A'd 11-7-83



Surface Casing

Size: 13-3/8 " Cemented with 275 SX

TOC: Surface feet determined by circ. -eale

Hole size: 17-1/2"

Intermediate Casing

Size: 9-5/8 " Cemented with 300 SX

TOC: 2246 1600 feet determined by 50% calc 75

Hole Size: 12-1/4"

Long String

Size: 7 " Cemented with 550+550 cu ft SX

TOC: 4975 553 feet determined by perlite 80% calc TS

Hole Size: 8-5/8"

Total Depth: 8530'

Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
(material)  
\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation \_\_\_\_\_
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Drinkard

INJECTION WELL DATA SHEET

<u>Greenhill Petroleum Corp.</u>		<u>Lovington Paddock</u>	
OPERATOR		LEASE	
<u>85</u>	<u>1590 FWL &amp; 1417 FNL</u>	<u>Sec. 1</u>	<u>T17S-R36E</u>
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP RANGE

Tubular Data

<div>13 7/8 349</div> <div>8 5/8 2454</div> <div>5 1/2 6363 70 6400</div>	Surface Casing
	Size: <u>13 7/8</u> " Cemented with <u>500</u> SK
	TOC: <u>surface</u> feet determined by <u>calc</u>
	Hole size: <u>17 1/2</u>
	Intermediate Casing
	Size: <u>8 5/8</u> " Cemented with <u>900</u> SK
	TOC: <u>201</u> feet determined by <u>50% calc</u>
	Hole Size: <u>11</u>
	Long String
	Size: <u>5 1/2</u> " Cemented with <u>1230</u> SK
TOC: <u>surface</u> feet determined by <u>80% calc</u>	
Hole Size: <u>7 7/8</u>	
Total Depth: <u>6400</u>	

Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ (material) not in a  
\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

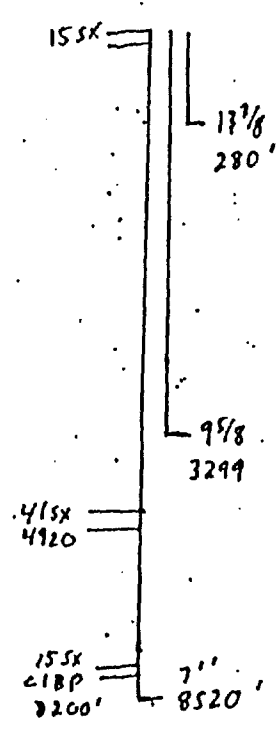
1. Name of the injection formation \_\_\_\_\_
2. Name of Field or Pool (if applicable) Lovington Paddock
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
\_\_\_\_\_
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
(above) Glorietta

INJECTION WELL DATA SHEET

Penrod		State E TR 18		
OPERATOR		LEASE		
20	1650' ENL. & 330' FEL	2	17S	36E
WELL NO.	FOOTAGE LOCATION	SEG.	TOWNSHIP	RANGE

Tubular Data

Completed  
9-24-53  
  
P&A'd  
4-9-84



Surface Casing  
Size: 13-3/8 ". Cemented with 265 SX  
TOC: Surface feet determined by calc  
Hole size: 17-1/2"

Intermediate Casing  
Size: 9-5/8" Cemented with 300 SX  
TOC: \_\_\_\_\_ feet determined by \_\_\_\_\_  
Hole Size: 12-1/4"

Long String + 500 cu. ft perlite  
Size: 7 " Cemented with 550 SX  
TOC: 2138 feet determined by calc  
Hole Size: 8-3/4"  
Total Depth: 8525'

Injection Interval  
\_\_\_\_\_ feet to \_\_\_\_\_ feet  
(perforated or open-hole, indicate which)

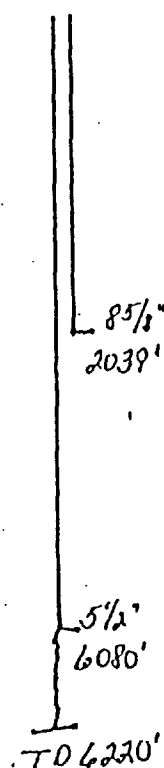
Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
(material)  
\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation No
2. Name of Field or Pool (If applicable) Lovington Paddock
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.  
\_\_\_\_\_
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#61	990' FWL & 2310' FNL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular DataSurface Casing

Size: 8-5/8" Cemented with 1000 SX

TOC: Surface feet determined by calc

Hole size:

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 220 SX

TOC: 3847 feet determined by <sup>temp survey</sup> ~~80% calc~~

Hole size: 7-7/8"

Total Depth: 6220'

Injection Interval6080 feet to 6220 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a - packer

at 6045 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Penrge		State "E" TR 18		
OPERATOR		LEASE		
19	1650' FNL & 990' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Completed  
7-29-53

Size: 13-3/8 " Cemented with 332 SX

TOC: Surface feet determined by calc

13 3/8  
266 Hole size: 17-1/2"

## Intermediate Casing

Size: 9-5/8 " Cemented with 300 SX

TOC: 1537  
1937 feet determined by 75  
50% calc

9 5/8  
3298' Hole size: 12-1/4"

## Long String

Size: 7 " Cemented with 225 SX

TOC: 6775 feet determined by temp survey

7"  
8530' Hole size: 8-3/4"

Total Depth: 8530'

## Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a  
(material)

