

GREENHILL PETROLEUM CORPORATION

12777 JONES ROAD, SUITE 375 HOUSTON, TEXAS 77070 TELEPHONE (713) 955-1146 FAX (713) 955-5105

Incorporated in Delaware, U.S.A

May 23, 1991

Oil Conservation Division P.O. Box 2088 Santa Fe, NM

Attn: David Catanach

Re: West Lovington

Lea County, NM

Enclosed please find the application whereby Greenhill proposes to convert the following producing oil wells to injection wells in the West Lovington Unit area.

Well Nos. 21, 32, 33, 34

Also enclosed are copies of certified receipts whereby I have contacted all parties as required by the NMOC. I will forward the publication information when I receive it from the newspaper.

Sincerely,

Michael J. Newport

Land Manager-Permian Basin

MJN:jb

Enclosure



GREENHILL PETROLEUM CORPORATION

12777 JONES ROAD, SUITE 375 HOUSTON, TEXAS 77070 TELEPHONE (713) 955-1146 FAX (713) 955-5105

incorporated in Delaware, U.S.A.

May 22, 1991

Ms. Eleanor Graham P.O. Box 1117 Lovington, NM 88260

Re: West Lovington Unit

Lea County, NM

Dear Ms. Graham:

Enclosed please find the copies of the applications for conversions of producers to injection wells within the West Lovington Unit area on your surface acreage. Operators are required to furnish the copies of these applications to the surface owners. Listed below are the wells which we plan to convert to injection wells on your acreage:

Well Nos. 21, 32, 33, 34

We are required to notify offset operators within a one-half mile radius of these conversions.

Please call me at (713) 955-1146 in the event you have any questions.

PS Form 3800, Feb. 1982

Very truly yours,

Michael J. Newport

Land Manager-Permian Basin

MJN:jb Enclosures

	1141C(G
	50.00
	Postmark or Date
69	TOTAL Postage and Fees
	Return receipt showing to whom, Date, and Address of Delivery
	Return Receipt Showing to whom and Date Delivered
	Restricted Delivery Fee
	Special Delivery Fee
	Certified Fee
69	Postage
396	P.O. State and ZJP Code 11 1 SS
	Street And No.
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* U.S.G.P.O. 1984-446-014

NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL

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GREENHILL PETROLEUM CORPORATION

12777 JONES ROAD, SUITE 375 HOUSTON, TEXAS 77070 TELEPHONE (713) 955-1146 FAX (713) 890-2405

Incorporated in Delaware, U.S.A.

CERTIFIED MAIL

May 22, 1991

Exxon Company USA
P.O. Box 1600
615 W. Missouri
Midland, TX 79702-1600

Re: West Lovington Unit

Lea County, NM

Dear Sirs:

This letter is to hereby notify you that Greenhill Petroleum Corporation will be converting the following wells to injection within the West Lovington Unit.

Well Numbers: 21, 32, 33, 34

We are required to notify offset operators within a one-half mile radius of these conversions

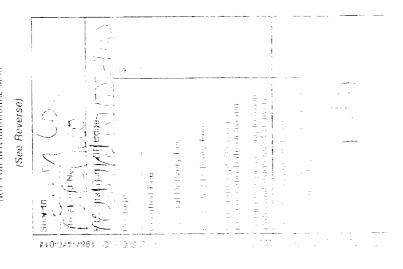
Very truly yours,

Michael J. Newport

Land Manager-Permian Basin

MJN:jb

F UBS USCEPTION US IN THE PROPERTY HER MAIL NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL



of the earlier submittal.

OIL CONSERVATION DIVISION

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING JANTA FE. NEW MEXICO 87501 FORM C-108 Revised 7-1-81

	STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501
APPLICA	ATION FOR AUTHORIZATION TO INJECT
I.	Purpose: Secondary Recovery Pressure Maintenance Disnosal Storage Application qualifies for administrative approval? Dyes Dno
II.	Operator: Greenhill Petroleum Corporation
	Address: 11490 Westheimer, Ste., 200, Houston, TX 77077
	Contact party: Mike Newport Phone: 955-1146
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?
٧.	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:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and 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 lithological 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.
• х.	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: Airhord Date: 5-22-91
* If t	he information required under Sections VI, VIII, X, and XI above has been previously itted, it need not be duplicated and resubmitted. Please show the date and circumstance

II. 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, sole 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 backer 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 ournose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- 3. 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:

- The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

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

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

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- 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".

WATER ANALYSIS REPORT

K-58T175R36E

Company : GREENHILL PETROLEUM Date : 7-17-90
Address : HOBBS, NM Date Sampled : 7-17-90

Lease : WEST LOVINGTON UNIT Analysis No. : 2

Well : SOUTHWEST WINDMILL

Sample Pt. : WINDMILL

	ANALYSIS		mg/L		* meq/L
1. 2. 3.	pH 7.7 H2S NEG.				
4.	Specific Gravity 1.00 Total Dissolved Solids	2	690.5		
5. 6.	Dissolved Oxygen				
7. 8.					
9. 10.	Phenolphthalein Alkalinity Methyl Orange Alkalinity ((CaCO3)			
11.	Bicarbonate	нсоз	2.0	HCO3	0.0
12. 13.	Chloride Sulfate	Cl SO4	321.0 125.0	Cl SO4	9.1 2.6
14. 15.	Calcium Magnesium	Ca Mg	180.0 0.1	Ca Ng	9.0 0.0
16. 17.	Sodium (calculated) Iron	Na Fe	62.0	Na	2.7
18.	Barium	Ba	0.0		
19. 20.	Strontium Total Hardness (CaCO3)	Sr	0.0 450.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt	X meq/L	= mg/L	
9 *Ca < *HCO3	0	Ca (HCO3)2	81.0	0.0	3
>		CaSO4	68.1	2.6	177
0 *Mg> *SO4	3	CaCl2	55.5	6.3	352
/		Mg (HCO3) 2	73.2		
3 *Na> *C1	9	MgSO4	60.2		
+	·	MqCl2	47.6	0.0	0
Saturation Values Dist. Wate	r 20 C	NaHCO3	94.0		
CaCO3 13 mg	/L	Na2S04	71.0		
	/L	NaCl	58.4	2.7	158

REMARKS:

Petrolite Oilfield Chemicals Group

Respectfully submitted, R. MATTHEWS

E- 54 T175236E

WATER ANALYSIS REPORT

Company Address : GREENHILL PETROLEUM Date : 7-17-90 : HOBBS, NM Date Sampled: 7-17-90

Lease Well : WEST LOVINGTON UNIT Analysis No. : 1

: NORTH WINDMILL

Sample Pt. : WINDMILL

	ANALYSIS			mg/L		* meq/L
1.	pH	7.6				
2.	H2S	NEG.				
3.	Specific Gravity	1.001				
4.	Total Dissolved Solids			724.6		
5.	Suspended Solids					
6.	Dissolved Oxygen					
7.	Dissolved CO2					
8.	Oil In Water					
9.	Phenolphthalein Alkali	inity (Ca	1CO3)			
10.	Methyl Orange Alkalini	ty (các	031			
11.	Bicarbonate	• (нсоз	2.0	HCO3	0.0
12.	Chloride		Cl	350.0	Cl	9.9
13.	Sulfate		504	135.0	504	2.8
14.	Calcium		Ca	190.0	Ca	9.5
15.	Magnesium		Mg	30.5	Mg	2.5
16.	Sodium (calculated)		Na	16.7	Na	0.7
17.	Iron		Fe	0.4	1100	0.7
18.	Barium		Ва	0.0		
	Strontium		Sr	0.0		
20.	Total Hardness (CaCO3)			600.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt	X meq/L	= mg/L
9 *Ca < *HCO3 0 /> 3 *Mg> *SO4 3 	Ca (HCO3) 2 CaSO4 CaCl2 Mg (HCO3) 2 MgSO4	81.0 68.1 55.5 73.2 60.2	0.0 2.8 6.6	3 191 368
Saturation Values Dist. Water 20 C CaCO3 13 mg/L CaSO4 * 2H2O 2090 mg/L BaSO4 2.4 mg/L	MgCl2 NaHCO3 Na2SO4 NaCl	47.6 84.0 71.0 58.4	2.5	119

REMARKS:

Petrolite Oilfield Chemicals Group

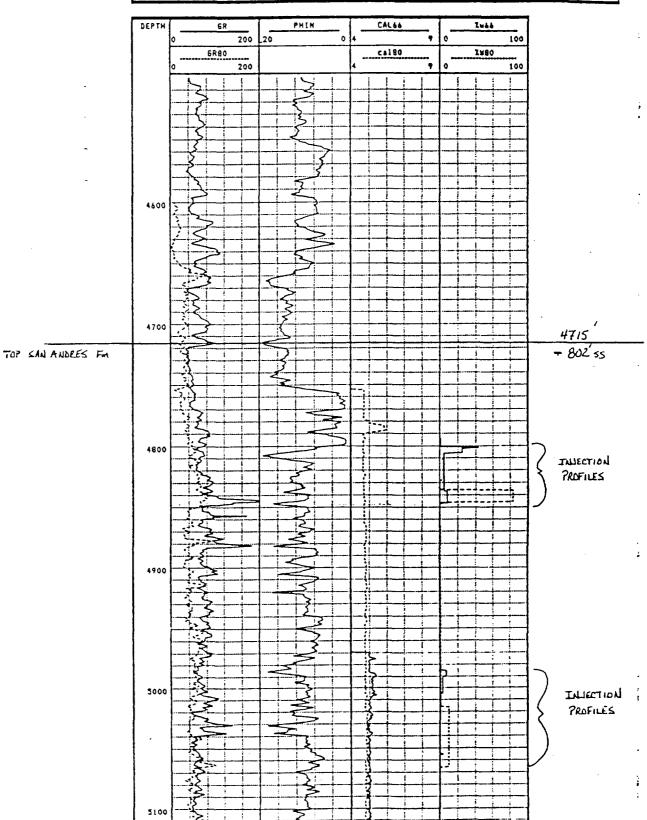
Respectfully submitted, R. MATTHEWS

VIII Geologic Data

The zone of interest for this application to inject is the San Andres Formation. In the area of the West 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 4650' and 5160' (log depth) in the West Lovington San Andres Field. Attached is a type log from the West Lovington San Andres Field. The well log (WLU#18) is an injection well and shows two main zones within the field unit where water has been injected.

