

# 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

July 30, 1990

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

ATTN: MR. DAVID CATANACH

RE: West Lovington Unit Area Lea County, New Mexico

Sirs:

Enclosed please find the C-108 and sttachments covering the conversion to injection wells in the West Lovington Area. We propose converting the following wells:

Well Numbers: 11, 12, 13, 19, 23, 25, 35, 36, 37, 40 42, 44, 46, 48, 50, 61

Please call me at 713/955-1146 in the event you have additional questions.

Very truly yours,

Richael J. Juget

Michael J. Newport Landman

MJN:ntd Enclosures cc: State of New Mexico - Oil Conservation District I P. O. Box 1980 Hobbs, NM 88240

WLU032

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: 16010 Barker's Point Lane Houston, TX 77079

Contact party: Mike Newport Phone: (713)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? X yes no If yes, give the Division order number authorizing the project <u>R-2071</u>
- 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.

Michael J. Newport Name: Title Landman Date: 7/27/90 Signature: herpor

 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.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division

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 an 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.

- E. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
  - (1) The name of the injection formation and, if applicable, the field or pool name.
  - (2) The injection interval and whether it is perforated or open-hole.
  - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
  - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
  - (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.
- XIV. PROOF OF NOTICE

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

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

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

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

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

III. Tabulation and Prognosis for each well Greenhill proposes for injection.

GREENHILL PETROL	EUM CORPORATION		WEST L	OVINGTON UN	IT	
OPERATOR	· · · · · · · · · · · · · · · · · · ·	*****	LEASE		<u>=</u>	
11	660 FEL & 1	980 FNL	5	175	36E	······
WELL NO.	FOOTAGE LOC	ATION	SEC.	TOWNSHIP	RANGE	
LEA COUNTY, NEW	MEXICO					
			<u>Tul</u>	bular Data		
11		<u>Surface</u>	Casing			
		Size: <u>1</u>	3 3/8_"	Cemented v	with	<u>200</u> sx
		TOC: <u>S</u>	URFACE	feet d	etermined b	y <u>CALC</u>
	_ 13 <sup>3</sup> /8"	Hole siz	:e:]	4 1/2		
		Intermed	liate Cas	ing		
	A	Size:	<u>8 5/8 </u> ″	Cemented v	with	<u>200</u> sx
	8 5/8	TOC: <u>1</u>	400	feet d	etermined b	у <u>CALC @ 5</u> 0%
		Hole Siz	:e:]	0 3/4		
		<u>Long Str</u>	ing			
		Size: <u>5</u>	1/2″	Cemented	with	<u>350</u> sx
	51/2 "	TOC: _2	643	feet d	etermined b	y <u>CALC @ 8</u> 0%
	4740	Hole Siz	:e:	7 5/8		•
		Total De	pth: <u>5</u>	5150		
TO S	150	Injectio	n Interv	al		
		4 (perfora	740 Ited or o	feet to pen-hole, in	<u>    5105 (PE</u> ndicate whi	TD) feet ch)
Tubing size <u>NONE</u>	lined with				·	set in a
NONE		packer at	(mate:	rial)	feet.	
(brand & model) (or describe any ot	her casing-tubin	g seal).				
Other Data		6, ,				
1 N-ma of the ini	ostion formation	SAN ANI	אסבג הטוט	MITC		
I. Name of the Inj						
2. Name of Field o	r Pool (II appli	cable)	LUV	INGIUN (SAN	ANDRES) WE	<u>.ST</u>
3. Is this a new w If no, for what	ell drilled for purpose was the	injection? well orig	NO inally d	rilled? P	RODUCTION	
<ol> <li>Has the well ev intervals and g used. NO</li> </ol>	er be perforated ive plugging det	in any ot ail (sacks	her zone of ceme	(s)? List and or bridge	all such pe e plug(s)	rforated
5. Give the depth (pools) in this	to and name of a area.	ny overlyi	.ng and/o	r underlyin	g oil or ga	s zones

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_	Area of Review Well # 11			ů.	27
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GREENHILL PETROLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR	LEASE
12660_FWL & 1	980 FNL 4 17S 36F
WELL NO. FOOTAGE LOC.	ATION SEC. TOWNSHIP RANGE
LEA COUNTY, NEW MEXICO	WEST LOVINGTON FIFLD
	<u>Tubular Data</u>
	Surface Casing
	Size: <u>10 3/4</u> " Cemented withSX
103/4	TOC: SFC @ 75%EFF feet determined by CALC
	* Hole size: <u>12 1/4</u>
	Intermediate Casing
75/8	Size: 7 5/8 "Cemented with 600 SX
	TOC: <u>350'@ 50%EFF</u> feet determined by <u>CALC</u>
	* Hole Size: <u>9 7/8</u>
51/2	Long String
	Size: <u>5 1/2</u> "Cemented with <u>400</u> SX
	TOC: 2300'@ 50% feet determined by <u>CALC</u>
	* Hole Size:6 3/4
, 2 ,0013	Total Depth: 5100 FT
	Injection Interval
	4750 feet to 5095 feet (perforated or open-hole, indicate which)
Tubing size None lined with	
None	(material) packer at feet.
(brand & model)	
(of describe any other casing-cubin	g sear).
<u>Other_Data</u>	
1. Name of the injection formation	SAN ANDRES
2. Name of Field or Pool (If appli	cable) LOVINGTON (SAN ANDRES) WEST
3. Is this a new well drilled for If no, for what purpose was the	<pre>injection? NO well originally drilled? PRODUCTION</pre>
4. Has the well ever be perforated intervals and give plugging det used. NO	in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)
5. Give the depth to and name of a (pools) in this area.	ny overlying and/or underlying oil or gas zones

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_	Area of Review well #12 15	◆		¥	53
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GR	EENHILL PETROLEUM CO	ORPORATIO	<u>N</u>	WEST LOV	INGTON UNIT		
	OPERATOR			LEASE			
	13 UELL NO	660 FNL	& 660 FEL	4	17S	36E	NPM
	WELL NO.	FUUIAGE		SEC.	TOWNSHIT	MIGE	
<u>WE</u>	ST LOVINGION FIELD,	LEA COUI	NTY, NEW MED	(10)		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
				Tul	<u>bular Data</u>		
		]	Surfa	ce Casing			
			Size:	13″	Cemented w	ith	<u>225</u> sx
		133/8	TOC:	SFC-75%EFF	feet de	termined	by CALC
		286	Hole	size: <u>17</u>	1/4		-
			Inter	<u>mediate Cas</u>	ing		
		85/8	Size:	<u>    8  5/8     </u> "	Cemented w	vith	<u>100</u> sx
		1977	TOC:	1846'-50%EF	FFfeet de	termined	by <u>CALC</u>
			Hole	Size: <u>12</u>	1/2		
	51/2		Long	String			
	4710		Size:	5 1/2 "	Cemented w	vith	<u>150</u> sx
			TOC:	3950'75%EFF	- feet de	termined	Ъу <u>CALC</u>
			Hole	Size: <u>7</u>	7/8		
			Total	Depth: 51	183'		
	TD 5183'		Injec	tion Interv	<u>al</u>		
			<u>471</u> (perf	.0 orated or @	feet to pen-hole, ir	5183 dicate w	feet hich)
Tub	ing size <u>NONE</u>	lined w	ith	•			set in a
_	NONE		packer	(mate at	rial)	fee	t.
(or	(brand & model) describe any other	casing-t	ubing seal)				
<u>Othe</u>	<u>r Data</u>						
1.	Name of the injecti	on forma	tion	SAN AND	DRES DOLOMIT	E	
2.	Name of Field or Po	ol (If a	pplicable)	LC	<u>)VINGTON (SA</u>	N ANDRES)	WEST
3.	Is this a new well If no, for what pur	drilled pose was	for injecti the well o	on? N <u>O</u> riginally d	rilled?	PRODUCTIO	N
4.	Has the well ever b intervals and give used. NO	e perfor plugging	ated in any detail (sa	other zone cks of ceme	(s)? List and or bridge	all such plug(s)	perforated
			_	<b>_</b>			