- packer at - feet.  
(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation -
- Name of Field or Pool (If applicable) Lovington Abo
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
-
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Drinkard



## INJECTION WELL DATA SHEET

PENROC	State "E" TR 18			
OPERATOR	LEASE			
17	1650' FNL & 2310' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Size: 13-3/8 " Cemented with 275 SXTOC: Surface feet determined by calcHole size: 17-1/2"

## Intermediate Casing

Size: 9-5/8 " Cemented with 300 SXTOC: 1550  
2316 feet determined by TS  
50% calcHole Size: 12-1/4"

## Long String

Size: 7 " Cemented with + 500 perlite  
500 SXTOC: 5175 feet determined by Temp SurveyHole Size: 8-3/4"Total Depth: 8506'

## Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - (material) set in a  
- packer at - feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

## Other Data

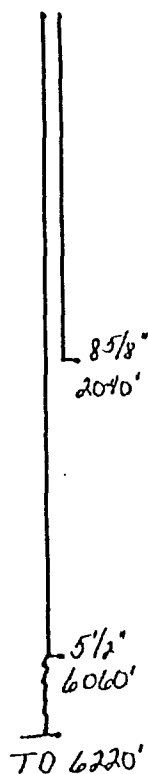
- Name of the injection formation -
- Name of Field or Pool (If applicable) Lovington Abo
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
-
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Drinkard

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#60	1980' FNL & 2310' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
10-11-54

Surface Casing

Size: 8-5/8" Cemented with 1200 SX

TOC: Surface feet determined by <sup>CIRC</sup> calc

Hole size: 12 1/4

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 350 SX

TOC: 3841 feet determined by temp <sup>f.l.c</sup> survey

Hole size: 7 1/8

Total Depth: 6220'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with IPC set in a - packer

at - feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation:
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Amerada Hess		State L "A"		
OPERATOR		LEASE		
11	1650' FNL & 1980' FEL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

## Surface Casing

Size: 13-3/8" Cemented with 250 SX

TOC: Surface feet determined by calc

Hole size: 17-1/2"

## Intermediate Casing

Size: 8-5/8" Cemented with 1500 SX

TOC: <sup>1361</sup>Surface feet determined by <sup>TS</sup>calc

Hole Size: 11"

## Long String

Size: 5-1/2" Cemented with 600 SX

TOC: 4908 feet determined by temp survey

Hole Size: 7-7/8"

Total Depth: 8440'

## Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
 (perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
 \_\_\_\_\_ (material)  
 \_\_\_\_\_ packer at \_\_\_\_\_ feet.  
 (brand & model)  
 (or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation \_\_\_\_\_
- Name of Field or Pool (If applicable) Lovington Abo
- Is this a new well drilled for injection? No  
 If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Above Drinkard

Completed  
 1-4-53

13 3/8  
 248'  
  
 8 5/8  
 3750  
  
 5 1/2  
 8300  
 70  
 8440

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation

Lovington, San Andres

OPERATOR

LEASE

#41

'1980' FNL &amp; 1980' FEL

1

17S

36E

WELL NO.

FOOTAGE LOCATION

SEC.

TOWNSHIP

RANGE

Tubular DataSurface Casing

Size: 13 " Cemented with 250 SX

TOC: Surface feet determined by calc

Hole size: 17-1/4"

Intermediate Casing

Size: 8-5/8" " Cemented with 250 SX

TOC: 2332 feet determined by calc

Hole Size: 11"

Long String

Size: 5-1/2 " Cemented with 200 SX

TOC: 3501 feet determined by calc

Hole Size: 7-7/8"

Total Depth: 4903

Injection Interval— feet to — feet  
(perforated or open-hole, indicate which)Tubing size — lined with — set in a  
(material)  
— packer at — feet.(brand & model)  
(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) Lovington San Andres
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. NO
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

Completed  
9-22-39314'  
18"3100'  
7 7/8"4590'  
5 1/2"4903'  
TD

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#59	1650' FNL & 1980' FEL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
10-19-53

Converted to  
Injection 9-73

Surface Casing

Size: 13-3/8" Cemented with 300 SX

TOC: Surface feet determined by calc

Hole size: 17 1/2"

Intermediate Casing

Size: 8-5/8" Cemented with 1500 SX

TOC: <sup>1028</sup>Surface feet determined by <sup>TS</sup>calc

Hole size: 11"

Long String

Size: 5-1/2" Cemented with 550 SX

TOC: <sup>3618</sup>~~3054~~ feet determined by <sup>TS</sup>~~80%~~ calc

Hole size: 7-7/8"

Total Depth: 6235

Injection Interval

6050 feet to 6235 feet  
(perforated or open-hole, indicate which)

13 3/8"  
297'

8 5/8"  
3235'

5 1/2"  
6050'

TO 6235'

Tubing size 3" lined with IPC set in a - packer at 5991 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Amerinda Hess

State L"Λ"

OPERATOR

LEASE

10

1650' FNL & 660' FEL

1

179

36E

WELL NO.

FOOTAGE LOCATION

SEC.