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

CYPRESS PETROLE	CONSULTANTS	
WELL NAME - TEXACO INC. (UNIT 18) LOCATION - 640 FML 660 FEL 5-175-36E WLU WELL DATA - DF 3913, TD 5150. 5-1/2 4746 LOGS - WORTH GRN ((1-15-62) LOG PARAMETERS-		
DATA FILE NAME: wiuis.igi	DATE OF PLOT:	2/27/199



PROPOSED STIMULATION PROGRAM FOR CONVERSIONS FROM PRODUCERS TO INJECTION WELLS

WEST LOVINGTON UNIT LEA COUNTY, NEW MEXICO

- 1. MIRU pulling unit w/reverse unit. Check and report press. on all csg. strings. Inspect wellhead connections for condition and press. rating. Ensure all csg. valves are at least 2000 psig W.P. Rig up & test BOP.
- 2. Pull and lay down IPC tbg. string (see note). PU 4 3/4" bit w/csg. scraper on 2 3/8" work string and TIH. [Rotate scraper thru interval of 4050' to 4675'. Do not take scraper below 4675'.] POOH w/tools. Lay down scraper. TIH w/bit on 2 3/8" work string. Clean out from below packer (possibly 4160') to TD @ 5155' w/clean water (fresh or brine). POOH w/tools.
- 3. PU 5 1/2" pkr on tbg. and TIH. Set pkr. at ±4650'. Open pkr. bypass and spot 2-5 tons of CO2 to 100 ft. above the pkr. Close bypass and displace CO2 into formation under pressure with fresh water. Do not overdisplace. Shut-in overnight.
- 4. Open well and flowback to recover load. POOH w/tbg. & pkr.
- 5. Pick up BJ Titan PFT tool and TIH to 5150'±.
- 6. Pump in 2000 gallons of clean water (fresh or brine) through PFT in circulation mode while moving across interval 5150' to 4780'.

Treat the following intervals:

A.	5150-5100	E	8-10	E.	4850-40	C-7
В.	5070-5030	E	1-4	F.	4820-4780	B-3 to C-2
C.	4990-4970	D	7-9			

NOTE: EXCLUDE 4715-4780

- 7. Pump 3200 gal of 15% NEFE HCL treated with Iron and Sulfur control agents (to prevent reprecipitation of FeS) through the PFT in injection mode utilizing approximately 20 gal/ft in each interval specified above.
- 8. Pull up to 4700' flush with 20 Bbls clean water. SI for 1 hr., then flowback to recover load. POH w/2 3/8" tubing & PFT, laying down tubing. Lay down PFT tools. Release B.J.
- 9. PU Inj string w/packer. Rerun and try to set packer at 4650'± (records

show packer at 4160'±.

- 10. Circulate inhibited water into annulus. Set packer w/12M tension. Flange up.
- 11. Perform leakage test per NMOCD requirements. Release rig.
- 12. Install cartridge housing and filter.
- 13. R.T.I. Monitor and report pressures, rates, etc. and pressure on filter.





Martin Water Laboratories, Inc.

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

RESULT OF WATER ANALYSES

709 W. INDIANA	
MIDLAND, TEXAS 7970	31
PHONE 683-4521	

	LABORATOR	RY NO. 9891/8	
To: Mr. Dan Westover	SAMPLE RE	CEIVED _ 9-13-89	
12777 Jones Road, Suite 375, Houston, TX	RESULTS RE	PORTED 9-20-89	
COMPANY Greenhill Petroleum Corporation LEAS			
FIELD OR POOL Lovington			
SECTION BLOCK SURVEY COUNTY_			
SOURCE OF SAMPLE AND DATE TAKEN: NO. 1 Raw water - taken from water supply wel	1 #4084.	9-13-89	
NO. 2 Raw water - taken from water supply wel			
NO. 3 Produced water - taken from injection p	ump discha	arge. 9-13-89	
NO. 4			
REMARKS:			

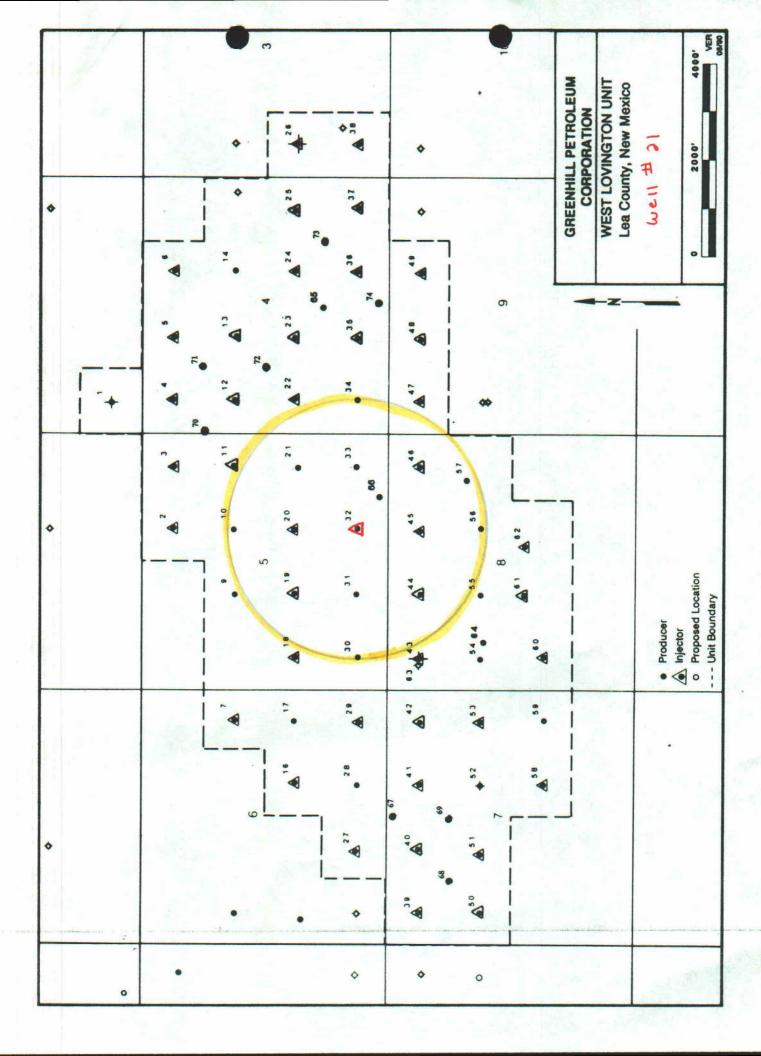
CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1,0018	1.0016	1.0324	
pH When Sampled	7.3	7.6	7.0	
pH When Received	7,58	7.90	6.50	
Bicarbonate as HCO3	200	185	1,220	
Supersaturation as CaCO3	4.	4	20	
Undersaturation as CaCO3				
Total Hardness as CaCO3	200	176	8,100	
Calcium as Ca	66	54	2,320	
Magnesium as Mg	9	10	559	
Sodium and/or Potassium	25	23	11,788	
Sulface as 504	50	44	2,100	
Chloride as Cl	27	20	21,661	
Iron as Fe	0.36	4.88	0.36	
Barium as Ba	- 0	0	0	
Turbidity, Electric	12	34	71	
Color as Pt	7	7.	109	
Total Solids, Calculated	377	336	39,648	
Temperature *F.	60	60	70	
Carbon Dioxide, Calculated	16	8	195	
Dissolved Oxygen,次识交交 — Chemets	6.0	2.5	0.20	
Hydrogen Sulfide	0.0	0.0	600	
Resistivity, ohms/m at 77° F.	23.90	26.75	0.210	
Suspended Oil			20	
Filtrable Solids as mg/1	10.8	12.0	7.5	•
Volume Filtered, ml	1,000	1,000	2,000	
Resi	ults Reported As Milligram	s Per Liter		
Additional Determinations And Remarks Letter	r of recommendat	ion attached.	•	
				