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

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GI	REENHILL PET OPERATOR	ROLEUM CORPORATIO	N	WEST LC	VINGTON UNI	[	
	19	1980 FSL	<u>&amp; 1980 FWL</u>	5	175	36E	NMPM
	WELL NO.	FOOTAGE	LOCATION	SEC.	TOWNSHIP	RANGE	
WE	EST LOVINGTO	N FIELD, LEA COUN	TY, NEW MEX	ICO			
				<u>Tu</u>	<u>bular Data</u>		
			Surface	e Casing			
			Size:	13 3/8 "	Cemented w	vith	<u>190</u> sx
		133/8	TOC: _(	CIRC	feet de	termined l	by <u>CALC</u>
		299	Hole s	ize: <u>1</u>	7"		
			Interm	ediate Cas	ing		
		8518	Size:_		Cemented v	vith	<u>150</u> sx
		1989 '	TOC:	1494'@ 80%	feet de	etermined	by <u>CALC</u>
			Hole S	ize: <u>11</u>	1/2"		
			Long S	tring			
		<u> </u>	Size:	<u>5 1/2</u> ″	Cemented v	vith]	<u>150</u> sx
		4770	тос: _	3839'@ 80%	FILL feet de	etermined	by <u>CALC</u>
			Hole S	ize: <u>7</u>	7/8		·
			Total	Depth: <u>5</u>	085		
		1-TD 5080	Inject	<u>ion Interv</u>	<u>val</u>		
			474	10	feet to	5085	feet
_			(perio	raced or Co	pen-noie, it	Idicate Wh	icn)
Tul	oing size _N	IUNE lined wi	th	 (mate	rial)		_ set in a
	N (brand & mo	ONE	packer a	t		feet	•
(or	describe ar	ny other casing-tu	bing seal).				
<u>0th</u>	er Data						
1.	Name of the	e injection format	ion <u>SAN</u>	ANDRES D	OLOMITE		
2.	Name of Fie	eld or Pool (If ap	plicable)	Ĺ	OVINGTON (SA	AN ANDRES)	WEST
3.	Is this a r If no, for	new well drilled f what purpose was	for injectio the well or	n? N <u>O</u> iginally d	lrilled?	PRODUCTION	<u> </u>
4.	Has the wel intervals a used. NO	ll ever be perfora and give plugging	ited in any detail (sac	other zone ks of ceme	e(s)? List a ent or bridge	all such p e plug(s)	erforated
5.	Give the de (pools) in	epth to and name c this area.	of any overl	ying and/c	or underlying	g oil or g	as zones

GRAYBURG - OVERLYING - PRODUCTIVITY NEVER DETERMINED

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Area of Review Well #19 15	€		*	27
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G	GREENHILL PETROLEUM CORPORATION			WEST LO	VINGTON UNI	<u>r</u>	
	OPERATOR			LEASE			
<del></del>	23 WELL NO	1980 FSL & 1980 FOOTAGE LOCA		4	17S TOWNSHIP	36E RANGE	NMPM
W	EST LOVINGION	-IELD, LEA COUNTY,	<u>NEW ME</u>	XICO			
				Tul	oular Data		
			<u>Surfac</u>	ce Casing			
			Size:	<u>13 3/8</u> ″	Cemented v	with200	SX
		$    \frac{137_8}{700}$	TOC:	CIRC	feet de	etermined by	CALC
			Hole :	size: <u>17</u>	/ 1/4		
		85/8	<u>Inter</u>	<u>mediate Cas</u>	ing		
		1953	Size:	8 5/8 "	Cemented w	with <u>100</u>	SX
			TOC:	1740 @ 75%E	FF feet d	etermined by	CALC
			Hole :	Size: 12	1/2		
		$\frac{51/2}{11/1000}$	Long	String			
		1015	Size:	5 1/2 "	Cemented v	with400	SX
		ОН	TOC:	2670 @ 75%E	FF feet d	etermined by	CALC
			Hole :	Size: <u>7</u>	7/8		·
		10 5156	Total	Depth: <u>5</u>	150		
			Injec	tion Interv	<u>al</u>		
			<u>46</u>	95	feet to	5150	feet
			(perr	oraced or (of		nuicate which	.,
Tuł	oing size2	<u>3/8"</u> lined with _	· <u></u>	IPC (mate	rial)	S	et in a
	BA	AKER p	acker a	at 462	5'	feet.	
(or	(brand & model describe any o	) ther casing-tubing	; seal)				
<u>Othe</u>	er Data						
1.	Name of the in	jection formation		SAN ANDRES	DOLOMITE		<u></u>
2.	Name of Field	or Pool (If applic	able)	L	<u>OVINGTON (S</u>	AN ANDRES) W	EST
3.	Is this a new If no, for wha	well drilled for i t purpose was the	njecti well o	on? <u>NO</u> riginally d	rilled?	PRODUCTION	
4.	Has the well e intervals and used. NO	ver be perforated give plugging deta	in any il (sa	other zone cks of ceme	(s)? List and or bridg	all such perf e plug(s)	Forated
5.	Give the depth (pools) in thi	to and name of an s area.	ny over	lying and/o	r underlyin	g oil or gas	zones

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Area of Review Well # 23	\$		ű A	
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INJECTION WE	ELL DATA	A SHEET
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GI	REENHILL PETROL	EUM CORPORATION		WEST LO	OVINGTON UNI	IT		
<del></del>	OPERATOR			LEASE				-
	25	1980 FSL & 66	O FEL	4	17S	36E		_
	WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE		
WE	EST LOVINGTON F	TELD, LEA COUNTY,	NEW MEXICO					
		$\frac{757_8}{327'}$	Surface Ca Size: 7 5 TOC: CIRC Hole size Intermedia Size: 7 TOC: 7 Hole size Long Strin Size: 4 1 TOC: 2370 Hole Size Total Dep Injection 4730 (Perforate	Tub asing 5/8 " 2 @ 50%E :" ate Casi " :: :" :: :: : _	Cemented w FF_feet de Ing Cemented w feet de Cemented w FF_feet de 3/4 20 1 feet to pen-hole, in	vith vith	50 s CALC CALC S S CALC S S CALC S S CALC S S CALC S S S S CALC S S S S S S S S S S S S S	x x x PF: 5030 5031 5038 5039 5093
Tul	bing size 2 3/8	" 4.7# lined with _		IPC			set in a	L
 (or	BA (brand & model describe any o	KER [] L) Dither casing-tubing	oacker at	(mater 505(	0'	feet.		
Oth	er Data		,, .					
1.	Name of the in	njection formation	SAN	ANDRES I	DOLOMITE			-
2.	Name of Field	or Pool (If applic	cable)	LOVING	TON (SAN AN	DRES) WEST		-
3.	Is this a new If no, for wha	well drilled for i at purpose was the	injection? well origin	NO nally dr	illed? PF	RODUCTION		-
4.	Has the well e intervals and used. NO	ever be perforated give plugging deta	in any other and the second se	er zone( of cemer	(s)? List a ht or bridge	ll such per plug(s)	forated	
5.	Give the depth (pools) in thi	n to and name of ar Is area.	ny overlyin	g and/or	underlying	g oil or gas	zones	

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	Area of Review Well #25	₹	A	ŵ	2
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GR	EENHILL PETR	OLEUM CORPORATION	WEST LOVINGTON UNIT				
<u></u>	OPERATOR		** ***	LEASE			
	35	660 FSL & 19	80 FWL	4	175	36E	NMPM
	WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE	
WE	ST LOVINGTON	FIELD, LEA COUNTY,	NEW MEX	[CO			
				Tub	oular Data		
	1		<u>Surface</u>	Casing			
			Size: <u>1</u>	3 3/8″	Cemented w	vith <u>225</u>	SX
		$\frac{ 3^{3}/8}{3^{3}/8}$	TOC: <u>C</u>	IRC @ 80%E	<u>FF</u> feet de	etermined by	CALC
		526	Hole si:	ze: <u>17</u>	7 1/4	. <u></u>	
		05/."	Intermed	liate Casi	ing		
		<u> </u>	Size:{	3 5/8 "	Cemented v	vith <u>100</u>	sx
			TOC: <u>1</u>	766 @ 75%E	EFF_ feet de	etermined by	CALC
			Hole Si	ze: <u>1</u> 2	2 1/2		
			Long St:	ring			
		51/2 "	Size:	5 1/2″	Cemented v	vith	SX
		4682	TOC: <u>4</u>	L76'@ 75%E	FF feet de	etermined by	CALC
			Hole Si	ze:7	7/8		·
			Total D	epth: <u>5</u>	5175		
		TTT 5150 PB	Injecti	on Interva	<u>al</u>		
	10	5175	46 (perfor	582 ated or or	feet to pen-hole in	5150 dicate which	feet h)
Tubi	.ng size2	7/8"_ lined with _		IPC		·	set in a
	BA	KER T	backer at	(mate) 4612	rial)	feet.	
(or d	brand & mode lescribe any	1) other casing-tubing	g seal).				
<u>Other</u>	Data						
1. N	lame of the i	njection formation	S/	N ANDRES	DOLOMITE		<u> </u>
2. N	lame of Field	or Pool (If applic	cable) _	L	OVINGTON (S	SAN ANDRES)	WEST
3. I I	s this a new f no, for wh	well drilled for a at purpose was the	injection well ori	? <u>NO</u> ginally di	rilled? _P	RODUCTION	
4. H i u	las the well ntervals and used. NO	ever be perforated give plugging deta	in any o ail (sack	ther zone s of cemen	(s)? List and the second se	all such per e plug(s)	forated

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

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7	*			÷ *	8
	<ul> <li>★</li> <li>★</li> </ul>			•£	28
tî	Area of Review Well # 35	\$		۲	27
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#### WEST LOVINGTON UNIT GREENHILL PETROLEUM CORPORATION LEASE OPERATOR 36 660 FSL & 1980 FFL 17S 36F 4 NMPM WELL NO. SEC. TOWNSHIP FOOTAGE LOCATION RANGE WEST LOVINTON FIELD, LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 "Cemented with 200 SX TOC: <u>CIRC</u> feet determined by <u>CALC</u> Hole size: 17 Intermediate Casing Size: 8 5/8 " Cemented with 600 SX TOC: <u>CIRC @ 15%FILL</u> feet determined by <u>CALC</u> 1960 Hole Size: <u>11</u> Long String Size: <u>5 1/2</u> " Cemented with <u>375</u> SX TOC: 2758 @ 75%FILL feet determined by \_\_\_\_CALC\_\_\_ Hole Size: <u>7 7/8</u>\_\_\_\_ Total Depth: 5152 5152' TO Injection Interval (perforated or open-hole, indicate which) feet feet to 5152 Tubing size 2 3/8" lined with \_\_\_\_\_ \_\_\_ set in a IPC(material) BAKER (materia BAKER 4588' feet. (brand & model) (or describe any other casing-tubing seal). Other Data Name of the injection formation SAN ANDRES DOLOMITE 1. LOVINGTON (SAN ANDRES) WEST 2. Name of Field or Pool (If applicable) Is this a new well drilled for injection? NO 3. 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 4. 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.