TOWNSHIP

**RANGE**

## Tubular Data

Completed  
11-7-52

## Surface Casing

Size: 13-3/8 " Cemented with 225. SX

TOC: Surface: feet determined by calc

Hole size: 17-1/2"

### Intermediate Casing

Size: 8-5/8 " Cemented with 1500 SX

TOC: <sup>1346</sup>Surface <sup>TS</sup>feet determined by calc

Hole Size: 11"

Long String

Size: 5-1/2 " Cemented with 600 SX

TOC: 4972      feet determined by temp survey

Hole Size: 7-7/8"

Total Depth: 8435'

### Infection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ (material) set in a \_\_\_\_\_

\_\_\_\_\_ packer at \_\_\_\_\_ foot.

(brand & model)

(or describe any other casing-tubing seal).

### Other Data

1. Name of the injection formation \_\_\_\_\_
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
\_\_\_\_\_
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Above Drinkard

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#58	1980' FNL & 560' FEL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
10-53

<u>Surface Casing</u>	
Size: 13-3/8" Cemented with 300 SX	
TOC: Surface feet determined by <sup>circ</sup> <del>calc</del>	
13 3/8" 297'	Hole size: 17 1/2"
<u>Intermediate Casing</u>	
Size: 8-5/8" Cemented with 1500 SX	
TOC: 588 feet determined by temp survey	
8 5/8" 3742'	Hole size: 11"
<u>Long String</u>	
Size: 5-1/2" Cemented with <sup>550</sup> <del>500</del> SX	
TOC: 3795 feet determined by temp survey	
Hole size: 7 7/8"	
5 1/2" 6065'	Total Depth: 6235
TO 6235'	<u>Injection Interval</u>
- feet to - feet (perforated or open-hole, indicate which)	

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation:
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
# 57	1980' & 695' FEL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
6-13-52

13 1/8"  
3149  
  
8 5/8"  
3129  
  
5 1/2"  
7055'

Surface Casing

Size: 13-3/8" Cemented with 300 SX  
TOC: Surface feet determined by calc  
Hole size: 17 1/2

Intermediate Casing

Size: 8-5/8" Cemented with 1400 SX  
TOC: Surface feet determined by calc  
Hole Size: 11

Long String

Size: 5-1/2" Cemented with 550 SX  
TOC: 5454 4820 feet determined by TS  
Hole Size: 7 3/4  
Total Depth: 8450

Injection Interval

6028  
6028 ~~5320~~ feet to 6187 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a  
(material)  
packer at 6018 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Paddock
- Name of Field or Pool (IF applicable) Paddock
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta



## INJECTION WELL DATA SHEET

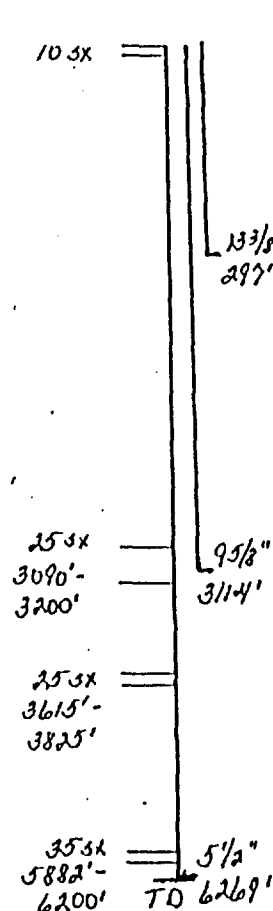
Sun Oil Company		M. Caylor		
OPERATOR		LEASE		
6	902' FWL & 1980' FNL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
10-15-53

P&A'd 3-9-70

5 1/2 shot and  
pulled 3795

Surface Casing

Size: 13-3/8" Cemented with 300 SX

TOC: Surface feet determined by <sup>circ</sup>calc

Hole size: 18"

Intermediate Casing

Size: 9-5/8" Cemented with <sup>1550</sup>1200 SX

TOC: Surface feet determined by <sup>circ</sup>calc

Hole size: 12-1/4"

Long String

Size: 5-1/2" Cemented with <sup>500</sup>450 SX

TOC: 3270 feet determined by temp survey

Hole size: 7-7/8"

Total Depth: 6269'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation:
- Name of Field or Pool (If applicable) Lovington Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

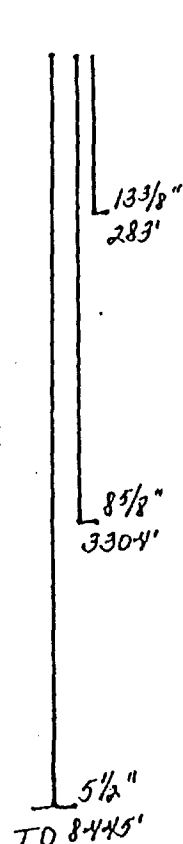
(Above) Glorieta

## INJECTION WELL DATA SHEET

Penroc		C. S. Caylor		
OPERATOR		LEASE		
4F	1653' FNL & 1558' FWL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
7-14-52

Surface Casing

Size: 13-3/8" Cemented with 280 SX

TOC: Surface feet determined by calc

Hole size: 18"

Intermediate Casing

Size: 8-5/8" Cemented with 800 SX

TOC: 853 feet determined by 50% calc

Hole size: 12-1/4"

Long String

Size: 5-1/2" Cemented with 800 SX

TOC: 4087 feet determined by 80% calc

Hole size: 7-7/8"

Total Depth: 8445'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

(Above) Drinkard

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#56	1650' FNL & 1733' FWL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
10-7-53