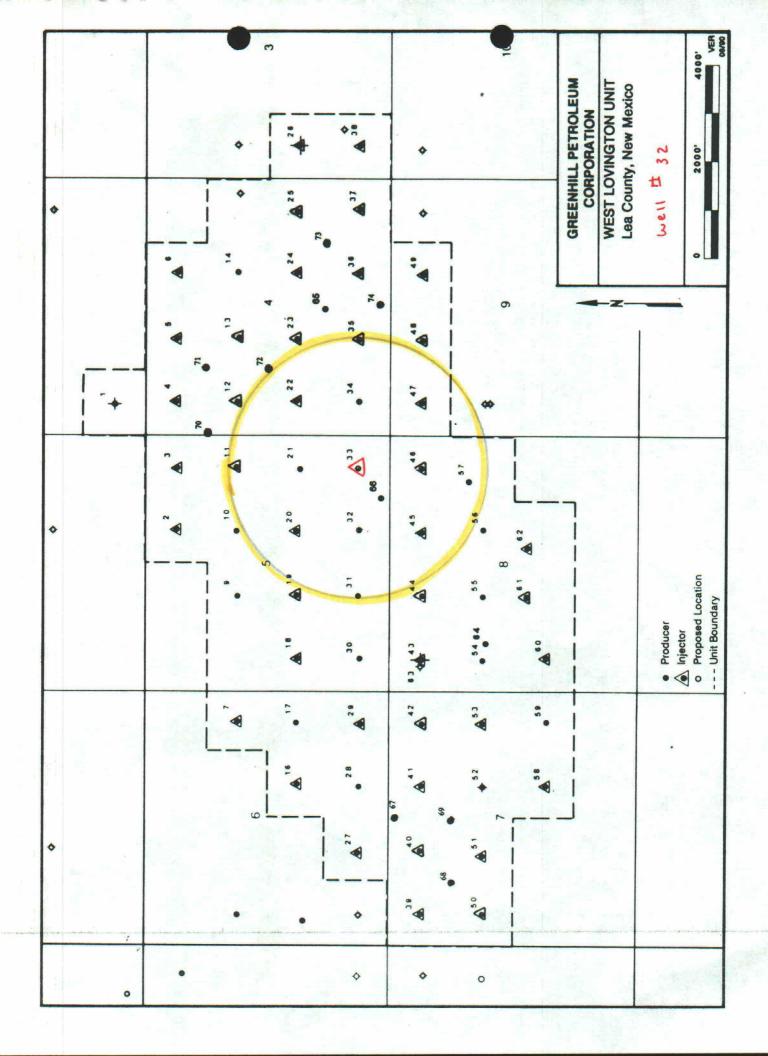
cc: Mr. Bryant Bradley, Ozark Training & Consulting, Austin Mr. Cv Jones. Hobbs

Waylan C. Martin, M.A.

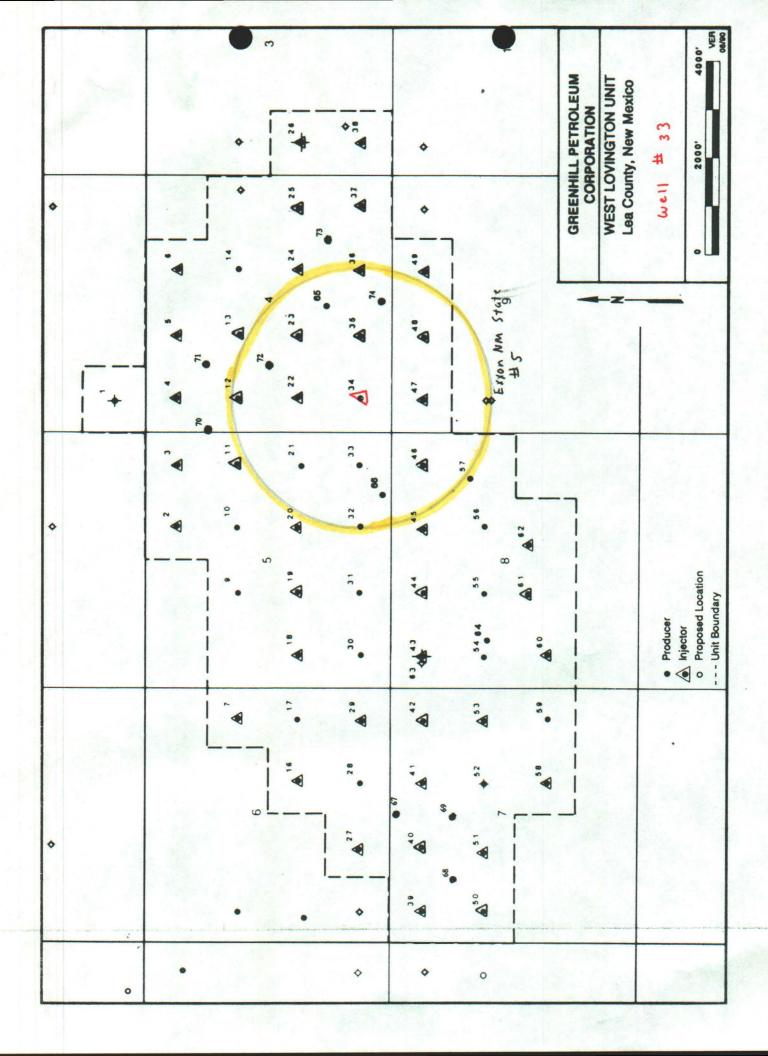
GKEENHILL	PETROLEUM CORPORATION	NC	WEST LO	OVINGTON UNI	T	
OPERATO)R		LEASE	-		
21	1980 FSL &	660 FEL	5	175	36E	
WELL NO	FOOTAGE L	OCATION	SEC.	TOWNSHIP	RANGE	
LEA COUNT	Y, NEW MEXICO					
			<u>Tu'</u>	bular Data		
!		Surface	Casing			
		Size:	13 3/8 "	Cemented w	ith	s
		TOC:	SURFACE	feet de	termined	by <u>CALC</u>
	- 24	Hole si	ze:1	17 1/4		•
	L 13 3/s	Interme	diate Cas	ing		
npleted 11/4/44 open hole		Size:	8 5/8 "	Cemented w	ith	<u>200</u> _s
pen hole	_ 85/8	TOC: _	1364	feet de	etermined	by <u>CALC 5</u>
		Hole Si	lze:1	.1		
		Long St	ring			
	-51/2 4700	Size:	5 1/2 "	Cemented w	ith	200 s
		TOC:	3266	feet de	etermined	by <u>CALC 8</u>
 ;	To sta	Hole Si	ze:	7 3/8		ı
	TO 5100	Total I	Depth: <u>5</u>	100		
		Injecti	on Interv	<u>al</u>		
	,,	(perfor	4767 ated or (o	pen-hole, in		feet
Tubing size	2781ined with	h	IPC			set in a
J			(mate	rial)		
(brand &				4///	reet	.
(or describe	any other casing-tub	ing seal).				
Other Data						
1. Name of t	he injection formati	onS	AN ANDRES	DOLOMITE		· · · · · · · · · · · · · · · · · · ·
2. Name of E	ield or Pool (If app	licable) _	L(OVINGTON (SA	N ANDRES)	WEST
	new well drilled for what purpose was t				ODUCTION	
intervals used.	vell ever be perforat and give plugging d					perforated
5. Give the (pools) i	depth to and name of n this area.	any overly	ring and/o	r underlying	; oil or ;	gas zones



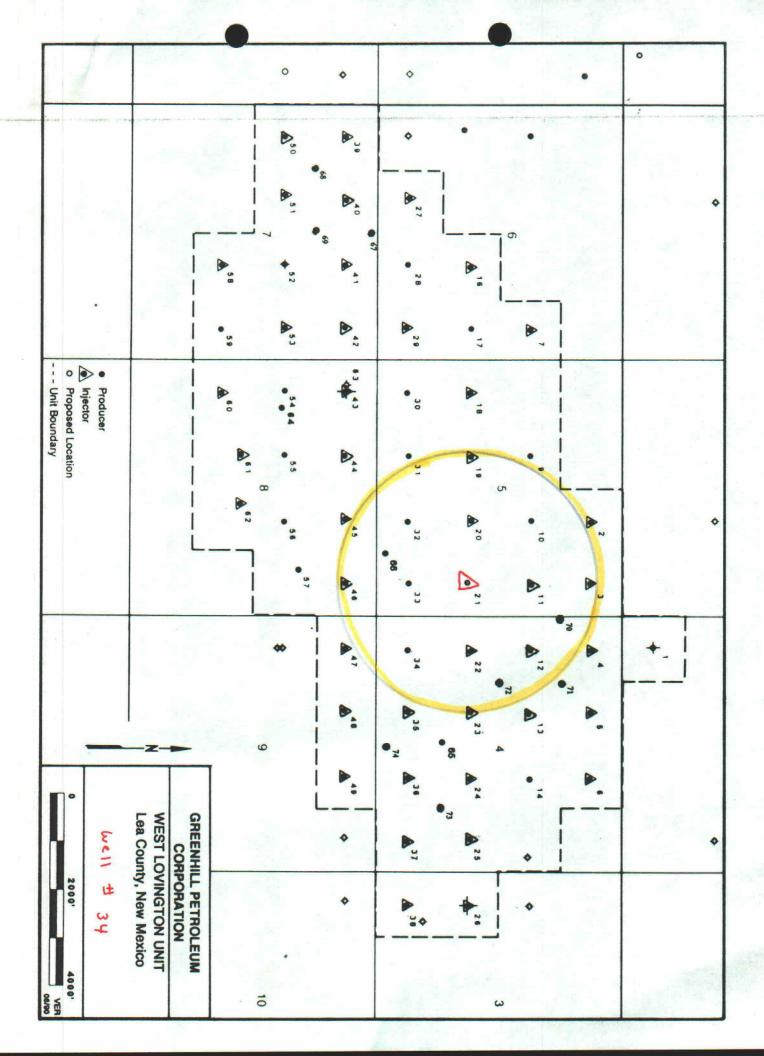
		OLEUM CORPORATION	WEST LOVINGTON UNIT
	OPERATOR		LEASE
	32 WELL NO.	660 FSL & 1980 FOOTAGE LOCA	FEL 5 17S 36E TION SEC. TOWNSHIP RANGE
L	EA COUNTY, NEW	MEXICO_	
			Tubular Data
			Surface Casing
			Size: 13 3/8 " Cemented with 200 SX
			TOC: SURFACE feet determined by CALC
			Hole size: 17
open hole completed - 2/13/45	1378	Intermediate Casing	
	300	Size: 8 5/8 ~ Cemented with 200 SX	
			TOC: 1364 feet determined by CALC 50%
	260	Hole Size: 11	
		1000	Long String
			Size: 5 1/2 " Cemented with 200 SX
			TOC: 3241 feet determined by CALC 80%
			Hole Size: 7 3/8
		4700'51/2	Total Depth: 5080
			Injection Interval
		_ TD 5080'	4700 <u>feet</u> to <u>5080</u> feet
		~ = . <i>U</i>	(perforated or open-hole, indicate which)
Tul	bing size	3 lined with _	TPC set in a (material)
	Baker A D-1 (brand & mode	P	acker at 4650 feet.
(or	describe any	other casing-tubing	seal).
Oth	er Data		
1.	Name of the i	njection formation	SAN ANDRES DOLOMITE
2.	Name of Field	or Pool (If applic	able) LOVINGTON (SAN ANDRES) WEST
3.	Is this a new If no, for wh	well drilled for i	njection? NO PRODUCTION PRODUCTION
4.			in any other zone(s)? List all such perforated il (sacks of cement or bridge plug(s)
5.	Give the dept	h to and name of an	y overlying and/or underlying oil or gas zones
	(pools) in th		
	GRAYB	URG - OVERLYING	