GRAYBURG	-	OVERLYING	-	UNEVALUATED

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Area of Review well # 36	10 *		9	73
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	GREENHILL PETROLEUM CORPORATION			WEST LOVINGTON UNIT					
	OPERATOR			LEASE	Ξ				
	37	660 FSL &	660 FEL	4	175	<u> </u>	36E		
	WELL NO.	FOOTAGE	LOCATION	SEC.	TOWN	SHIP	RANGE		
	LEA COUNTY, NEW	MEXICO							
				3	fubular	<u>Data</u>			
	1	11	Surfac	ce Casing					
			Circi	13	" Como	ntod	+h	250	CV
			TOC:	SURFACE	_ Ceme f	eet det	cermined	 by CALC	3 ]
		L13 280	Hole s	size:	17			<u> </u>	<b>6</b>
			Interr	<u>mediate Ca</u>	asing				
		95/0	Size:	8 5/8	_″ Ceme	nted wi	lth	600	sx
		1980	TOC:	72	f	eet det	cermined	Ъу <u>CALC</u>	: 50%
			Hole S	Size:	11				
		- 51/2	Long	String					
		1011	Size:	5 1/2	_″ Ceme	nted wi	lth	400	sx
		0 5120	TOC:	2348	f	eet det	cermined	by <u>CALC</u>	80%
			Hole :	Size:	7 3/4		<u> </u>	·	
			Total	Depth:	5120				
			Injec	tion Inter	rval				
			(porf.	4705	fee	t to	5120	fe	et
_			(perro	Stated of	open-no		ficace wi	.iicii)	
Tul	ping size $2^{\circ}$	/8 lined wi	.th	(ma	LPC terial)			set in	na
	Baker	~	packer a	at46	501 <b>'</b>		fee	t.	
(or	describe any o	, ther casing-tu	ubing seal)						
<u>Oth</u>	er Data								
1.	Name of the in	jection format	ion	SAN ANDRE	S DOLOM	ITE			
2.	Name of Field	or Pool (If ap	oplicable)		LOVINGTO	ON (SAN	ANDRES)	WEST	
3.	Is this a new If no, for wha	well drilled f t purpose was	for injection the well of	on? <u>NO</u> riginally	drilled	i? <u>PRO</u>	DUCTION		
4.	Has the well e intervals and used. NO	ver be perfora give plugging	ated in any detail (sa	other zon cks of cen	ne(s)? ment or	List al bridge	ll such plug(s)	perforat	ed
5.	Give the depth (pools) in thi	to and name o s area.	of any over	lying and	/or unde	erlying	oil or	gas zone	S

GRAYBURG - OVERLYING

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	Area of Review Well # 37 15	C C Hiss	Etn Erron 5 tat c	4	27
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(	GREENHILL PE	TROLEUM CORPORATION	WEST LOVINGTON UNIT				
	OPERATOR			LEASI	3		
	40	1980 FWL & 660	FNL	7	175	36E	NMPM
	WELL NO.	FOOTAGE LOCAT	TION	SEC.	TOWNSHIP	RANGE	
V	WEST LOVINGT	ON FIELD, LEA COUNTY,	NEW MEXI	[CO			
				- -	<u> Tubular Data</u>		
			Surface	Casing			
			Strov 13	3/8	" Comented r	vith 150	۶۷
			5126. <u>10</u>	<u> </u>		1 <u></u>	0
		12.3/6	TOC: <u>22</u>	. @ 100	<u>FILL</u> feet de	stermined by	
		$\left[\begin{array}{c} \frac{15}{221}\right]$	Hole siz	:e:	19"		
			Intermed	<u>iiate Ca</u>	asing		
			Size: 8	5/8	_ Cemented v	with	sx
			TOC: <u>72</u>	23'@ 100	<u> %FILL</u> feet de	etermined by .	CALC
		$\frac{85/8}{2000}$	Hole Siz	ze:	11"	<u></u>	
		2020	Long Sti	ring			
			Size: 5	1/2	_ Cemented v	with 200	SX
			тос: 30	88 @ 10	- 10%FILL feet de	etermined by	
		51/2	Hole Si:	ze:	7 3/4		
		( 4712	Total De	epth:	5160		
			Injectio	on Inte	<u>rval</u>		
		TP 5144'	41	12	feet <b>to</b>	5144 (fill)	feet
			(perfora	ated or	open-hole, in	ndicate which	)
Tul	bing size <u>2</u>	2 3/8" lined with		IPC		s	et in a
	I	BAKER pa	acker at	(ma 4	t <b>erial)</b> 642'	feet.	
	(brand & mo	del)			<u> </u>		
(or	describe an	y other casing-tubing	seal).				
<u>Oth</u>	<u>er Data</u>						
1.	Name of the	injection formation	SA	N ANDRE	S_DOLOMITE		<u> </u>
2.	Name of Fie	ld or Pool (If applica	able) _		LOVINGTO	N (SAN ANDRES	) WEST
3.	Is this a n If no, for	ew well drilled for in what purpose was the w	njection well ori	? ginally	NO drilled?	PRODUCTION	<u></u>
4.	Has the wel intervals a used. NO	l ever be perforated ind give plugging detai	in any o il (sack	ther zo s of ce	ne(s)? List ment or bridg	all such perf e plug(s)	orated
5.	Give the de (pools) in	pth to and name of any this area.	y overly:	ing and	/or underlyin	g oil or gas	zones

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Area of Review well #40	¢		. ¥	19
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GR	EENHILL PETRO	DLEUM CORPORATION	WEST LOVINGTON UNIT						
_	OPERATOR		LEASE						
	42	660 FNL & 66	60 FEL	7	17S	36E	NMPM		
	WELL NO.	FOOTAGE LO	CATION	SEC.	TOWNSHIP	RANGE			
WE	ST LOVINGTON	FIELD, LEA COUNTY,	NEW MEX	100					
		$\frac{13^{3}}{2.04}$	<u>Surfac</u> Size:_ TOC: _ Hole s	<u>Tub</u> <u>e Casing</u> <u>13 3/8 "</u> <u>CIRC @ 50%</u> ize: <u>1</u>	<u>Dular Data</u> Cemented w <u>EFF</u> feet de <u>6</u> "	ith termined	<u>250</u> sx by <u>CALC</u>		
				<u>lediate Cas</u> :	<u>1ng</u>				
			Size:_	<u>85/8</u> ″	Cemented w	ith	<u>150</u> sx		
			TOC: _	1590 @ 75%	EFF_feet_de	termined	by <u>CALC</u>		
		85/8	Hole S	ize: <u>1</u>	1 1/2				
		2008	Long S	Long String					
			Size:_	5 1/2 "	Cemented w	ith	<u>200</u> sx		
			TOC: _	TOC:					
		51/2"	Hole S	ize:	7"				
		( 4727	Total	Total Depth: 5160					
		$\langle \rangle$	Inject	Injection Interval					
	-	- TD 5160	(perfo	4727 prated or of	feet to pen-hole in	5160 dicate wl	feet nich)		
Tul	oing size <u>N</u>	ONE lined with	. <u> </u>	-			set in a		
	N	ONE	packer a	(mater at -	rial) -	fee	t.		
(or	(brand & mod describe any	lel) 7 other casing-tubi	ng seal).	<del></del>					
<u>Othe</u>	er Data								
1.	Name of the	injection formatio	n	SAN ANDRES	DOLOMITE				
2.	Name of Fiel	ld or Pool (If appl	icable)	LOVIN	GTON (SAN AN	NDRES) WE	ST		
3.	Is this a ne If no, for w	ew well drilled for What purpose was th	injectio e well or	on? <u>NO</u> iginally d	rilled?	PRODUCTI	ON		
4.	Has the well intervals ar used.	ever be perforate nd give plugging de O	d in any tail (sac	other zone ks of ceme	(s)? List a nt or bridge	ll such plug(s)	perforated		
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5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