Surface Casing

Size: 8-5/8" Cemented with 975 SX

TOC: Surface feet determined by calc

Hole size: 11

Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

Long String

Size: 5-1/2" Cemented with 400 SX

TOC: 4139 feet determined by temp  
survey

Hole size: 7 7/8

Total Depth: 6256'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer

at - feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Paddock
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta


## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#55	1879' FNL & 2248' FEL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completion  
6-20-53

Converted to  
Injection 1/71



Surface Casing  
 Size: 8-5/8" Cemented with <sup>1025</sup>~~1595~~ SX  
 TOC: Surface feet determined by <sup>circ</sup>~~calc~~  
 Hole size: 11

Intermediate Casing  
 Size: Cemented with SX  
 TOC: feet determined by  
 Hole size:

Long String  
 Size: 5-1/2" Cemented with 400 SX  
 TOC: 3971 feet determined by 80% calc  
 Hole size: 7 7/8

Total Depth: 6250'

Injection Interval  
 6120 feet to 6250 feet  
 (perforated or open-hole, indicate which)

Tubing size 2-3/8 lined with IPC set in a. - packer  
 at 6067 feet. (Or describe any other casing-tubing seal).

Other Data

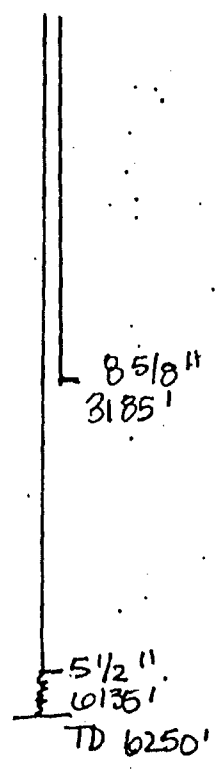
- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
 If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used.  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
54	1650' FNL & 660' FEL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
2-6-54



Surface Casing  
Size: 8 5/8 " Cemented with 1595 SX  
TOC: Surface feet determined by calc  
Hole size: 11

Intermediate Casing  
Size: \_\_\_\_\_ " Cemented with \_\_\_\_\_ SX  
TOC: \_\_\_\_\_ feet determined by \_\_\_\_\_  
Hole Size: \_\_\_\_\_

Long String  
Size: 5 1/2 " Cemented with 435 SX  
TOC: 3537 feet determined by temp survey  
Hole Size: 7 7/8  
Total Depth: 6250'

Injection Interval  
6135 feet to 6250 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a  
Baker AD - 1 PC packer at 6075 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

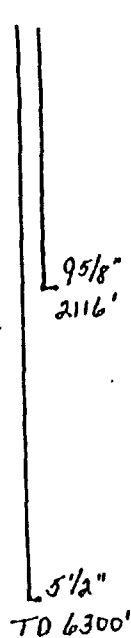
# INJECTION WELL DATA SHEET

Tidewater Oil Company		H. L. Batton "A"		
OPERATOR	1650	LEASE		
1	1653' FNL & 330' FWL	5	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

## Tubular Data

Completed  
5-2-57

Cased Hole



### Surface Casing

Size: 9-5/8" Cemented with 1200 SX

TOC: Surface feet determined by <sup>circ</sup> ~~calc~~

Hole size: 12-1/4"

### Intermediate Casing

Size: Cemented with SX

TOC: feet determined by

Hole size:

### Long String

Size: 5-1/2" Cemented with 800 SX

TOC: <sup>3380</sup> ~~1940~~ feet determined by <sup>TS</sup> ~~80%~~ ~~calc~~

Hole size: 7-7/8"

Total Depth: 6300'

### Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer

at - feet. (Or describe any other casing-tubing seal).

### Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Lovington Paddock
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

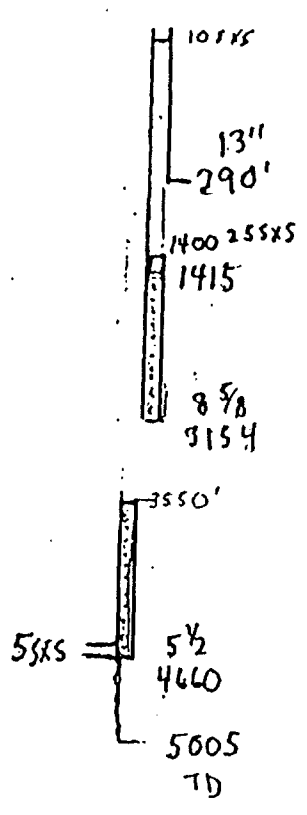
INJECTION WELL DATA SHEET

Samedan Oil Corp. Caylor  
OPERATOR LEASE

1 330 Feet South of North Line 330 Feet East of West Line of SE 1/4 Sec. 6, T17S R37E  
WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE

Tubular Data

P&A  
10/25/39



Surface Casing

Size: 13 " Cemented with 250 SX  
TOC: Surface feet determined by circulation  
Hole size: 15

Intermediate Casing

Size: 10 8 5/8 " Cemented with 500 SX  
TOC: \_\_\_\_\_ feet determined by \_\_\_\_\_  
Hole Size: 10

Long String

Size: 5 1/2 " Cemented with 200 SX  
TOC: 2814 feet determined by 80% calc  
Hole Size: 7  
Total Depth: 5005

Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
(material)  
\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation \_\_\_\_\_
2. Name of Field or Pool (If applicable) \_\_\_\_\_
3. Is this a new well drilled for injection? \_\_\_\_\_  
If no, for what purpose was the well originally drilled? \_\_\_\_\_
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
\_\_\_\_\_
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
\_\_\_\_\_

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#68	1980' FSL & 1890' FWL	6	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
12-23-53

Converted to  
Injection 12-66

Surface Casing  
 Size: 8-5/8" Cemented with 1475 SX  
 TOC: Surface feet determined by calc  
 Hole size: 11"  
Intermediate Casing  
 Size: Cemented with SX  
 TOC: feet determined by  
 Hole size:  
Long String  
 Size: 5-1/2" Cemented with 400 SX  
 TOC: 3928 feet determined by 80% calc  
 Hole size: 7-5/8"  
 Total Depth: 6250'

8 5/8"  
 3143'  
 5 1/2"  
 6107'  
 TO 6250'

Injection Interval

6120 feet to 6250 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a packer  
at 6039 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no; for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

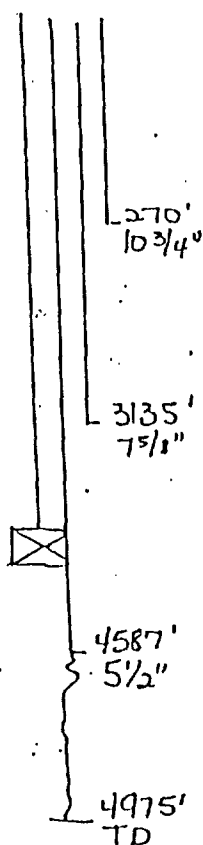


INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#50	1980' FSL & 660' FWL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
10-2-39



Surface Casing

Size: 10-3/4 " Cemented with 200 SX

TOC: Surface feet determined by circ

Hole size: 13-3/4"

Intermediate Casing

Size: 7-5/8 " Cemented with 400 SX

TOC: 1026 feet determined by calc

Hole Size: 9-7/8"

Long String

Size: 5-1/2 " Cemented with 175 SX

TOC: 2611 feet determined by calc

Hole Size: 6-3/4"

Total Depth: 4975'

Injection Interval

4587 feet to 4975 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a  
(material)  
R-3 Tension packer at 4460 feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation			Lovington Paddock		
OPERATOR	2310	LEASE			
#67	2210' FSL & 660' FWL	6	17S	37E	
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE	

Tubular Data

Spud Date  
1-23-54

This has previously  
been identified as  
a problem well pursuant  
to ORDER 9431 and  
will be corrected in  
the near future.

Surface Casing

Size: 13-3/8" Cemented with 275 SX

TOC: Surface feet determined by calc

13 3/8" Hole size: 17 1/2

Intermediate Casing

Size: 9-5/8" Cemented with 300 SX <sup>150 at and</sup> Below Du Tool

TOC: 2497 feet determined by 70% calc

9 5/8" Hole size: 12 1/2

3289'

Long String

Size: 5-1/2" Cemented with 810 SX

TOC: feet determined by temp  
survey

5 1/2" Hole size: 8 3/4

8180'

Total Depth: 8664'

TO 8664'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer  
at - feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation:
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such  
perforated intervals and give plugging details (sacks of cement or  
bridge plug(s) used.  
No
- Give the depth to and name of any overlying and/or underlying oil or gas  
zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#61	2545' FNL & 100' FWL	6	17S	37E
WELL NO.	FOOTAGE LOCATION	SEG.	TOWNSHIP	RANGE

Tubular Data

Completed  
3-15-90

Surface CasingSize: 13-3/8 " Cemented with 450 SXTOC: Surface feet determined by circ.Hole size: 17-1/2"Intermediate CasingSize: 8-5/8 " Cemented with 800 SXTOC: Surface feet determined by calcHole Size: 12-1/4"Long StringSize: 5-1/2 " Cemented with 940 SXTOC: 262 feet determined by calcHole Size: 7-7/8"Total Depth: 5400'Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_ feet  
(perforated or open-hole, indicate which)

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
(material)  
\_\_\_\_\_ packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation  
OPERATORLovington San Andres  
LEASE

WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE
#48	1980' FSL & 1980' FEL	1	17S	36E

## Tubular Data

## Surface Casing

Size: 13 " Cemented with 250 SXTOC: Surface feet determined by calcHole size: 17-1/4"

## Intermediate Casing

Size: 9-5/8 " Cemented with 250 SXTOC: 2251 feet determined by calcHole Size: 12"

## Long String

Size: 7 " Cemented with 225 SXTOC: 3119 feet determined by calcHole Size: 8-3/4"Total Depth: 4960'

## Injection Interval

4530 feet to 4960 feet  
(perforated or open-hole, indicate which)Tubing size 2-7/8" lined with IPC set in a  
(material)Baker Model 'A' packer at 4526 feet.  
(brand & model)

(or describe any other casing-tubing seal).