GREENHILL PEIR	OLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR		LEASE
33.	660 FSL & 660	
WELL NO.	FOOTAGE LOCA	ATION SEC. TOWNSHIP RANGE
LEA COUNTY, NE	W MEXICO	The second secon
		Tubular Data
		Surface Casing
		Size: 13 " Cemented with 225 SX
n hole	13 3/8	TOC: SURFACE feet determined by CALC
pleted - 9/15/44		Hole size: 17
		Intermediate Casing
	85/8	Size: 8 5/8 " Cemented with SX
		TOC: 1327 feet determined by CALC 50
		Hole Size: 11
	1-5½ 1 4675	
,		Long String
		Size: 5 1/2 " Cemented with 200 SX
		TOC: 3585 feet determined by CALC 80
		Hole Size: 7 7/8
		Total Depth: 5077
		Injection Interval
		4770 feet to 5077 feet (perforated or open-hole) indicate which)
Tubing sign	7/	
P. J.	Timed with	(material)
(brand & mode)	1)	packer at 4720 feet.
	other casing-tubin	ng seal).
Other Data		
1. Name of the in	njection formation	SAN ANDRES DOLOMITE
	•	cable) LOVINGTON (SAN ANDRES) WEST
	well drilled for at purpose was the	injection? NO PRODUCTION PRODUCTION
		in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)
5. Give the depth	h to and name of a	any overlying and/or underlying oil or gas zones
(pools) in the		, , , , , , , , , , , , , , , , , , ,
GRAYRI	URG - OVERLYING	



GREENHILL PE OPERATOR	TROLEUM CORPORATION	WEST LEASE	LOVINGTON U	TIV	
34	660 EW 8 660			265	
WELL NO.				36E RANGE	
LEA COUNTY,	NEW MEXICO				
		I	Tubular Data		
	111	Surface Casing			
		Size: 13 3/8	Cemented	with	<u>250</u> sx
		TOC: SURFACE	feet d	etermined by	y <u>CALC</u>
en hole noleted - 11/10/44	13 3/8	Hole size:	17		
spiered - 1710/77	- 8 5/g	Intermediate Ca	sing		
		Size: 8 5/8	_" Cemented	with	150 sx
		TOC: 1470	feet d	etermined by	y <u>CALC 50%</u>
		Hole Size:	11		
	1-5½ 1-4688	Long String			
	TO SILOI	Size: 5 1/2	_" Cemented	with	<u>150</u> sx
	TO 5161	TOC: 3612	feet d	etermined by	y <u>CALC 80%</u>
		Hole Size:	7 3/8	 .	·
		Total Depth:	5161	· · · · · · · · · · · · · · · · · · ·	
		Injection Inter	<u>val</u>		
		4773 (perforated or(feet to open-hole i		
Tubing size	$\frac{\sqrt{8}}{2}$ lined with _	IP	20		set in a
Bal	<u>u.e. r /2 D-/</u> p	acker at	4723	feet.	
(brand & mo	odel) ny other casing-tubing	; seal).			
Other Data					
1. Name of the	injection formation	SAN ANDRE	S DOLOMITE		·
2. Name of Fie	eld or Pool (If applic	able)	LOVINGTON (SA	AN ANDRES) V	WEST ·
	new well drilled for i what purpose was the			RODUCTION	
	ll ever be perforated and give plugging deta		ment or bridg		rforated
5. Give the de (pools) in	epth to and name of an			g oil or gas	s zones
CDA	AVRIIDO . OVEDI VINO				



	ROLEUM CORPORATION			<u>OVINGTON UN</u>	IT	
OPERATOR			LEASE			
3	660 FNL & 660			17\$	36E	
WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE	
LEA COUNTY, NE	EW MEXICO					
			Tub	ular Data		
		Surface Ca	eina			
		Size: 12 3	<u>/4</u>	Cemented v	vith	200 sx
		TOC: SURF	<u>ACE</u>	feet de	etermined	by CAL
	L133/8	Hole size:	14	1/2	 	
		Intermedia	ite Casi	ng		
open hole completed 1/11/45		Size: 8 5	/8	Cemented v	vith	<u>200</u> sx
converted to	L85/5	TOC: <u>1374</u>		feet de	etermined	by <u>CALC 50%</u>
injection 4/2/69		Hole Size:	10_	3/4		
	·	Long Strin	ıg			
-	- 5½" 4720 .	Size: 5 1	/2	Cemented v	vith	400 sx
	1120 .	TOC: 2263		feet de	etermined	by CALC 80%
TO	5125	Hole Size:	7 5/	/8		•
		Total Dept	h: <u>51</u> 2	25		
		Injection	Interva	<u>.1</u>		
		4750		<u>fe</u> et to	5125	feet
		(perforate	ed or op	en-hole, ir		
Tubing size	$\frac{2^{3}/8"}{}$ lined with _	IPC				set in a
	· ,	acker at _	(mater		feet	•
(brand & mo	del)		4055			, •
(or describe an	y other casing-tubing	; seal).				
Other Data	•					
1. Name of the	injection formation	San A	Andres D	olomite		
2. Name of Fie	ld or Pool (If applic	able)	Lovingt	on (San And	ires) West	t
	ew well drilled for i what purpose was the	•	no nally dr	rilled?	PRODUCTIO	<u>DN</u>
	l ever be perforated nd give plugging deta					perforated
5. Give the de	pth to and name of an	v overlying	and/or	underlying	oil or a	785 70005
(pools) in		., 0,022,1116	, unu/ UL	and Liying	, 0.1 01 8	ora ronga
GRA	YBURG - OVERLYING					

	ROLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR		LEASE
10	1982 FNL & 1	
WELL NO.		ATION SEC. TOWNSHIP RANGE
LEA COUNTY, NE	EW MEXICO	
		Tubular Data
	1 []	Surface Casing
		Size: 13 3/8 " Cemented with
		TOC: SURFACE feet determined by CALC
		Hole size: <u>17 1/4</u>
pen hole	1378	Intermediate Casing
mpleted		Size: 8 5/8 " Cemented with 600 S
2/28/45		TOC: 119 feet determined by CALC 50
	85/8	Hole Size: 11
		Long String
		Size: 5 1/2 " Cemented with 300 S
		TOC: 3091 feet determined by CALC 80
	- 51/2	Hole Size: 7 7/8
	4726	Total Depth: 5100
		Injection Interval
	TO 5100	4750 feet to 5100 feet
		(perforated or open-hole indicate which)
Tubing size2	$2^{3/8}$ lined with	IPC set in a
		(material) packer at 4551' feet.
(brand & mo	del)	
or describe an	y other casing-tubin	g seal).
ther Data		
. Name of the	injection formation	SAN ANDRES DOLOMITE
2. Name of Fie	ld or Pool (If appli	cable) LOVINGTON (SAN ANDRES) WEST
	ew well drilled for what purpose was the	injection? NO PRODUCTION
	nd give plugging det	in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)
5. Give the deposits (pools) in		ny overlying and/or underlying oil or gas zones
	AYBURG - OVERLYING	

GR		ETROLEUM CORPORATION		ST -LOVINGTON EASE	UNIT	
	OPERATO				•	•
	19 WELL NO	1980 FSL & 19 FOOTAGE LOCA		$\frac{5}{\text{EC.}}$ TOWNS	S 36E HIP RANGE	NMPM
WE		TON FIELD, LEA COUNTY,			•	
				Tubular I)ata	
		·	- 6 - 0		<u>Na eq</u>	
			Surface Cas			444
		10.7/			ted with	
		$\frac{13^{3}l_{s}}{299}$			et determined	by <u>CALC</u>
			Hole size:	17"	· · · · · · · · · · · · · · · · · · ·	•
			Intermediat	_		
	•	85/8	Size:		nted with	<u>150</u> sx
		1414	TOC: 1494'	0 80% fe	et determined	by CALC
		·	Hole Size:	11 1/2"	· · · · · · · · · · · · · · · · · · ·	
			Long String	•		•
	•	4740	Size: 5 1/	2	nted with	<u>150</u> sx
		1770	TOC: 3839'	@ 80%FILL fe	eet determined	by CALC
		·	Hole Size:	7 7/8	·	
			Total Depth	: 5085	· .	
		-1 _{70 5080}	Injection I	nterval	·	•
		:	4740		t to 5085	
		• •	(perforated	or open-ho	le, indicate w	hich)
Tub	ing size	2-3/8" lined with		(material)		set in a
			acker at	4728	fee	it.
(or	(brand & describe	model) any other casing-tubing	; seal).			
Othe	er Data					
1.	Name of t	the injection formation	SAN AND	RES DOLOMITE		
2.	Name of I	ield or Pool (If applic	able)	LOVINGTO	N (SAN ANDRES) WEST
3.	Is this a	new well drilled for i	njection? <u>N</u> well origins	0 illy drilled	? PRODUCTI	ON
4.		vell ever be perforated and give plugging deta		cement or		
5.		depth to and name of an			rlying oil or	gas zones
		BURG - OVERLYING - PROD	HCTIVITY NEV	ED DETERMINE	'n	
	- UNAT	STENETING - FROD	COLTATE HEA	TIV DETERMITING	.υ	

	ETROLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR		LEASE
20	1980 FSL & 1980 FOOTAGE LOCATION	fEL 5 17S 36E SEC. TOWNSHIP RANGE
		SEC. TOWNSHIP RANGE
LEA COUNTY,	NEW MEXICO	
onverted to injection 2/18/63 completed 3/3/45 3 pen hole	Size TOC: 13 3/8 Hole Inte Size 8 5/8 TOC: Hole Long ToC: Hole Inte I	Tubular Data Sace Casing Size: 13 3/8
Tubing size	2" lined with	(material)
(brand & mo	odel) packer	at 4663' feet.
	ny other casing-tubing seal	.).
Other Data		
1. Name of the	injection formation	SAN ANDRES DOLOMITE
2. Name of Fie	eld or Pool (If applicable)	LOVINGTON (SAN ANDRES) WEST ***
	new well drilled for inject what purpose was the well	cion? NO originally drilled? PRODUCTION
		ay other zone(s)? List all such perforated cacks of cement or bridge plug(s)
5. Give the de (pools) in		erlying and/or underlying oil or gas zones
GRAY	YRURG - OVERLYING	

GREENHILL PETROL	EUM CORPORATI	ON	WEST LO	OVINGTON UNI	Τ		
OPERATOR			LEASE				
22	1980 FSL &	660 FWL	44	178	368		
WELL NO.	FOOTAGE	LOCATION	SEC.	TOWNSHIP	RANGE		
LEA COUNTY, NEW	MEXICO	·	····				
			<u>Tul</u>	bular Data			
1	11	Surface	e Casing				
				Cemented w	ı i+ h	100	çv
		<u> </u>					
	13	TOC:	SURFACE	feet de	termined	by <u>CALC</u>	
	-13	Hole s	ize:	7 1/2	· · · · · · · · · · · · · · · ·		
Converted to		Interm	ediate Cas	ing			
injection 2/18/63		Size:_	8 5/8 "	Cemented w	ith	150	_sx
completed 12/11/44 Open hole	L- 85/8	TOC:	1485	feet de	termined	ъу CALC	50%
Open hore				1			
Ŧ				·			
	- 51/2	Long S					
	4703	Size:_	5 1/2 "	Cemented v	vith	150	_sx
	D SIJI .	TOC:	3772	feet de	etermined	by <u>CALC</u>	80%
•	5 5771	Hole S	ize:	7 5/8			
		Total	Depth: <u>5</u>	171			
		Inject	ion Interv	al			
			1655	feet to	5171	fee	e fr
				pen-hole, ir			
Tubing size 2 3	8" lined w	Lth	IPC			set ir	ı a
BAKEI	\	packer a	•	rial)	fee	t.	
(brand & model (or describe any o)	 -					
•	cher casing-co	iorng sear).			•		
Other Data							
1. Name of the in	ection format	cion S	AN ANDRES	DOLOMITE			
2. Name of Field	or Pool (If ap	oplicable)	L0	VINGTON (SAN	ANDRES)	WEST	
3. Is this a new If no, for wha				rilled? PRO	DUCTION		
4. Has the well endintervals and used.						perforate	ed.
5. Give the depth (pools) in thi		of any overl	ying and/o	r underlying	g oil or	gas zones	

	ROLEUM CORPORATION	, .	WEST LO	VINGTON UNI	<u>.</u>	
OPERATOR	1000 FC! # 100	O E141		17S	265	NMDM
23 WELL NO.	1980 FSL & 198 FOOTAGE LOCA		SEC.	TOWNSHIP	36E RANGE	NUPM
WEST LOVINGTON	N FIELD, LEA COUNTY,	NEW ME	XICO		· · · · · · · · · · · · · · · · · · ·	
			Tu	bular Data		
		Surfac	e Casing			
		Size:_	13 3/8 ″	Cemented 1	with	sx
	133/8	TOC: _	CIRC	feet d	etermined by	CALC
	290	_		7 1/4		
	8 5/8	Intern	nediate Cas	ing		
	1953	Size:_	8 5/8 _"	Cemented	with100_	sx
					etermined by	
		Hole S	Size: 12	2 1/2		
	51/2	Long S	String			
	4695'	Size:	5 1/2 "	Cemented	with400	sx
	OH:	TOC:	2670 @ 75%!	EFF_ feet d	etermined by	CALC
_		Hole S	Size:	7 7/8		•
	TO 5150	Total	Depth:	5150		
			ion Interv			
		46 (perfo			5150 ndicate which	
Tubing size	2 3/8" lined with		IPC		;	set in a
	BAKER		(mate	rial)	feet.	
(brand & mod						
,	Jones Cassing Cassing	5 50027				
Other Data	iniamian farmatian		CAN ANDDEC	DOLOMITE		
	injection formation				AN ANDREG !!	ros.
	d or Pool (If applie			LUVINGIUN (S	AN ANDRES) W	E21
	w well drilled for : hat purpose was the			rilled?	PRODUCTION	
	ever be perforated d give plugging deta					forated
5. Give the dep	th to and name of an	ny over]	ying and/o	or underlyin	g oil or gas	zones
CDAVRIID	G (UNEVALUATED)					

OPERATOR LEASE 30 660 FSL & 660 FWL 5 17S 36E	
3() 55() 55() 55() 56() 56()	
30 660 FSL & 660 FWL 5 17S 36E WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE	
LEA COUNTY, NEW MEXICO	
Tubular Data	
Surface Casing	
Size: 13 3/8 " Cemented with 200)sx
TOC: SURFACE feet determined by	CALC
Hole size: 15	
open hole mpleted 3/30/45 Intermediate Casing	
Size: 8 5/8 " Cemented with 300	sx
TOC: 1044 feet determined by	CALC 50%
Hole Size: 11	
Long String	
4724 Size: 5 1/2 " Cemented with 400	SX
TOC: 1861 feet determined by	CALC 80%
To 5/50 Hole Size: 7 3/8	•
Total Depth: 5150	
Injection Interval	
4790 feet to 5150 (perforated or open-hole, indicate which	
Tubing size NONE lined with s	et in a
packer at feet.	
(brand & model) (or describe any other casing-tubing seal).	
Other Data	
1. Name of the injection formation SAN ANDRES DOLOMITE	
2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WES	T
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 perf intervals and give plugging detail (sacks of cement or bridge plug(s)	orated
used. NO	
used. NO Sive the depth to and name of any overlying and/or underlying oil or gas (pools) in this area.	zones

	DLEUM CORPORATION			LOVINGTON UN	(IT		
OPERATOR			LEASE				i
WELL NO.	660 FSL & 19 FOOTAGE LOG		5 SEC.	17S TOWNSHIP	36E RANGE		
LEA COUNTY, NE	•		020.	2011101122	1411/02		
227 0001119 1127	· HEXTOO		m	L1 D.A.			
		_		<u>bular Data</u>			
		Surface	e Casing				
		Size:	13 3/8 ″	Cemented w	ith	190	_SX
		TOC: _	SURFACE	feet de	termined	by <u>CALC</u>	
open hole	133/8	Hole s	lze:	17			
open hole Completed 2/22/45		Interm	ediate Cas	ing			
•		Size:_	8 5/8 "	Cemented w	ith	150	_sx
		TOC: _	1478	feet de	termined	by <u>CALC</u>	<u>50%</u>
	1 - 8 FP	Hole S	ize:	11 1/2	····		
		Long S	tring				
		Size:_	5 1/2 ~	Cemented w	vith	150	_sx
	5/2	TOC: 3905 feet determined by CALC 80%					
	4723	Hole Size: 7 7/8					
	1 To 5140	Total 1	Depth:	5140			
		Inject	ion Interv	al			
			4784	feet to	_5055	feet	:
		(perfo	rated or @	pen-hole, ir	idicate wh	nich)	
Tubing size NON	E lined with		(mate	rial)		_ set in	а
NOM (brand & model		packer a	•		fee	t.	
(or describe any o	•	ng seal).					
Other Data							
1. Name of the in	njection formation	nS	AN ANDRES	DOLOMITE			
2. Name of Field	or Pool (If appl:	icable)	L(OVINGTON (SA	N ANDRES)	WEST ·	
	well drilled for it purpose was the			rilled? PR	ODUCTION		···········
intervals and used.	ever be perforate give plugging de					perforated	i
NO 5. Give the depth	n to and name of	any overl	ving and/o	r underlying	oil or	GAS ZODAS	_
(pools) in thi			,	- anderly ing	, }	5us Lones	
00.5.4.0.1							

1	GREENHILL PETF	ROLEUM CORPORATION		WEST LO	VINGTON UNI	Т	
	OPERATOR			LEASE			
	35	660 FSL & 19	80 FWL	4	178	36E	NMPM
	WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE	
	WEST LOVINGTON	FIELD, LEA COUNTY,	NEW MEXIC	0		<u>.</u>	
				Tub	oular Data		
		1 1	Surface (Casing			
			-		Cemented w	ith 225	SX
		133/8					
		326				termined by	LALL
			Hole size	e: <u>17</u>	7 1/4		
		85/8"	<u>Intermed</u>	late Casi	lng		
		1963	Size: <u>8</u>	5/8_"	Cemented w	ith <u>100</u>	sx
			TOC: 176	66 @ 75%E	FF feet de	termined by	_CALC
		·	Hole Size	e: <u>' 12</u>	2 1/2	· · · · · · · · ·	
			Long Str	lng			
		51/2"	Size: 5	1/2 "	Cemented w	ith 100	sx
		4682	TOC: 417	76'0 75%E	FF feet de	termined by	CALC
			Hole Size	e: <u>7</u>	7/8		• ,
			Total Dep	pth:5	175	-	•
	-	TT 5150 PB		n Interva	<u>al</u>		
	TO	5175	468	32	feet to	5150	feet
						dicate which	
Tul	bing size2	7/8" lined with _		IPC			set in a
	В	AKER p	acker at	(mater -4612		feet.	
	(brand & mode	21)					
(or	describe any	other casing-tubing	; seal).				
<u>Oth</u>	er Data						
1.	Name of the i	injection formation	SAM	ANDRES	DOLOMITE		
2.	Name of Field	or Pool (If applic	able)	L	OVINGTON (S	AN ANDRES)	WEST
3.		well drilled for in the mat purpose was the			rilled? P	RODUCTION	**************************************
4.		ever be perforated i give plugging deta					forated
5.	Give the dept (pools) in the	ch to and name of ar nis area.	ny overlyi	ng and/oi	r underlying	; oil or gas	zones