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GREENHILL PETROLEUM CORPORATION			WEST LOVINGTON UNIT					
OPERATOR			LEASE					
44	1980 FWL	& 660 FNL	8 SEC	17S TOWNSHIP	36E BANGE	NMPM		
					IULIOD			
WEST LOVINGTON_F1	ELD, LEA COUNTY	, NEW MEXIC	0			<u>_</u>		
,	<b>1</b> 1		<u>Tubular Data</u>					
		Surface	e Casing					
	17.3%	Size: <u>1</u>	3 3/8″	Cemented w	vith34	<u>lo</u> sx		
	$\frac{1}{197'}$	тос: <u>С</u>	IRC	feet de	etermined by	CALC		
		Hole s:	ize: <u>16</u>	11	ana da da tana da an			
		Interm	<u>ediate Casi</u>	ing				
		Size:	8 5/8″	Cemented w	vith <u>15</u>	<u>50</u> sx		
	85/8	тос: <u>1</u>	485 @ 80%	feet de	etermined by	r <u>CALC</u>		
	2018	Hole S	ize: <u>11</u>	1/2				
		Long S	tring					
		Size:	5 1/2 "	Cemented v	vith2(	<u>)0</u> sx		
Ļ	$\frac{57_2}{1172}$	тос: <u>2</u>	539 @ 80%E	FF feet de	etermined by	r <u>CALC</u>		
	4730'	Hole S	ize: <u>7</u>			·		
		Total 1	Depth: <u>51</u>	60	<b>.</b>			
) 	511.0	Inject	ion Interva	<u>al</u>				
		4 (perfo	730 rated or or	feet to pen-hole in	5160 ndicate whice	feet ch)		
Tubing size <u>NON</u>	E lined wi	.th				set in a		
NON	E	packer a	(matei t	rial)	feet.			
(brand & mode)	l)	pucker u	·					
Other Data	Juner Casing-Co	bing seal).						
1. Name of the i	niection format	ton S	AN ANDRES	DOLOMITE				
2 Name of Field	or Pool (If an	nlicable)	LOVING	TON (SAN AN	DRES) WEST			
2. Name of field			2 NO		· · · · ·			
If no, for what	well arilled f at purpose was	the well or	iginally di	rilled? PR	ODUCTION			
<ol> <li>Has the well of intervals and used.</li> </ol>	ever be perfora give plugging	ted in any detail (sac	other zone ks of cemer	(s)? List and or bridge	all such per e plug(s)	forated		
NO		····	·					

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

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-	Area of Review well # 44	\$		¥	27
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GREEN	HILL PI	ETROLE	UM CORPORATION		WEST L	OVINGTON · UN	IT		
01	PERATOR	ર			LEASE				
<u></u>	46		660 FNL & 60	50 FEL	8	17S	36E	NMPM	
W	ELL NO	•	FOOTAGE LO	DCATION	SEC.	TOWNSHIP	RANGE		
WEST	LOVING	TON FI	ELD, LEA COUNT	(, NEW MEXI	<u>co</u>				
			$\frac{10^{3/4}}{175_3}$	Surface Size: 10 TOC: <u>CI</u> Hole si: <u>Interme</u> Size: <u>7</u> TOC: <u>CI</u> Hole Si <u>Long St</u> Size: <u>5</u> TOC: <u>17</u> Hole Si Total D <u>Injecti</u>	<u>Tub</u> <u>Casing</u> <u>3/4</u> " <u>RC</u> ze:13 <u>diate Casi</u> <u>5/8</u> " <u>RC</u> ze:9 ring <u>1/2</u> " <u>09</u> ze:6 epth: <u>510</u> on Interva	Cemented w feet de 3/4 feet de 3/4 Cemented w feet de 7/8 Cemented w feet de 3/4 feet de 3/4 feet de	vith etermined  vith etermined  etermined PERI	<u>200</u> SX by <u>CALC</u> <u>650</u> SX by <u>CALC</u> <u>400</u> SX <u>by CALC</u> <u>55:</u> 4730-60 4780-4810 4870-80 4910-15 4980-5040	-  5050-55 5085-95
				47 (perfor	30 ated or of	_ feet to ben-hole, in	<u>5095</u> ndicate wl	feet nich)	
Tubing	size .	2 3/8	" lined wit	h	IPC (mater	cial)		set in a	
(1	and c	BAKER		_ packer at	502	.8'	fee	t.	
(or des	and & cribe a	any ot	her casing-tub	ing seal).					
Other D	ata								
1 Mar		ha fait	estion formati	۱۸ ک ۱۸ ک	N ANDES D				
I. Nam	e oi Ci	ue inj	ection formation	JII	IN ANURES D				
2. Nam	e of F	ield o	r Pool (If app	licable) _	LOVINGT	ON (SAN AN	DRES) WES	<u>Γ</u>	
3. Is If	this a no, fo:	new w r what	ell drilled fo purpose was t	r injection he well ori	? <u>NO</u> ginally dr	cilled? _F	RODUCER		
4. Has int use	the we ervals d.	ell ev and g NO	er be perforat ive plugging d	ed in any o etail (sack	ther zone( s of cemer	(s)? List and or bridge	all such p e plug(s)	perforated	
5. Giv (po	e the o ols) in	depth n this	to and name of area.	any overly	ing and/or	underlyin	g oil or ;	gas zones	

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	Area of Review well #46 15			2	27
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#### WEST LOVINGTON UNIT GREENHILL PETROLEUM CORPORATION LEASE OPERATOR 9 SEC. 48 1980 FWL & 660 FNL 17S 36E NMPM WELL NO. TOWNSHIP FOOTAGE LOCATION RANGE WEST LOVINGTON FIELD, LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 "Cemented with 285 SX 13' TOC: <u>CMT CIRC</u> feet determined by <u>OBSV</u>. 303 Hole size: <u>17 1/4</u> Intermediate Casing Size: 8 5/8 "Cemented with 770 SX TOC: CIRC @ 60%FILL feet determined by CALC Hole Size: 11 Long String Size: 5 1/2 " Cemented with 1800 SX TOC: <u>CIRC @ 60%FILL</u> feet determined by <u>CALC</u> Hole Size: <u>7 3/4</u> 4678 Total Depth: 5100 CIBP @ 4630' $\overline{w/40}$ ' CMT on top Injection Interval 4678 feet to 5100 feet (perforated or open-hole, indicate which) 51001 70 Tubing size NONE lined with \_\_\_\_\_ set in a (material) NONE 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) WEST Is this a new well drilled for injection? NO 3. PRODUCTION 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 4. 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.

GRAYBURG - OVERLYING - UNEVALUATED

## INJECTION WELL DATA SHEET

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 Area of Review well #48 15	* *		Ŷ	27
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	50	660 FWL & 198	30 FNI	7	175	36F	
<u></u>	WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE	
WE	ST LOVINGTON	FIELD, LEA COUNTY,	NEW MEXIC	)			
				Tu	bular Data		
			Surface (	Casing			
			Circ. 13	2 70 <i>"</i>	Comported .	{ + h	250 67
			512e: <u>15</u>	<u> </u>	Gemented w	· · · · ·	<u>250</u> 5X
		133/8	TOC: <u>UI</u>	<u> </u>	feet de	termined b	by <u>CALC</u>
		248'	Hole size	e: <u>1</u>	7 1/4		
			Intermed	late Cas	ing		
			Size: <u>8</u>	<u>5/8</u> ″	Cemented w	ith	<u>450</u> sx
		83/5	TOC: <u>40</u>	)'@ 75%F	<u>ILL</u> feet de	termined l	ру
		1451	Hole Siz	e: <u>1</u>	1		
			<u>Long Str</u>	ing			
			Size: 5	1/2″	Cemented w	ith	<u>450</u> sx
		51/2	TOC: 17:	39'0 75%	feet de	termined	оу
	Ć	4738'	Hole Siz	e:	7 3/8		•
	)		Total De	oth: 5	121		
	>		Inicatio	n Intorn	<u> </u>		
	51	21 TO	Injectio	n Interv		5404	.DF @ 4040
			4/. (perfora	38 ted or o	feet to pen-hole, in	<u>5121</u> dicate wh:	feet ich)
Tub	oing size <u>NO</u>	NE lined with _		<del>.</del>			_ set in a
	NO	NE E	packer at	(mate	rial)	feet	
(or	(brand & mod describe any	el) other casing-tubing	z seal).				
0+1-	r Data		,, ·				
<u>ocne</u>			CAL				
1.	Name of the	injection formation		ANDRES	DULUMITE	<u>, .</u>	
2.	Name of Fiel	d or Pool (If applie	cable)	LOVIN	GTON (SAN`AI	NDRES) WES	T
3.	Is this a ne If no, for w	w well drilled for i hat purpose was the	injection? well orig	NO inally d	lrilled?	PRODUCTIO	)N
4.	Has the well intervals an used. NO	ever be perforated d give plugging deta	in any ot ail (sacks	her zone of ceme	e(s)? List a ent or bridge	ll such p plug(s)	erforated