## Other Data

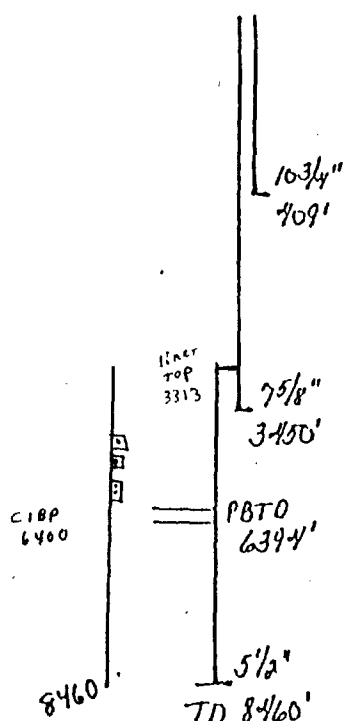
- Name of the injection formation San Andres
- Name of Field or Pool (If applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.  
NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#65	2310' FSL & 2310' FEL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Spud Date  
6-13-53

Surface Casing

Size: 10-3/4" Cemented with 500 SX

TOC: Surface feet determined by calc

Hole size: 15

Intermediate Casing

Size: 7-5/8" Cemented with 1136 SX

TOC: Surface feet determined by calc

Hole size: 9 7/8

Long String

Size: 5-1/2" Cemented with 800 SX

TOC: 3780 feet determined by temp survey

Hole size: 6 3/4

Total Depth: 8460'

Injection Interval

- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a - packer  
at 6050 feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation: Paddock
2. Name of Field or Pool (If applicable) Paddock
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

INJECTION WELL DATA SHEET

Amerada Hess		State L "A"		
OPERATOR		LEASE		
12	2310' FSL & 2310' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Completed  
2-23-53

Tubular Data

<div>13 7/8 298</div> <div>8 5/8 3150</div> <div>5 1/2 8125</div> <div>TD 8440</div>	<u>Surface Casing</u>	
	Size:	13-3/8" Cemented with 250 SX
	TOC:	Surface feet determined by calc
	Hole size:	17-1/2"
	<u>Intermediate Casing</u>	
	Size:	8-5/8" Cemented with 1500 SX
	TOC:	1039 feet determined by TS calc
	Hole Size:	11"
	<u>Long String</u>	
	Size:	5-1/2" Cemented with 600 SX
TOC:	5614 feet determined by temp survey	
Hole Size:	7-7/8"	
Total Depth:	8440'	
<u>Injection Interval</u>		
feet to feet (perforated or open-hole, indicate which)		

Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ set in a  
(material)  
packer at \_\_\_\_\_ feet.  
(brand & model)  
(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation \_\_\_\_\_
- Name of Field or Pool (if applicable) Lovington Abo
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used.
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Drinkard

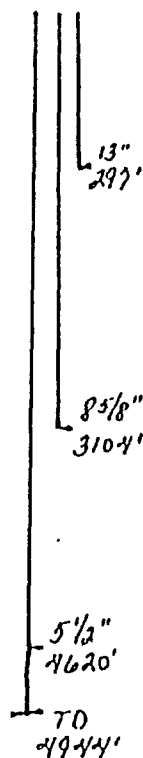
## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation			Lovington San Andres		
OPERATOR			LEASE		
47	1980' FNL & 1986' FNL	1980	1	17S	36E
WELL NO.	FOOTAGE LOCATION		SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
7-6-39

Converted  
to Injection  
8-6-69

Surface Casing

Size: 13" Cemented with 250 SX

TOC: Surface feet determined by calc

Hole size: 17-1/4"

Intermediate Casing

Size: 8-5/8" Cemented with 500 SX

TOC: 1572 feet determined by 50% calc

Hole size: 11"

Long String

Size: 5-1/2" Cemented with 230 SX

TOC: 3367 feet determined by 80% calc

Hole size: 7-7/8"

Total Depth: 4944'

Injection Interval

4620 feet to 4935 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a - packer  
at 4517 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) Lovington San Andres
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

(Above) Grayburg

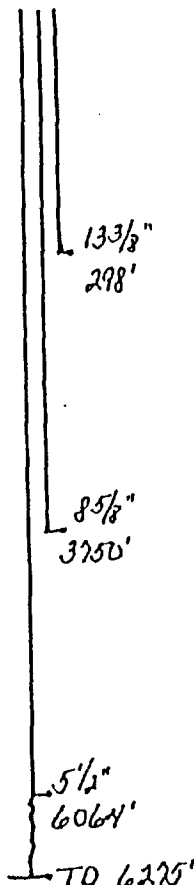
## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington Paddock		
OPERATOR		LEASE		
#64	1980' FSL & 1880' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
12-18-53

Converted to  
Injection 12/66

Surface Casing

Size: 13-3/8" Cemented with <sup>295</sup>~~300~~ SX

TOC: Surface feet determined by <sup>circ</sup>~~calc~~

Hole size: 17 1/2

Intermediate Casing

Size: 8-5/8" Cemented with 1500 SX

TOC: Surface feet determined by <sup>607</sup>~~calc~~ <sup>TS</sup>

Hole size: //

Long String

Size: 5-1/2" Cemented with 550 SX

TOC: <sup>3834</sup>~~3068~~ feet determined by <sup>TS</sup>~~calc~~

Hole size: 7-7/8"

Total Depth: 6275'

Injection Interval

6064 feet to 6275 feet  
(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with IPC set in a packer  
at 5979 feet. (Or describe any other casing-tubing seal).