(GREENHILL PETROLEU	M CORPORATION		WEST LO	VINGTON UNI	Γ	
	OPERATOR			LEASE			
		660 FSL & 198 FOOTAGE LOCA		SEC.	17S TOWNSHIP		NMPM
h	EST LOVINTON FIEL	, LEA COUNTY,	NEW MEX	ICO			
-					oular Data		
	1 1	1	Curfoo				
				e Casing			
							sx
		13'	TOC: _	CIRC	feet de	etermined by	CALC
		200	Hole s	ize: <u>17</u>	•		
			Interm	ediate Casi	ing		
		o 5/."	Size:_	8 5/8 "	Cemented v	ith <u>600</u>	sx
		85/8" 1960	TOC: _	CIRC @ 15%F	ILL feet de	etermined by	CALC
		1760	Hole S	ize: <u>11</u>			
			Long S	tring			
		4	Size:_	5 1/2 "	Cemented v	with 375	sx
		5/2	TOC: _	2758 @ 75%F	ILL feet de	etermined by	CALC
)	ه ل و	Hole S	ize:	7/8		•
			Total	Depth: <u>51</u>	52		
	511	52' TD	Inject	ion Interv	<u>al</u>		
	3.	37		4658	feet to	5152	feet
			(perfo	rated or of		ndicate which	
Tul	oing size 2 3/8"	lined with _		· IPC	1.1	s	et in a
	- BAKER	r	acker a	(mate) t 4588	i	feet.	
(or	(brand & model) describe any othe	r casing-tubing	g seal).				
Othe	er Data						
1.	Name of the injec	tion formation		SAN ANDRES	DOLOMITE		
2.	Name of Field or	Pool (If applic	cable)	<u> </u>	OVINGTON (S	AN ANDRES) WE	EST
3.	Is this a new well If no, for what p				cilled? PR	ODUCTION	
4.	Has the well ever intervals and giv used.	e plugging deta	ail (sac		nt or bridge		orated
5.	Give the depth to (pools) in this a		ny overl	ying and/or	r underlyin	g oil or gas	zones
		RAYBURG - OVERI	LYING -	UNEVALUATE	D		

GREENHILL PETRO	OLEUM CORPORATION	WEST	LOVINGTON-UN	NIT	
OPERATOR		LEASE			
46	660 FNL & 660	FEL 8	178	36E	NMPM
WELL NO.	FOOTAGE LOC		TOWNSHIP	RANGE	AN.H.J.I.
WEST LOVINGTON	FIELD, LEA COUNTY,	NEW MEXICO			······································
WEST LOVINGTON	75/8 1988'	Surface Casing Size: 10 3/4 TOC: CIRC Hole size: Intermediate Casing Size: 7 5/8 TOC: CIRC Hole Size: Long String Size: 5 1/2	feet d 13 3/4 15 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	with	CALC SX CALC CALC
Tubing size 2	5099 3/8" lined with	4730 (perforated) or	feet to	5095 5095	1910-15 1980-5040 feet ich)
		(ma	terial)	£	-
(brand & mode	•	<u></u>	4710	feet	•
or describe any	other casing-tubir	ng seal).	•	•	
ther Data		÷ ·	•		;
. Name of the	injection formation	san andres	DOLOMITE		
. Name of Field	d or Pool (If appli	cable) LOVIN	IGTON (SAN A	NDRES) WEST	
	w well drilled for hat purpose was the		drilled?	PRODUCER	
	ever be perforated d give plugging det				erforated
NO)				

GRAYBURG - OVERLYING - UNEVALUATED

### 47 660 FWL & 660 FNL 9 17S 36E WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE	GREENHILL PETRO	DLEUM CORPORATION		WEST LEASE	LOVINGTON I	UNIT	
WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE Tubular Data Surface Casing Size: 10 3/4 " Cemented with 210 TOC: SURFACE feet determined by CAL Hole size: 13 3/4 Hole size: 13 3/4 Intermediate Casing Size: 7.5/8 " Cemented with 600 TOC: CMT CIRC feet determined by CAL Long String Size: 5 1/2 " Cemented with 400 TOC: CMT CIRC feet determined by CAL TO 5/2 5100 Hole Size: 6 3/4 Total Depth: 5100 Injection Interval A690 feet to 5100 fee (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) SAN ANDRES DOLOMITE 2. Name 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 perforate used.	47	6 60 FWL & 660	FNL	9	17S	36F	
Tubular Data Surface Casing Size: 10 3/4 " Cemented with 210 TOC: SURFACE feet determined by CAL Hole size: 13 3/4 Intermediate Casing Size: 7.5/8 " Cemented with 600 TOC: CMT CIRC feet determined by CAL Long String Size: 5 1/2 " Cemented with 400 TOC: CMT CIRC feet determined by CAL TO							
Surface Casing Size: 10 3/4 " Cemented with 210 TOC: SURFACE feet determined by CAL Hole size: 13 3/4 Hole size: 13 3/4 Intermediate Casing Size: 7 5/8 " Cemented with 600 TOC: CMT CIRC feet determined by CAL Long String Size: 5 1/2 " Cemented with 400 TOC: CMT CIRC feet determined by CAL Long String Size: 5 1/2 " Cemented with 400 TOC: CMT CIRC feet determined by CAL Total Depth: 5100 Injection Interval 4690 feet to 5100 feet (material) Cordinate Model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST (Intervals and give plugging detail (sacks of cement or bridge plug(s)) used.	LEA COUNTY, NEW	MEXICO					
Size: 10 3/4 " Cemented with 210 TOC: SURFACE feet determined by CAL Hole size: 13 3/4 Hole size: 13 3/4 Intermediate Casing Size: 7 5/8 " Cemented with 600 TOC: CMT CIRC feet determined by CAL Hole Size: 9 7/8 Long String Size: 5 1/2 " Cemented with 400 TOC: CMT CIRC feet determined by CAL Hole Size: 6 3/4 Total Depth: 5100 Injection Interval 4690 feet to 5100 feet (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 perforate inservals and give plugging detail (sacks of cement or bridge plug(s))				Tub	ular Data		
TOC: SURFACE feet determined by CAL Hole size: 13 3/4 Hole size: 13 3/4 Intermediate Casing Size: 7 5/8 " Cemented with 600 TOC: CMT CIRC feet determined by CAL Long String Size: 5 1/2 " Cemented with 400 TOC: CMT CIRC feet determined by CAL Long String Size: 5 1/2 " Cemented with 400 TOC: CMT CIRC feet determined by CAL TOC: CMT CIRC feet		111	Surface Ca	sing			
Hole size: 13 3/4 Intermediate Casing Size: 7 5/8 Cemented with 600 TOC: CMT CIRC feet determined by CAL Hole Size: 9 7/8 Long String Size: 5 1/2 Cemented with 400 TOC: CMT CIRC feet determined by CAL Hole Size: 9 7/8 Long String Size: 5 1/2 Cemented with 400 TOC: CMT CIRC feet determined by CAL TOC: CMT CIRC feet determined by CAL TOTAL Depth: 5100 Injection Interval 4690 feet to 5100 feet (perforated or open-hole, indicate which) Tubing size 2 3/8" lined with IPC set in Baker packer at 4670' feet. (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s)			Size: 10	3/4 "	Cemented	with	210s
Intermediate Casing Size: 7.5/8 Cemented with 600 TOC: CMT CIRC feet determined by CAL Hole Size: 9.7/8 Long String Size: 5.1/2 Cemented with 400 TOC: CMT CIRC feet determined by CAL Hole Size: 6.3/4 Total Depth: 5100 Injection Interval 4690 feet to 5100 feet (perforated or open-hole, indicate which) Tubing size 2.3/8" lined with 1PC set in Grant Address and sive plugging detail (sacks of cement or bridge plug(s)) Size: 7.5/8 Cemented with 600 TOC: CMT CIRC feet determined by CAL Total Depth: 5100 Injection Interval (material) 4670' feet. (Deption Interval) 4670' feet. (material) 4670' fee			TOC: SUR	FACE	feet d	etermined	by <u>CALC</u>
Intermediate Casing Size: 7.5/8 "Cemented with 600 TOC: CMT CIRC feet determined by CAL Hole Size: 9.7/8 Long String Size: 5.1/2 "Cemented with 400 TO SIZE: 5.1/2 "Cemented with 400 TO SIZE: 5.1/2 "Cemented with 400 TO SIZE: 6.3/4 Total Depth: 5100 Injection Interval 4590 feet to 5100 feet for perforated or open-hole, indicate which) Tubing size 2.3/8" lined with IPC set in (material) (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s)			Hole size:	1	3 3/4		
TOC:CMT_CIRCfeet determined byCAL		10 3/4	<u>Intermedia</u>	ite Casi	ng		
Long String Size: 5 1/2 _ " Cemented with 400	/18/63		Size: 7	5/8_~	Cemented	with	600 s
Long String Size: 5 1/2 " Cemented with 400			TOC: CMT	CIRC	feet d	etermined	by <u>CALC</u>
Size: 5 1/2 " Cemented with 400 Size: 5 1/2 " Cemented with 400 TOC: CMT CIRC feet determined by CAL TO 5/00 Hole Size: 6 3/4 Total Depth: 5100 Injection Interval 4690 feet to 5100 feet (perforated or open-hole, indicate which) Tubing size 2 3/8" lined with IPC set in (material) Baker packer at 4670' feet. (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST: 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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s) used.		75/8	Hole Size:		9 7/8		,
To sloo Hole Size: 6 3/4 Total Depth: 5100 Injection Interval 4690 feet to 5100 feet (perforated or open-hole, indicate which) Tubing size 2 3/8" lined with IPC set in Baker packer at 4670' feet, (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s) used.			Long Strin	īg			
To 5/00 Hole Size: 6 3/4 Total Depth: 5100 Injection Interval 4690			Size: 5	1/2 "	Cemented	with	<u>400</u> _s
To 5/00 Hole Size: 6 3/4 Total Depth: 5100 Injection Interval 4690 feet to 5100 feet to perforated or open-hole, indicate which) Tubing size 2 3/8" lined with IPC set in (material) Baker packer at 4670' feet. (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s) used.		51/2 5100	TOC: CMT	CIRC	feet d	etermined	by <u>CALC</u>
Injection Interval 4690 feet to 5100 feet perforated or open-hole, indicate which) Tubing size 2 3/8" lined with IPC set in (material) Baker packer at 4670' feet, (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s) used.	Т		Hole Size:		6 3/4		•
Tubing size 2 3/8" lined with IPC set indicate which) Tubing size 2 3/8" lined with IPC set indicate which) Baker packer at 4670' feet.			Total Dept	:h:5	100		
Tubing size 2 3/8" lined with IPC set in (material) Baker packer at 4670' feet. (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s) used.			Injection	Interva	<u>.1</u>		
Baker packer at 4670' feet. (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s) used.							
Baker packer at 4670' feet. (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s) used.	Tubing size $\frac{2^{-3}}{}$	78" lined with	IPC				_ set in a
(brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s) used.	Bak	r	acker at			feet	·
1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s) used.	(brand & model))					
 Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s) used. 	Other Data						
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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s) used.	1. Name of the inj	jection formation	SAN	ANDRES	DOLOMITE	··	
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 perforate intervals and give plugging detail (sacks of cement or bridge plug(s) used.	2. Name of Field	or Pool (If applic	able)	L0	VINGTON (S	AN ANDRES)	WEST :
intervals and give plugging detail (sacks of cement or bridge plug(s)			-		illed? P	RODUCTION	· · · · · · · · · · · · · · · · · · ·
	intervals and g						erforated
5. Give the depth to and name of any overlying and/or underlying oil or gas zones			y overlying	g and/or	underlyin	g oil or g	as zones
(pools) in this area. GRAYBURG - OVERLYING	· ·						