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

GRAYBURG - OVERLYING - UNEVALUATED

## INJECTION WELL DATA SHEET

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GRE	ENHILL PETROLEUM CO	RPORATION		WEST LO	DVINGTON UNI	Г		
	OPERATOR			LEASE				
	61	2310 FSL & 1	.980 FWL	8	<u>175</u>	<u>36E</u>	NMPM	
	WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE		
WES	T LOVINGTON FIELD,	LEA COUNTY, N	IEW MEXICO					• <u></u>
				Tu	<u>bular Data</u>			
	1 1	1	Surface (	Casing				
			Size 10	<u> </u>	Cemented w	d th	200	SY
			5126. <u>10</u>	<u> </u>	Cemenced w			
		10.3/1	TOC: <u>UIR</u>		feet de	termined	ь ру <u>сагс</u>	
		301	Hole size	e: <u>15</u>				
			Intermed	<u>iate Cas</u>	ing			
			Size: 7	5/8″	Cemented w	rith	500	sx
		- 1	TOC: <u>CIR</u>	C	feet de	termined	by <u>CALC</u>	
		-7 5/8	Hole Size	e:9	7/8			
			Long Str	ing				
	5020'		Size: 5	1/2 ″	Cemented w	ith	1050	SX
	5070'		TOC: CIR		feet de	termined		
	5	1 <u>2</u> .	Hole Size	e: 6	3/4			
	:	30	Total De	pth: 50	80	C	IBP @ 49	54
			Injection	n Interv	al	P	erfs: 50	)20-7(
			5020	)	feet to	5070	fe	et
			perfora	ted or o	pen-hole, ir	ndicate w	hich)	
Tub	ing size <u>NONE</u>	lined with _					set i	n a
	NONE	P	acker at			fee	et.	
(or )	(brand & model) describe any other	casing-tubing	seal)					
0.1	- Deta		,, .					
<u>Uthe</u> :	<u>r_Data</u>							
1. 1	Name of the injecti	on formation	SAN	ANDRES I	DOLOMITE	· · · ·		
2. 1	Name of Field or Po	ol (If applic	able)	LO	VINGTON (SAN	ANDRES)	WEST	
3.	Is this a new well If no, for what pur	drilled for i pose was the	njection? well orig	NO inally d	rilled? PR	ODUCTION		
4. 1 : :	Has the well ever b intervals and give used. NO	e perforated plugging deta	in any ot il (sacks	her zone of ceme	(s)? List and or bridge	all such plug(s)	perforat	ed
5. (	Give the depth to a (pools) in this are	nd name of an a.	y overlyi	ng and/o	or underlying	g oil or	gas zone	S

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#### INJECTION WELL DATA SHEET

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<b>↓</b>				
 \$			* • *	8
 ō ↓ ↓			• 2 •	22
Area of Review well #61 15	₹	► ► ÷ ÷	¥	2
· · ·		••		














Enron	sun Phillips		
23	Island Ci) Tri Serv et al Mecoy i Stephens et el 24	Sun 19	Gulf Citics Scruice Contractions Contract

a de la anticipación de la companya de la definicación de la companya de la companya de la companya de la compa Nota de la companya d La companya de la comp VI. Listed below is a tabulation of all wells which are in the one-half mile area of review.

Greenhill Petroleum Well No's:

- 37 24, 25, 26, 36, 37, 38, 49 Exxon New Mexico State 'R' #1, Cities State 'AU' #1, Fasken Exxon State #1, Turner Graham #1
- 25 14, 23, 24, 25, 26, 36, 37, 38 Exxon New Mexico State `R' #1, Turner Graham #1, Fasken Exxon State #1
- 36 14, 23, 24, 25, 34, 35, 36, 37, 38, 48, 49 Exxon New Mexico State 'R' #1
- 35 13, 22, 23, 24, 33, 34, 35, 36, 37, 47, 48, 49
- 23 5, 12, 13, 14, 21, 22, 23, 24, 25, 34, 35, 36, 48
- 13 4, 5, 6, 11, 12, 13, 14, 22, 23, 24, 35
- 12 1, 3, 4, 5, 10, 11, 12, 13, 14, 21, 22, 23, 34
- 11 2, 3, 4, 9, 10, 11, 12, 13, 20, 21, 22, 33
- 46 21, 32, 33, 34, 44, 45, 46, 47, 48, 56, 57, 62 Exxon New Mexico State `P' #1
- 61 43, 44, 45, 54, 64, 55, 56, 57, 59, 60, 61, 62
- 42 17, 28, 29, 30, 40, 41, 42, 43, 44, 52, 53, 54, 64, 59, 63
- 40 27, 28, 39, 40, 41, 42, 50, 51, 52 Exxon New Mexico State 'R' #1, Carpenter State 'AJ' #1
- 50 39, 40, 50, 51, 52 Carpenter State 'AJ' #1, Stanolind State 'V' #1, Exxon New Mexico State 'R' #1
- 44 19, 30, 31, 32, 42, 63, 43, 44, 45, 46, 54, 64, 55, 56, 57, 61, 62
- 19 9, 10, 17, 18, 19, 20, 21, 30, 31, 32, 44
- 48 23, 34, 35, 36, 46, 47, 49 Exxon New Mexico State 'P' #1, Exxon New Mexico State 'R' #1

GREENHILL P	ETROLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATO	R	LEASE
<u>1</u> P	A 660 FSL & 660	FWL 33 16S 36E
WELL NO	FOOTAGE LOCAT	TION SEC. TOWNSHIP RANGE
LEA COUNTY,	NEW MEXICO	
PiA - 7/5/84 date completed 6/5/84 Openhole	$\frac{(m+p)g}{(05x)} = \frac{(m+p)g}{(05x)} = \frac{(m+p)ug}{(038-x08)} = \frac{(m+p)ug}{(048-x08)} = \frac{(m+p)ug}{(04$	Tubular Data         Surface Casing         Size: 13 3/8 Cemented with 200 SX         TOC: SURFACE feet determined by CALC         Hole size: /5''         Intermediate Casing         Size: $85/8$ Cemented with 200 SX         TOC: /199 feet determined by <u>So20 Cal(C</u> Hole Size: /2 <sup>1</sup> /4         Long String         Size: $5 1/2$ Cemented with 200 SX         TOC: 3660 feet determined by <u>So20 Cal(C</u> Hole Size: 7 <sup>1</sup> /8         Total Depth: 5133
	TO 5133	(perforated or open-hole, indicate which)
Tubing size	lined with	set in a
	pa	(material) acker at <b>feet</b> .
(brand &	model)	
(or describe	any other casing-tubing	seal).
<u>Other Data</u>		
1. Name of t	he injection formation	
2. Name of F	'ield or Pool (If applica	able)
3. Is this a If no, fo	new well drilled for in or what purpose was the v	njection? well originally drilled?
4. Has the w intervals used.	ell ever be perforated is and give plugging detai	in any other zone(s)? List all such perforated il (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.

GREENHILL PETRO	LEUM CORPORATIO	DN	WEST LC	VINGTON UNI	[T		
OPERATOR			LEASE				
2	660 FNL	& 1980 FEL	5	17S	36E		
WELL NO.	FOOTAGE	LOCATION	SEC.	TOWNSHIP	RANGE		
LEA COUNTY, NEW	MEXICO		<u> </u>				
			Tul	bular Data			
		Surface	e Casing				
		Size: 1	3 3/8 "	Cemented	with	250	SX
		 TOC+ S		foot d		her CAL	
open hole	12 34	1003		Leet u	ecermined	Dy <u>CAL</u>	<u> </u>
s/27/45	L-13-78	Hole si	.ze: <u>1</u> /	/ 1/4			
converted to		Interme	diate Cas	ing			
injection 2/63		Size:	<u>8 5/8 </u> ″	Cemented	with	700	sx
105	85/0	TOC: <u>C</u>	MT CIRC	feet d	etermined	by <u>CAL</u>	С
		Hole Si	ze: 11				
		Long St	-ring				
		Long 50					
	51/2	Size:	<u>5 1/2    "</u>	Cemented	with	250	sx
	4750	TOC: <u>3</u>	358	feet d	etermined	by <u>CAL</u>	<u>C_80</u> 2
	Flora	Hole Si	ze:7	7/8			
	3153	Total I	)epth: <u>51</u>	.00			
		Injecti	on Interv	al			
		Δ	820	feet to	5100	fa	at
		(perfor	ated or of	pen-hole, in	ndicate w	hich)	
Tubing size	2". lined w	ith	·IPC			set i	n a
	<u></u>	packer at	(mate: . 462	rial) 23'	fee	t.	
(brand & mode	1)	puonor ut			rcc		
(or describe any	other casing-t	ubing seal).					
<u>Other Data</u>							
1. Name of the i	njection forma	tion S.	AN ANDRES	DOLOMITE		·	
2. Name of Field	or Pool (If a	pplicable)	LOVING	TON (SAN AN	IDRES) wes	T	
3. Is this a new If no, for wh	well drilled at purpose was	for injectior the well ori	n? <u>NO</u> ginally d:	rilled? P	RODUCTION		<u> </u>
4. Has the well	ever be perfor.	ated in any o	ther zone	(s)? List	all such p	perforat	ed:
intervals and used.	give plugging	detail (sach	s of cemen	nt or bridg	e plug(s)		
NO NO		·					

#### GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 660 FNL & 660 FEL 3 5 17S 36E FOOTAGE LOCATION WELL NO. SEC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: <u>12 3/4</u> " Cemented with <u>200</u> SX TOC: SURFACE feet determined by CAL L 133/8 Hole size: <u>14 1/2</u> Intermediate Casing open hole Size: 8 5/8 " Cemented with 200 SX completed 1/11/45 L85/8 TOC: 1374 \_\_\_\_\_ feet determined by <u>CALC\_50%</u> Converted to injection Hole Size: 10 3/4 4/2/69 Long String Size: <u>5 1/2</u> " Cemented with <u>400</u> SX 4720 TOC: <u>2263</u> feet determined by <u>CALC\_80%</u> TO 5125 Hole Size: 7 5/8 Total Depth: 5125 Injection Interval feet to 5125 4750 feet (perforated or open-hole,) indicate which) Tubing size 2 3/8" lined with \_\_\_\_\_IPC \_\_\_\_\_ set in a (material) \_\_\_\_\_ packer at \_\_\_\_\_ 4653"\_\_\_\_ feet. (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation San Andres Dolomite Lovington (San Andres) West Name of Field or Pool (If applicable) 2. Is this a new well drilled for injection? no 3. PRODUCTION 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 4. intervals and give plugging detail (sacks of cement or bridge plug(s) used. NO

INJECTION WELL DATA SHEET

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

#### **GREENHILL PETROLEUM CORPORATION** WEST LOVINGTON UNIT OPERATOR LEASE 4 660 FNL & 660 FWL 4 17S 36F WELL NO. SEC. TOWNSHIP FOOTAGE LOCATION RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size:13 3/8 " Cemented with 200 SX TOC: SURFACE\_\_\_\_\_\_feet determined by <u>CALC</u>\_\_\_\_\_ -133/8 Hole size: 17 1/4 open hole Intermediate Casing completed 2/19/45 Size: 8 5/8 "Cemented with 200 SX 8 5/8 converted to TOC: 1398 feet determined by CALC 50% injection 2/18/63 Hole Size: <u>12 1/2</u> Long String Size: 5 1/2 "Cemented with \_\_\_\_\_400 SX TOC: 2590 \_\_\_\_\_ feet determined by CALC 80%\_\_\_\_\_ 5% 4769 Hole Size: <u>7 7/8</u> Total Depth: 5100 TO 5100 Injection Interval feet to \_\_\_\_\_\_5100 <u>4765</u> feet (perforated or open-hole, indicate which) Tubing size \_\_\_\_\_ lined with \_\_\_\_\_IPC \_\_\_\_ set in a (material) packer at 4712' feet. (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation \_\_\_\_\_ SAN ANDRES DOLOMITE LOVINGTON (SAN ANDRES) WEST Name of Field or Pool (If applicable) 2. NO Is this a new well drilled for injection? 3. PRODUCTION 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 4. intervals and give plugging detail (sacks of cement or bridge plug(s) used. NO

#### INJECTION WELL DATA SHEET

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

GREENHILL PET	FROLEUM CORPORATION		WEST L	OVINGTON_UN	IT	<u> </u>	
CI LATOR	1000 514 1				0.05		
WELL NO.	FOOTAGE LOC	<u>660 FNL</u> CATION	4	<u> </u>	<u>36E</u> RANGE		
LEA COUNTY, M	NEW MEXICO						
			Tu	bular Data			
		<u>Surfa</u>	ce Casing				
		Size:	13 3/8 "	Cemented v	with	20 s	x
		TOC:	SURFACE	feet de	etermined	by CALC	
	(3.3/c	Hole :	size: <u>17</u>	1/4			
open hole		Intern	<u>nediate Cas</u>	ing			
completed 1/18/45		Size:	<u>8 5/8</u> ″	Cemented w	with	<u>200</u> s	X
converted to injection 4/3/69	-95/a	TOC:	1361	feet de	etermined	Ъу <u>CALC 50</u>	1%
	A / 8	Hole :	Size: <u>12</u>	1/2			
		Long	String				
	51/2	Size:	<u>5 1/2</u> ″	Cemented v	with	_ <u>400</u> s	x
	4/48	TOC:	2569	feet de	etermined	Ъу <u>САІС 80</u>	%
		Hole	Size:7	7/8		•	
-Ti	0 5125	Total	Depth: <u>51</u>	25			
		Injec	tion Interv	al			
		(perf	760 orated or (	feet to pen-hole, in	<u> </u>	feet hich)	
Tubing size _	$2^{3/8"}$ lined with		IPC		***	set in a	ì
		packer	(mate) at <u>466</u>	111) 3'	fee	t.	
(brand & m (or describe a	odel) ny other casing-tubir	ng seal)					
<u>Other Data</u>							
1. Name of th	e injection formation	n	SAN ANDRE	S DOLOMITE			-
2. Name of Fi	eld or Pool (If appli	icable)		LOVINGT <mark>ON (</mark> S	AN ANDRES	5) WEST 🔭	-
3. Is this a If no, for	new well drilled for what purpose was the	injecti e well o	on? <u>NO</u> riginally d	rilled? P	RODUCTION	١	_
4. Has the we intervals used. N	ll ever be perforated and give plugging det O	i in any cail (sa	other zone cks of ceme	(s)? List and or bridge	all such e plug(s)	perforated	_
5. Give the d	lepth to and name of a	any over	lying and/o	or underlying	g oil or	gas zones	
(pools) in	this area.						
61	KAIBUKG - UVERLYING						

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GREENHILL PETRO	DLEUM CORPORATIO	<u>DN</u>	WEST L	<u>OVINGTON UN</u>	IT		<b>,</b>
OPERATOR			LEADE .				
WELL NO.	660 FNL FOOTAGE	& 1980 FEL LOCATION	<u>4</u>	<u> </u>	<u>36E</u> RANGE		
LEA COUNTY, NEW	MEXICO	···					
,	<b>1</b> 1		Tul	<u>bular Data</u>			
		<u>Surface</u>	Casing				
		Size: <u>1</u>	3 3/8 "	Cemented w	vith	200	sx
		TOC: S	JRFACE	feet de	termined	by <u>CAL</u>	С
	L133/8	Hole si	ze: <u>17</u>	, 11	<u></u>		
		Interme	diate Cas	ing			
pen hole		Size:{	<u> </u>	Cemented w	vith	200	sx
~pleted 12/18/44		тос: <u>1</u> 2	249	feet de	etermined	by <u>CAL</u>	<u>C 50%</u>
verted to jection 2/18/63	8 5/8	Hole Si	ze: <u>11</u>	11			
		Long St	ring				
		Size:	<u>1/2</u> ″	Cemented w	vith	200	sx
	- 51/2 4740	TOC: 29	000	feet de	etermined	by <u>CAL</u>	C 80%
	-	Hole Si	ze:7	7/8			
		Total D	epth: <u>51</u>	00			
	2100	<u>Injecti</u>	on Interv	<u>al</u>			
		47 (perfor	55 ated or o	feet to pen-hole, ir	5100 dicate wł	fenich)	eet
Tubing size	2" lined w	ith	IPC			set	in a
		packer at	(mate 45	rial) 90'	feet	t.	
(brand & mod	el) other casing-t	ubing seal)					
· L D ·	other custing c	abing scar).					
<u>ther_Data</u>			_				
. Name of the	injection forma	tion	SAN ANDRES	DOLOMITE	· · · · · · · · · · · · · · · · · · ·		
. Name of Fiel	d or Pool (If a	pplicable) _	L	OVINGTON (S	AN ANDRES	) WEST	
. Is this a ne If no, for w	w well drilled hat purpose was	for injection the well ori	? <u>NO</u> ginally d	rilled? Pl	RODUCTION		
. Has the well	ever be perfor	ated in any c detail (sack	ther zone s of ceme	(s)? List and the second se	all such p plug(s)	perfora	ted
intervals an used. NO	- 6- · · · F686	,					

### GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT LEASE OPERATOR 9 1980 FWL & 1980 FNL 5 17S 36E FOOTAGE LOCATION SEC. TOWNSHIP WELL NO. RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with 180 SX TOC: SURFACE feet determined by CALC Hole size: <u>14 1/2</u> 133/8 Intermediate Casing Size: 8 5/8 " Cemented with \_\_\_\_\_ 300 SX openhole TOC: 1071 feet determined by CALC 50% completed 5/1/47 85/5 Hole Size: \_\_\_\_\_\_ Long String Size: 5 1/2 " Cemented with 400 SX 5% TOC: 2582 \_\_\_\_\_ feet determined by <u>CALC 80%</u> 4761 Hole Size: <u>7 7/8</u> Total Depth: <u>5140</u> TO 5140 Injection Interval 4800 feet to 5140 feet (perforated or open-hole) indicate which) Tubing size NONE lined with \_--\_\_\_\_\_ set in a (material) \_\_\_\_\_ packer at \_\_\_\_ feet. NONE (brand & model) (or describe any other casing-tubing seal). Other Data Name of the injection formation \_\_\_\_\_\_ SAN ANDRES DOLOMITE \_\_\_\_\_ 1. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 2. Is this a new well drilled for injection? NO 3. If no, for what purpose was the well originally drilled? <u>PRODUCTION</u> Has the well ever be perforated in any other zone(s)? List all such perforated 4. 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 5.