Other Data

- Name of the injection formation: Paddock
- Name of Field or Pool (If applicable) Paddock
- Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

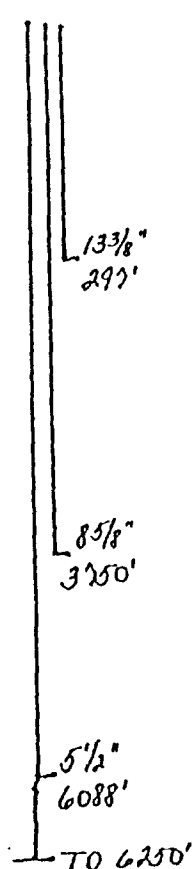


## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation

Lovington Paddock

OPERATOR	LEASE			
#63	1980' FSL & 990' FWL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular DataSpud Date  
5-19-53Surface Casing

Size: 13-3/8" Cemented with 300 SX

TOC: Surface feet determined by calc

Hole size: 17 1/2

Intermediate Casing

Size: 8-5/8" Cemented with 1500 SX

TOC: 879 feet determined by temp  
survey

Hole size: 11

Long StringSize: 5-1/2" Cemented with <sup>600</sup>~~500~~ SXTOC: <sup>3743</sup>~~3364~~ feet determined by <sup>TS</sup>~~80%~~ calc

Hole size: 7-7/8"

Total Depth: 6250'

Injection Interval6088 feet to 6250 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with IPC set in a packer  
at 6025 feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation: Paddock
2. Name of Field or Pool (If applicable) Paddock
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).  
No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Above Glorieta

## INJECTION WELL DATA SHEET

Greenhill Petroleum Corporation		Lovington San Andres		
OPERATOR		LEASE		
#46	660' FWL & 1980' FSL	1	17S	36E
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE

Tubular Data

Completed  
12-7-41

P&A'd  
5-22-87

11c 5 1/2" casing 2485-4150  
200 SRS.  
5 1/2" out 2400'  
170 SRS. 2450-2850  
np 880 SRS. Displaced down  
170 1000'

304'  
10 3/4"  
  
3092'  
7 5/8"  
  
4624'  
5 1/2"  
  
4946'  
TD

Surface Casing

Size: 10-3/4" ~ Cemented with 175 SX

TOC: Surface feet determined by calc

Hole size: 15"

Intermediate Casing

Size: 7-5/8" ~ Cemented with 300 SX

TOC: 1510 feet determined by calc

Hole Size: 9-7/8"

Long String

Size: 5-1/2" ~ Cemented with 300 SX

TOC: 1235 feet determined by calc

Hole Size: 6-3/4"

Total Depth: 4946'

Injection Interval

4624 feet to 4946 feet  
(perforated or open-hole, indicate which)

Tubing size 2" lined with IPC set in a

Baker Model 'A' (material) packer at 4574 feet.

(brand & model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (if applicable) Lovington San Andres
- Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
- Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. NO
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
Underlying-Grayburg

## INJECTION WELL DATA SHEET

Texaco OPERATOR C. S. Caylor LEASE

4 WELL NO. 2179' ENL & 2173' FEL FOOTAGE LOCATION 6 SEC. 17S TOWNSHIP 37E RANGE

## Tubular Data

Completed  
8-14-52

Recompleted  
San Andres  
6-14-89

PBTD 7915  
Perf 4600-4784'

Dec 27  
Sg 2 5 1/2 of 4981 E  
5042 w/100 SY  
Perf 38 SY

Mar 80  
Sg 2 5 1/2 from 5010 to  
4995 w/50 SY

## Surface Casing

Size: 13-3/8" Cemented with 250 SX

TOC: Surface feet determined by Circ calc

Hole size: 17-1/4"

## Intermediate Casing

Size: 8-5/8" Cemented with 1800 SX

TOC: Surface feet determined by Circ calc

Hole Size: 12-1/4"

## Long String

Size: 5-1/2" Cemented with 600 SX

TOC: 4377 feet determined by 80% calc

Hole Size: 7-7/8"

Total Depth: 8665'

## Injection Interval

feet to feet  
(perforated or open-hole, indicate which)

Tubing size lined with set in a  
(material)

(brand & model)  
(or describe any other casing-tubing seal).

## Other Data

1. Name of the injection formation
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Above Drinkard

## INJECTION WELL DATA SHEET

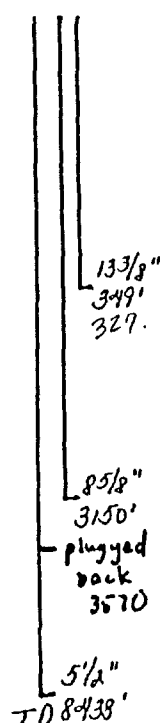
Oryx Energy Company

Maggie Caylor

OPERATOR	LEASE
3	660' FNL & 665' FWL
WELL NO.	FOOTAGE LOCATION
	SEC. TOWNSHIP RANGE

Tubular DataCompleted  
3-19-52Sidetrack  
6-28-90Well Plugged  
Back to 3570'  
Wellbore has  
8-5/8" csg.  
set @ 3150' &  
cmtd. w/1200  
SXS

sidetracked

5 1/2" r.t. at 5297'  
30 SX b.b.h. 170' above  
TOC 3570'Surface CasingSize: 13-3/8" Cemented with 300 SX  
TOC: Surface feet determined by calc

Hole size: 17-1/4"

Intermediate CasingSize: 8-5/8" Cemented with 1200 SX  
TOC: Surface feet determined by calc

Hole size: 11"

Long StringSize: 5-1/2" Cemented with 410 SX  
TOC: 3117 feet determined by temp survey  
6057 feet determined by 80% calc

Hole size: 7-3/4"

Total Depth: 8438'

Injection Interval- feet to - feet  
(perforated or open-hole, indicate which)

Tubing size - lined with - set in a - packer

at - feet. (Or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation:
2. Name of Field or Pool (If applicable) Lovington Abo
3. Is this a new well drilled for Injection? No  
If no, for what purpose was the well originally drilled? Production
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging details (sacks of cement or bridge plug(s) used).
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

(Above) Drinkard



# GREENHILL PETROLEUM CORPORATION

11490 WESTHEMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6641  
TELEPHONE (713) 589-8484  
FAX (713) 589-7687

Incorporated in Delaware U.S.A.