GRE		ROLEUM CORPORATION			VINGTON UNI	<u> </u>	•	
	OPERATOR			LEASE				
	48 WELL NO.	1980 FWL & 60 FOOTAGE L	60 FNL	9 SEC.	17S TOWNSHIP	36E RANGE	NM	IPM_
urc		•			TORNSHILL	. Idaioa		
WES	I LUVINGIUM	FIELD, LEA COUNTY	, NEW MEXICO				- ''' 	
		1 , ,		Tub	ular Data			•
			Surface	Casing				
			Size: <u>13</u>	~	Cemented	with	285	sx
		13'	TOC: <u>CM</u>]	CIRC	feet d	etermined	by OBS	V
		303'	Hole siz	e: <u>17</u>	1/4	. <u></u>		
			Intermed	iate Casi	lng			·
			Size: 8	5/8 "	Cemented	with	770	sx
		85/8"	TOC: CI	C @ 60%F	ILL feet d	etermined	by CALC	
		1972	Hole Siz	e: <u>11</u>	•	- 		·
			Long Str	ing				
			Size: 5	1/2 "	Cemented	with	1800	sx 4
			TOC: CIF	RC @ 60%F	ILL feet d	etermined	by CALC	·
		51/2"	Hole Siz	e: <u>7</u>	3/4	· ·	•	•
	(\	Total De	pth: <u>51</u>	00		CIDD 6	46201
			Injection	n Interv	a <u>l</u>	•	CIBP @ W/40' C	MT on top
		(<u> </u>	467		feet to	5100	fe	et ,
m1		2-3/8" 1414	-	_	pen-nois, i	noicate w		
Tui		2-3/8" lined wit		(mate	rial)		set i	n a
	(brand & m	odel)	_ packer at	· 100-4 4	1058	fee	t.	
(or	describe a	ny other casing-tub	ing seal).			•		
0th	er Data					,		
1.	Name of the	injection formati	on SAM	ANDRES	DOLOMITE			
2.	Name of Fi	eld or Pool (If app	licable)	LOVING	TON (SAN AL	NDRES) WES	ST	·
3.		new well drilled fo what purpose was t			rilled?	: PRODUCTIO	N	· ·
4.		ll ever be perforat and give plugging d		of cemen	nt or bridg			ed
5.		epth to and name of this area.				g oil or	gas zone	s .

GREENHILL PET	ROLEUM CORPORATION		WEST LO	VINGTON UNI	ΙΤ		
OPERATOR			LEASE				
	1980 FNL & 19						
WELL NO. LEA COUNTY, N	FOOTAGE LOC EW MEXICO	CATION	SEC.	TOWNSHIP	RANGE		
			Tub	ular Data			
		Surface	Casing				
		Size: 1	0 3/4 "	Cemented v	with	213	sx
	L10 3/4			feet de			
ed hole		Hole si	ze: <u>13</u>	3/4	·····		
ed hole opleded - 3/14/45		<u>Interme</u>	diate Casi	ng			
, in the second second	75/8	Size:	7 5/8 _"	Cemented	with	600	sx
	•	TOC: <u>C</u>	MT CIRC	feet d	etermined	by <u>CAL</u>	c
		Hole Si	.ze:9	7/8			
	•	Long St	ring				
		Size:	5 1/2 "	Cemented	with	400	sx
	- 51/2 5055	TOC: _1	363	feet d	etermined	by CAL	08_0
		Hole Si	.ze: <u>6</u>	3/4		•	
				55			
	•	<u>Injecti</u>	on Interva	<u>.1</u>			
			720 ated or op	feet to en-hole, i	5050 ndicate w		et
Tubing size No	NE lined with					set i	n a
NC	DNE .	packer at	(mater	:ial)	fee	t.	
(brand & mod							
Other Data							
	injection formation	n SA	IN ANDDES D	ON OMITE			
	-						_
	d or Pool (If appl:			INGTON (SA	N ANURES)	WEST	
	w well drilled for hat purpose was the			illed? PRO	ODUCTION		
	ever be perforated d give plugging de					perforat	ed
5. Give the dep	th to and name of a	any overly	ing and/or	underlyin	g oil or	gas zone	s
	URG - OVERLYING						

	OLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR		LEASE
WELL NO.	1650 FNL & 989 FOOTAGE LOCA	
LEA COUNTY, NE		1200
LLA COUNTY, NE	H MEXICO	
·	1.1	Tubular Data
		Surface Casing
		Size: 7 5/8 " Cemented withS
	0.57	TOC: CMT CIRC feet determined by CALC
hole	L 7 5/8 360	Hole size: 11
eted - 12/21/66		Intermediate Casing
		<u>-</u>
		Size: Cemented with S
	-	TOC: feet determined by
		Hole Size:
		Long String
		Size: 4 1/2 " Cemented with 650 S
		TOC: 676 feet determined by CALC 8
		Hole Size: 6 3/4
	_ 41/2 S120	Total Depth: 5120
	T 1.5 2150	-
		Injection Interval
		feet to 5028 feet to perforated or open-hole, indicate which)
Tubing size NO	NE lined with	set in a
		packer atfeet.
(brand & mode (or describe any	el) other casing-tubing	g seal).
Other Data		
	-ication formation	CAN ANDDEC DOLONITE
	_	SAN ANDRES DOLOMITE
2. Name of Field	or Pool (If applie	cable) LOVINGTON (SAN ANDRES) WEST
	well drilled for in well drilled for in well drilled for in well well well well well with the well well well well well well well we	injection? NO PRODUCTION well originally drilled? PRODUCTION
		in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)
5. Give the dept (pools) in th		ny overlying and/or underlying oil or gas zones
CDAVE	HDC OVERLYTHE	

GREENHILL PET	ROLEUM CORPORATION		WEST L	OVINGTON UN	IT		
OPERATOR			LEASE				
	2610 FWL & 133						
	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE		
LEA COUNTY, N	EW MEXICO						
			<u>Tul</u>	oular Data			
	1 1 1	Surface	Casing				
		Size: 13	3 3/8 _″	Cemented v	vith	450	_sx
				feet de			
	133/8			7 1/2		V	
completed - 2/23/90 Cased hole		Intermed	liate Cas:	ing			
		Size:{	3 5/8 _"	Cemented v	with	375	_sx
	L 85/8	TOC: 10	010	feet de	etermined	by _CAL	50%
		Hole Siz	ze: <u>1</u>	2 1/2			
		Long Str	ing				
		Size:	5 1/2 "	Cemented v	vith	770	_sx
	5½ - 5217	TOC: 10	022	feet de	etermined	by <u>CALC</u>	80%
	 T0 52 30	Hole Siz	ze:	7 7/8	· ·	•	
		Total De	epth: <u>5</u>	230			
		Injection	n Interv	<u>al</u>			•
·	·		706 ited or op	_ feet to pen-hole, in			;t
Tubing size No	ONE lined with					set ir	ı a
NC	ONE P	acker at		rial)	fee	t.	
(brand & mode				j			
Other Data	other casing-tubing	, seal).					
1. Name of the	injection formation	SA	N ANDRES	DOLOMITE			
2. Name of Field	d or Pool (If applic	cable) _	LC	VINGTON (SA	N ANDRES	WEST	
	w well drilled for i hat purpose was the			rilled? PR	ODUCTION		
	ever be perforated d give plugging deta	il (sacks	of cemen	nt or bridge			∍d
5. Give the dept (pools) in the	th to and name of ar				g oil or	gas zones	3
	BURG - OVERLYING			,			