#### INJECTION WELL DATA SHEET

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

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GREENHILL PETRO	LEUM CORPORATION	WEST LOVINGTON UNIT	
OPERATOR		LEASE	
10	1982 FNL & 1	1981 FEL 5 17S 36E	
WELL NO.	FOOTAGE LOCA	ATION SEC. TOWNSHIP RANGE	
LEA COUNTY, NEW	I MEXICO		
		Tubular Data         Surface Casing         Size: 13 3/8 Cemented with250         TOC: SURFACE feet determined by CALC         Hole size:17 1/4	sx
open hole	· L- 1348	Intermediate Casing	cv
2/28/45		TOC: <u>119</u> feet determined by <u>CALC 5</u>	.57 50%
	8 = 18	Hole Size:11	
		Long String	
		Size: <u>5 1/2</u> " Cemented with <u>300</u>	sx
		TOC: 3091 feet determined by <u>CALC 8</u>	<u>}0%</u>
	- 51/2	Hole Size:7 7/8	
	4726	Total Depth: 5100	
-		Injection Interval	
		4750 feet to 5100 feet (perforated or open-hole) indicate which)	:
Tubing size 2	3/8" lined with	IPC set in	а
	·	(material)	
(brand & mod (or describe any	el) other casing-tubing	g seal).	
<u>Other Data</u>			
1. Name of the	injection formation	SAN ANDRES DOLOMITE	
2. Name of Fiel	d or Pool (If applie	cable) LOVINGTON (SAN ANDRES) WEST	-
3. Is this a net If no, for wi	w well drilled for the hat purpose was the	injection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>	
4. Has the well intervals an used.	ever be perforated d give plugging deta	in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)	L

(pools) in this area.

# GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 14 1980 FNL 1880 FEL 4 17S 36E FOOTAGE LOCATION SEC. TOWNSHIP RANGE WELL NO. LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with 235 SX L133/8 TOC: SURFACE feet determined by CALC Hole size: <u>17</u> Intermediate Casing completed 12/12/44 Size: 8 5/8 "Cemented with \_\_\_\_600 SX TOC: 134.6 feet determined by CALC 50% Hole Size: 11 Long String 4674 Size: 5 1/2 "Cemented with 400 SX TOC: 2351 feet determined by CALC 80% TD 5109 Hole Size: 7 3/4 Total Depth: 5109 Injection Interval 4760 feet to 5109 (perforated or open-hole, indicate which) feet Tubing size NONE lined with --\_\_\_\_\_ set in a (material) \_\_\_\_\_ packer at \_\_\_ NONE feet. (brand & model) (or describe any other casing-tubing seal). Other Data Name of the injection formation \_\_\_\_\_ SAN ANDRES DOLOMITE\_\_\_\_ 1. Name of Field or Pool (If applicable) \_\_\_\_\_ LOVINGTON (SAN ANDRES) WEST 2. Is this a new well drilled for injection? NO 3. If no, for what purpose was the well originally drilled? <u>PRODUCTION</u> Has the well ever be perforated in any other zone(s)? List all such perforated 4. 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 5.

INJECTION WELL DATA SHEET

(pools) in this area.

GREENHILL PETROLE	JM CORPORATIO	N	WEST	LOVINGTON	UNIT		
OPERATOR			LEASE				
17	1980 FSL	& 660 FEL	6	17S	36E		
WELL NO.	FOOTAGE	LOCATION	SEC.	TOWNSHIP	RANGE		
LEA COUNTY, NEW MI	EXICO		·····				
			Tub	ular Data			
	1	Surface	Cacing				
		Durrace					
		Size: <u>13</u>	3/8″	Cemented w	vith	250	sx
		тос: <u>SU</u>	RFACE	feet de	etermined	by <u>CAL</u>	<u>C</u>
		Hole si	ze: <u>17</u>				
upen hole		Interme	diate Casi	ng			
completed 3/6/47	133/8	Size: <u>8</u>	5/8 "	Cemented w	vith	150	sx
		TOC: <u>15</u>	18	feet de	etermined	ъу <u>CALC</u>	50%
	- 8 5/0	Hole Si	ze: <u>11</u>				
	578	Long St	ring				
		Size: <u>5</u>	1/2″	Cemented w	vith	200	sx
q	$5V_2$	TOC: <u>35</u>	78	feet de	etermined	Ъу <u>CALC</u>	80%
	4 140	Hole Si	ze: <u>7</u>	3/4			
TD S	53	Total D	epth: <u>515</u>	3			
		<u>Injecti</u>	<u>on Interva</u>	<u>1</u>			
		47	50	feet to	5153	fe	et
NONI	_	(perior	ated or op	en-hole) ir	laicate Wi	nich)	
Tubing size <u>NOM</u>	lined wi	.th	(mater:	ial)		set i	n a
NONI	a. 	packer at			fee	t.	
(or describe any ot	her casing-tu	ubing seal).					
<u>Other Data</u>							
1 Name of the ini	ection format	ton (	AN ANDRES				
2. Name of Field a	w Dool (If an	valiantia)	10	VINCTON (SI		\ UECT /	<u> </u>
Z. Name of field o	i rooi (ii aļ	pricable, _		1110101 (3)	ANDRES	<u> </u>	
3. Is this a new w If no, for what	ell drilled f purpose was	for injection the well ori	? <u>NU</u> ginally dr:	illed? PF	RODUCTION		
4. Has the well ev intervals and g used. NO	er be perfora ive plugging	ited in any o detail (sack	ther zone(s s of cement	s)? List a t or bridge	all such p e plug(s)	perforat	ed
5. Give the depth (pools) in this	to and name o area.	of any overly	ing and/or	underlying	g oil or g	gas zone	s

GREENHILL	PETROLEUM CORPORATIO	<u>N</u>	WEST LO	<u>OVINGTON UN</u>	IT		
OPERATO	)R		LEASE				
<u>18</u>	1980 FSL &	660 FWL	<u> </u>	17S	36E	····	
WELL NO	NEW MENTOO	JUATION	SEC.	TOWNSHIT	RANGE		
LEA COUNTY	, NEW MEXICO	<u>.                                    </u>	<u>.,</u>				<u> </u>
			<u>Tub</u>	ular Data			
		<u>Surface</u>	Casing				
		Size: <u>13</u>	3/8 "	Cemented w	vith	200	sx
		TOC: <u>S</u> L	IRFACE	feet de	termined	by <u>CAL</u>	С
		Hole si	ze: 17	3/4			
	$13^{3/8}$	Interme	diate Casi	ng		·	
men hole		Circ: S		Comented t	•1 +h	200	<b>C</b> 3
pleted 7/50/45	- 8 5/8	5120		Cemenced v	vicn		57
verted to	no le 7/36/45 7/	TOC: <u>IC</u>	.44	feet de	etermined	by <u>CAL(</u>	<u>; 50</u> %
	н. С	Hole Si	ze: <u>11</u>				
		<u>Long St</u>	ring				
	- 51/2 4749	Size: <u>5</u>	1/2″	Cemented w	vith	400	S>
		TOC: <u>18</u>	81	feet de	etermined	by <u>CAL(</u>	<u>: 80</u> 2
		Hole Si	ze: <u>7</u>	3/8			
16	5150	Total D	epth: <u>515</u>	50			
		Injecti	<u>on Interva</u>	<u>1</u>			
		47	80	feet to	5150	fe	et
		(perfor	ated or op	en-hole, in	ndicate w	hich)	
Tubing size	$2^{3}/8''$ lined wit	h	IPC (mater	-1 <u>-</u> 1)		set i	.n a
		_ packer at	<u>4627'</u>		fee	t.	
(brand & (or describe	any other casing-tub	ing seal).					
<u>Other Data</u>							
l. Name of t	the injection formati	.on SA	N ANDRES [	OLOMITE			
2. Name of H	Field or Pool (If app	licable)	LOV	/INGTON (SAM	N ANDRES)	WEST	
2 To this a	now well drilled for	r injection	2 NO	<u> </u>	<u> </u>		
If no, fo	or what purpose was t	he well ori	ginally dr	illed? PRO	DUCTION		
4. Has the w	vell ever be perforat	ed in any o	ther zone(	(s)? List a	all such	perforat	ed
intervals	and give plugging d	letail (sack	s of cemen	nt or bridge	e plug(s)		
used.	_						

GREENHILL	PETROLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR	ł	LEASE
20	1980 FSL &	1980 FEL 5 17S 36E
WELL NO.	FOUTAGE LOCA	ATTON SEC. TOWNSHIP RANGE
LEA COUNTY	, NEW MEXICO	
		<u>Tubular Data</u>
		Surface Casing
		Size: <u>13 3/8</u> " Cemented with SX
		TOC: <u>SURFACE</u> feet determined by <u>CALC</u>
	$\lfloor 13^{3/8}$	Hole size: <u>17</u>
	EEENHILL PETROLEUM CORPORATION       WEST LOYINGTON UNIT         OPERATOR       LEASE         20       1980 FSL & 1980 fEL 5       17S       36E         WELL NO.       FOOTAGE LOCATION       SEC.       TOWNSHIP       RANGE         2A COUNTY, NEW MEXICO       Tubular Data         Tubular Data         Surface Casing         Size: 13 3/8 " Cemented with         13 $\frac{3}{7}$ Hole size: 17	Intermediate Casing
		Size: <u>8 1/4</u> "Cemented with <u>200</u> SX
nuerted to	GREENHILL PETROLEUM CORPORATION       WEST LOYINGTON UNIT         OPERATOR       LEASE         20       1980 FSL & 1980 FEL 5       175       361         WELL NO.       FOOTAGE LOCATION       SEC.       TOWNSHIP       RANG         LEA COUNTY, NEW MEXICO       Tubular Data       Surface Casing       Size: 13 3/8 " Comented with         IA       J/4       Hole size:       17	TOC: <u>1364</u> feet determined by <u>CALC 50</u>
Injection 2/18/63		Hole Size:11
npleted 3/3/45 enhole		Long String
pen hole	51/2	Size: 5 1/2 " Cemented with 200 SX
	7 100	TOC: 3610 feet determined by CALC 80
-		Hole Size: 7 7/8
-	FO 5104	Total Depth:
		Injection Interval
		4700 feet to 5104 feet (perforated or open-hole) indicate which)
Tubing size	2" lined with	IPC set in a
	r	(material) Dacker at 4663' <b>feet</b> .
(brand & r	nodel)	, seal)
(of describe a	any other casing-tubing	, scal).
<u>Other Data</u>		
1. Name of th	ne injection formation	SAN ANDRES DOLOMITE
2. Name of F	ield or Pool (If applic	cable)LOVINGTON (SAN ANDRES) WEST **
3. Is this a If no, for	new well drilled for i r what purpose was the	Injection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
4. Has the we intervals used. NO	ell ever be perforated and give plugging deta	in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)