April 27, 1992

Texaco, U. S. A.  
P. O. Box 3109  
Midland, Texas 79702

Attention: Mr. Keith Williams

RE: Application with New Mexico Oil  
Conservation Division  
Lovington San Andres Unit  
Lea County, New Mexico

Gentlemen:

Enclosed please find a copy of the application with the New Mexico Oil Conservation Division whereby Greenhill Petroleum Corporation proposes to convert the following wells from producers to injection wells in the Lovington San Andres Area:

Lovington San Andres #8, #11, #20, #23, #38, and #42

We are required by the Commission to notify Operators within our area of review.

Please contact me in the event you have additional questions.

Very truly yours,

Michael J. Newport  
Land Manager/Permian Basin

MJN/jem  
92.296

Enc.

THIS INFORMATION WAS RECEIVED BY TEXACO, U.S.A., ON  
THIS THE \_\_\_\_\_ DAY OF APRIL, 1992.

BY: \_\_\_\_\_



# GREENHILL PETROLEUM CORPORATION

Incorporated in Delaware, U.S.A.

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

May 1, 1992

Oil Conservation Division  
State of New Mexico  
Energy, Minerals, and Natural Resources  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attention: Mr. Ben Stone

RE: Proof of Publication  
Lovington San Andres Area  
Wells #8, #11, #20, #23, #38, and #42  
Lea County, New Mexico

Gentlemen:

Enclosed please find the proof of publication and return receipts for the application to convert the following wells from producers to injection wells:

Lovington San Andres Wells  
#8, #11, #20, #23, #38, & #42

Please inform me if you need additional information.

Very truly yours,

Michael J. Newport  
Land Manager/Permian Basin

MJN/jem  
92.308

Enc.

AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea.

I, Kathi Bearden

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period

of \_\_\_\_\_

One weeks.  
Beginning with the issue dated

Mar. 8, 1992  
and ending with the issue dated

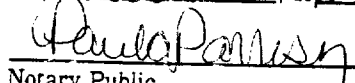
Mar. 8, 1992

  
General Manager

Sworn and subscribed to before

me this 10 day of

March, 1992

  
Notary Public.

My Commission expires \_\_\_\_\_

Aug. 5, 1995  
(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE

March 8, 1992

Greenhill Petroleum Corporation, 11490 Westheimer, Suite 200, Houston, Texas 77077-Phone (713) 589-8484 Contact: Michael J. Newport. Greenhill Petroleum corporation plans to convert the following producing wells to injection wells within the Lovington San Andres Field Area. The purpose of the produced injection wells is to increase the reservoir pressure in order to improve the recovery of hydrocarbons. The location of the proposed wells are the following Well Numbers within Sections 31 T16S-R37E, 36 T16S-R36E, 1 T17S-36E and 6 T17S-R37E, Lea County, New Mexico, Well Number 8, 11, 20, 23, 38, and 42. The injection intervals are approximately between the depths of 4,334 feet and 5,240 feet as seen in the Amerada Sitate "LA" Number 9. The maximum injection rates and pressures are 2000 PSI. 1500 BWPD. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within fifteen (15) days.

## DOMESTIC RETURN RECEIPT

5-8-82C 4951 04D.G.S.N.Y.

PS Form 3811, 11/86

1. <input checked="" type="checkbox"/> <b>SENDER:</b> Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Future to do this will prevent this card from being returned to you. Return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional services, check boxes for additional services requested. 1. <input type="checkbox"/> Show to whom delivered, date, and addressee's address. 2. <input type="checkbox"/> Restricted Delivery (Extra charge)		3. Article Addressed to: (Extra charge) Mr. & Mrs. Robert Rice RD #3, Box 2254 Birdsboro, Pennsylvania 19058	
4. Article Number P-375-330-331		5. Signature - Addressee <i>Robert Rice</i> X	
Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise		6. Signature - Agent X	
Always obtain signature of addressee or agent and DATE DELIVERED.		7. Date of Delivery 2/23/92	
8. Addressee's Address (ONLY if requested and fee paid) 277# \$86# 111# \$23# 75# \$23#			

3. Article Addressed to: CITY OF LOVINGTON P. O. Box 1268 Lovington, New Mexico 88260		4. Article Number P-375-330-332	
5. Signature - Addressee X <i>Carolanne Hogue</i>		Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
6. Signature - Agent X <i>[Signature]</i>		Always obtain signature of addressee or agent and DATE DELIVERED.	
7. Date of Delivery 4-3-92		8. Addressee's Address (ONLY if requested and fee paid)	

PS Form 3811, Apr

U.S. GPO: 1989-238-976

DOMESTIC RETURN RECEIPT