GREENHILL PETRO	LEUM CORPORATION		WEST L	OVINGTON UN	IT		
OPERATOR			LEASE				
66	135 FSL & 130	OO FFI	5	175	36E		
WELL NO.	FOOTAGE LOCA		SEC.	TOWNSHIP			
LEA COUNTY, NEW	/ MEXICO						
			Tub	oular Data			
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Surface (-				
				Cemented v	ví.th	450	SX
		-		feet de			
	133/8			7 1/2		-7	<u> </u>
completed - 2/23/40		Intermedi					
	6 5/ ₂			Cemented v	vith	380	_sx
	F &2/8	TOC: 937	7	feet de	etermined	by <u>CALC</u>	50%
		Hole Size	e: <u>12</u>	2 1/4			
		Long Str	lng				
·		Size: 5	1/2 "	Cemented v	vith	1275	_sx
		TOC: CM	CIRC	feet de	etermined	by <u>CALC</u>	
	-5½ -5220	Hole Size	·	7/8		•	
•	TO 5230	Total Dep	oth: <u>52</u>	30			
		Injection	ı Interva	<u>.1</u>			
		470 (perforat		feet to en-hole, in			;t
Tubing size NONE	lined with					set ir	ı a
NONE			•	ial)			
(brand & model)	·				Teet		
(or describe any ot	ther casing-tubing	g seal).					
Other Data							
1. Name of the inj	ection formation	SAN	ANDRES	DOLOMITE			
2. Name of Field o	or Pool (If applic	cable)	L0'	VINGTON (SA	N ANDRES)	WEST	
	well drilled for i purpose was the			illed? PR	ODUCTION		
	ver be perforated give plugging deta		of cemer	t or bridge		erforate	:d ·
5. Give the depth (pools) in this	to and name of ar				g oil or g	as zones	
-	G - OVERLYING						

OPERATOR	REFINING COMPANY	NEW MEXICO "P" STATE LEASE
	20001 1241 5 660	
WELL NO.	FOOTAGE LOCA	
		Tubular Data
	10 ex	Surface Casing
	113/4	Size: 11-3/4 " Cemented with 375. S
425-388	L 369	TOC: Surface feet determined by Calc.
25χ <u>~~~~</u>	1950 1910 25 5x	Hole size: 15
2800-2740		Intermediate Casing
25 SX	Cut 2750'	Size: Cemented withS
		TOC: feet determined by
95 5X	8 5/8 5199	Hole Size:
\$250-5/60	2 2144	Long String
ate completed 4/16/68		Size: 8-5/8 " Cemented with 450 S
4/16/68	25 5x	TOC: 3517' feet determined by
4/16/68 PCA	255x 7858-7770	Hole Size: 11
<u> </u>	TO 8700	"Total Depth: 8700'
	-10.100	Injection Interval
		feet to feet (perforated or open-hole, indicate which)
Tubing size	lined with	(material)
•	I	(material) packer atfeet.
(brand & model	.) other casing-tubing	z seal).
Other Data		
	destion formation	
	or Pool (If applic	cable)
	well drilled for interpretation was the	Injection? well originally drilled?
		in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)

	oleum Corporatio	on	West LEASE	Lovington Unit
OPERATOR				
72 WELL NO.	2600 FNL FOOTAGE		SEC.	T17S-R36F TOWNSHIP RANGE
	aran and American American American American		Tu	bular Data
		Surface	Casing	
		Size:8	5/8	Cemented with 275 SX
	·	TOC: S	urf.	feet determined bycirc
	·	Hole si	ze:	12 1/4
	L858"	Interme	diate Cas	ing
	364'	Size:		Cemented withSX
		TOC:		feet determined by
		Hole Si	ze:	
		Long St	ring	
	51/2" 5140 TD	Size: 5	1/2 "	Cemented with 700 SX
•	214010	TOC: _1	1747	feet determined by 70% calc
	,			7/8
		Total D	epth: _5	5140
		<u>Injecti</u>	on Interv	<u>ral</u>
		(perfor	ated or o	feet to feet ppen-hole, indicate which)
Tubing size	lined wi	Lth		set in a
		packer at	(mate	feet.
(brand & mod (or describe any	lel) other casing-tu	ıbing seal).		
Other Data				
1. Name of the	injection format	t ion San And	res Dolom	ite
				ngton-Upper San Andres
3. Is this a ne	w well drilled : hat purpose was	for injection	1? <u>No</u>	
4. Has the well	ever be perfora	ated in any c	other zone	e(s)? List all such perforated ent or bridge plug(s)
5. Give the dep		of any overly	ing and/o	or underlying oil or gas zones
Gn	aybung			

	troleum Corporation	
OPERATOR		LEASE
70	1300 FNL & 15	FWL 4 T17S-R36E
WELL NO.		
		Tubular Data
		Surface Casing
		Size: 8 5/8 " Cemented withSX
l		TOC: Surf. feet determined by circ.
		Hole size: 12 1/4
		Intermediate Casing
	85/8"	Size: Cemented withSX
	L378	TOC: feet determined by
		Hole Size:
		Long String
		Size: 5 1/2 " Cemented with 675 SX
	eli li	TOC: 1992 feet determined by 70% calc
Ĺ	5264	Hole Size: <u>7 7/8</u>
		Total Depth:5264
		Injection Interval
		feet to feet
		(perforated or open-hole, indicate which)
Tubing size		(material) set in a
(brand & mo	odel)	packer atfeet.
(or describe as	ny other casing-tubing	g seal).
Other Data		
1. Name of the	e injection formation	San Andres Dolomite
2. Name of Fig.	eld or Pool (If applic	cable) West Lovington Upper San Andres
	new well drilled for a what purpose was the	injection? <u>No</u> well originally drilled? <u>Production</u>
intervals a	and give plugging deta	in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)
E 01 41 1		
	epth to and name of all this area,	ny overlying and/or underlying oil or gas zones

Greenhill Petrol OPERATOR	eum Corporation	 	West Lo	vington Unit
74	180 FSL & 26	25 FEL	4	T17S~R36E
WELL NO.				
			T	ıbular Data
		Surfac	e Casing	
		Size:_	8 5/8	Cemented with 277 . S.
ĺ	·.	TOC: _	Surface	feet determined by circ.
	5124	Hole s	ize: 12	2 1/4
	6518	Interm	nediate Cas	sing
	7 , 0	Size:		Cemented withS
		TOC:		feet determined by
		Hole S	Size:	
		Long S	String	
		Size:	5 1/2	" Cemented with 1200 S
	5/12			feet determined by circ.
i	TD 5130	Hole S	Size: <u>7 7</u>	
		Total	Depth: _	5130
		Inject	tion Inter	val_
		(perf	orated or	feet to feet open-hole, indicate which)
Tubing size	lined with			set in a
		packer a	(mat at	erial) feet.
(brand & mode or describe any				
ther Data	J			
	njection formation	_n San And	res Dolomi	te
				ton Upper San Andres
. Is this a new	well drilled for nat purpose was the	injecti	on? No	
. Has the well	ever be perforate	d in any	other zon	e(s)? List all such perforated ent or bridge plug(s)
. Give the dept (pools) in th		any over	lying and/	or underlying oil or gas zones



GREENHILL PETROLEUM CORPORATION

11490 WESTHEIMER, SUITE 200 HOUSTON, TEXAS 77077 TELEPHONE (713) 589-8484 FAX. (713) 589-9399

Incorporated in Delaware, U.S.A.

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July 30, 1991

Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87504-2088

Attention:

David Catanach

Re:

West Lovington Unit

Well Nos. 21, 32, 33, 34

Lea County, NM

Enclosed find the legal notice which covers the proposed conversions of Well Nos. 21, 32, 33 and 34 from producers to injection wells. This information should complete our application.

11 /

Sincerely,

Michael J. Newport

MJN:sjs

enclosure

AFFIDAVIT OF PUBLICATION

State of New Mexico, County of Lea.

, 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

One weeks.
Beginning with the issue dated
$\frac{\text{July 4}}{\text{and ending with the issue dated}}, 19\frac{91}{\text{dated}}$
July 4 1991
Conoral Manager
General Manager Sworn and subscribed to before
me thisday of
Thonda Contand
Notary Public.

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.

My Commission expires____

LEGAL NOTICE

July 4, 1991 Greenhill Petroleum Greenhill Petroleum Corporation, 11490 Westhelmer, Ste., 200, Houston, TX 77077-Phone (713) 589-8484 Contact: Mike Newport. Greenhill Petroleum Corporation plans to convert the following producing wells to ining producing wells to injection wells within the West Lovington Field Area. The purpose of the produced injection wells is to increase the reservoir pressure in order to im-prove the recovery of hydrocarbons. The location of the proposed injection wells are the following Well wells are the following well Nos. within Sections 4 & 5, T17S-R36E, Lea County, NM. Well Nos. 21, 32, 33 & 34. The injection intervals are approximately be-tween the depths of 4650' and 5160' in the San Andres formation: The maximum formation: 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, NM 87501 within 15 days.