## **GREENHILL PETROLEUM CORPORATION** WEST LOVINGTON UNIT LEASE OPERATOR 21 1980 FSL & 660 FEL 5 17S 36E TOWNSHIP WELL NO. FOOTAGE LOCATION SEC. RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with \_\_\_\_\_ SX TOC: SURFACE feet determined by <u>CALC</u> Hole size: <u>17 1/4</u> - 13 <sup>3</sup>/s Intermediate Casing completed 11/4/44 Size: 8 5/8 "Cemented with 200 SX Open hole TOC: 1364 feet determined by CALC 50% 85/8 Hole Size: 11 Long String Size: <u>5 1/2</u> " Cemented with <u>200</u> SX -51/2 4700 TOC: 3266 \_\_\_\_\_ feet determined by CALC 80% Hole Size: <u>7 3/8</u> TO 5100 Total Depth: <u>5100</u> Injection Interval

INJECTION WELL DATA SHEET

feet to <u>5100</u> feet 4767 (perforated or open-hole, indicate which) NONE lined with \_\_\_\_\_ set in a Tubing size (material) NONE feet. \_\_\_\_\_ packer at \_\_ (brand & model) (or describe any other casing-tubing seal). Other Data Name of the injection formation \_\_\_\_\_ SAN ANDRES DOLOMITE\_\_\_\_\_ 1. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 2. Is this a new well drilled for injection? <u>NO</u> 3. If no, for what purpose was the well originally drilled? <u>PRODUCTION</u> Has the well ever be perforated in any other zone(s)? List all such perforated 4. 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.

GRAYBURG - OVERLYING

NO

GREENHILL PETRO	LEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR		LEASE
22	1980 FSL & 660	FWL 4 17S 36S
WELL NO.	FOOTAGE LOCA	TION SEC. TOWNSHIP RANGE
LEA COUNTY, NEW	MEXICO	
onverted to injection 2/18/63 ompteted 12/11/44 Open hole	$\begin{bmatrix} -13 \\ -85/8 \\ 51/2 \\ 4703 \\ 0 5171 \end{bmatrix}$	Tubular Data         Surface Casing         Size: 13 Cemented with 190SX         TOC: SURFACE feet determined by CALC         Hole size:
Tubing size $2^3$	8" lined with	· IPC set in a
RAKE	۲ ۲	(material) backer at 4760' feet
(brand & model	) )	
(or describe any o	ther casing-tubing	g seal).
<u>Other Data</u>		
L. Name of the in	jection formation	SAN ANDRES DOLOMITE
2. Name of Field	or Pool (If applic	cable)LOVINGTON (SAN ANDRES) WEST
3. Is this a new If no, for wha	well drilled for i t purpose was the	injection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
4. Has the well e intervals and used. <u>NO</u>	ver be perforated give plugging deta	in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)
5. Give the depth (pools) in thi	to and name of ar s area.	ny overlying and/or underlying oil or gas zones

,

GREENHILL PETROLE OPERATOR	UM CORPORATION		WEST LOV LEASE	/INGT <u>ON UN</u>	IT		<u> </u>
24	1980 FSL & 1980	FEL	4	<u>175</u>	365		
WELL NO.	FOOTAGE LOCATI	LON	SEC.	TUWNSHIP	RANGE		
LEA COUNTY, NEW M	IEXICO						<u> </u>
		CORPORATION       WEST LOVINGTON UNIT         LEASE         980 FSL & 1980 FEL       4       17S       36S         FOOTAGE LOCATION       SEC.       TOWNSHIP       RANGE         CO       Tubular Data         Surface_Casing       Size: 13       " Cemented with200					
	5	Surface Ca	sing				
	S	Size: <u>13</u>		Cemented	with	200	sx
	13 13	roc: <u>SURF</u>	ACE	feet d	etermined	by <u>CAL</u>	С
penhole	F	Hole size:	17	· · · · · · · · · · · · · · · · · · ·			
mpleted - 2/19/43	]	Intermedia	te Casi	ng			
2/18/63	241980 FSL & 1980 FELWELL NO.FOOTAGE LOCATIONEA COUNTY, NEW MEXICOSurf <tr< td=""><td>Size:<u>85</u></td><td>/8″</td><td>Cemented</td><td>with</td><td>600</td><td>sx</td></tr<>	Size: <u>85</u>	/8″	Cemented	with	600	sx
		roc: <u>93</u>		feet d	letermined	by <u>CAL</u>	<u>C 50</u> 2
	ŀ	Hole Size:	11				
	1	Long Strir	ıg				
		Size: 5 1	- /2 "	Cemented	with	400	SX
	4655	TOC: 2332		feet d	etermined	by CAL	 C 80'
		Hole Size:	7	3/Л			<u>u uu</u>
Ť	0 5120	Total Dept	·h· 51	20	<del></del>		
	-	Inication	Intoruo	1			
	-	4600	Incerva	± 	<b>F100</b>		
	-	(perforate	ed or op	en-hole, i	ndicate w	hich)	et
Tubing size $2^{3/8}$	"lined with	IPC				set i	in a
BAKE	IR pac	cker at	(mater 4600'	ial)	fee	t.	
(brand & model) (or describe any of	her casing-tubing	seal).					
Other Date							
		C A N					
1. Name of the inj	ection formation	SAN	ANDRES	DULUMITE			
2. Name of Field of	r Pool (If applical	ble)	L0	VINGTON (S	AN ANDRES	WEST	
<ol> <li>Is this a new w If no, for what</li> </ol>	ell drilled for in purpose was the wo	jection? ell origir	NO Nally dr	illed? P	RODUCTION	<u> </u>	
<ol> <li>Has the well evaluate intervals and gused, NO</li> </ol>	er be perforated in ive plugging detail	n any othe l (sacks o	er zone( of cemen	s)? List t or bridg	all such ge plug(s)	perforat	ted
<b></b>							



GREENHILL PETRO	GREENHILL PETROLEUM CORPORATION				WEST LOVINGTON UNIT				
OPERATOR		LEASE							
27	660 FSL & 198	D FWL	6	<u>175</u>	<u>36E</u>		<u> </u>		
WELL NO.	FOOTAGE LUCA	TION	SEC.	TOWNSHIP	RANGE				
LEA COUNTY, NEW	MEXICO								
			Tub	oular Data					
		<u>Surface</u>	Casing						
		Size:	<u>13                                    </u>	Cemented v	with	250	S2		
	13	TOC:	SURFACE	feet d	etermined	by CALC			
open hole		Hole si	ze:	17 1/4		•			
Completed - 5/30/45		Interme	liate Casi	nσ					
4/12/69		Cinot	9 5 / 9 //	Comented		600	C.		
	L 8 5/8	512e	0 5/0	Cemenced	with	000			
		TOC:	78.67	feet d	etermined	by <u>CALC</u>	<u>50%</u>		
		Hole Si	ze:	11					
	51/2	Long St:	ring						
		Size:	5 1/2 "	Cemented	with	400	s		
		TOC:	2394	feet d	etermined	ьу <u>CALC</u>	<u>80%</u>		
	2512 01	Hole Si	ze:	7 3/4					
		Total D	epth:	5175	·				
		Injectio	on Interva	<u>1</u>					
			4770	feet to	5175	fe	et		
		(perfora	ated or Of	ven-hole, in	ndicate wh	ich)			
Tubing size $2^{3/2}$	8"lined with		IPC	4		set in	n a		
	p	acker at	4 <del>6</del> 6	7'	feet	•			
(brand & model) (or describe any oth	ner casing-tubing	seal).							
Other Data		·							
<u>Utilet Data</u>									
1. Name of the inje	ection formation	<u></u>	AN ANDRES	DOLOMITE					
2. Name of Field on	Pool (If applic	able) _	L	<u>OVINGTON (S</u>	AN ANDRES	<u>WEST</u>			
3. Is this a new we If no, for what	ell drilled for i purpose was the	njection well ori;	? <u>NO</u> ginally du	illed? P	RODUCTION				
4. Has the well eve intervals and gi used. NO	er be perforated ive plugging deta	in any o il (sack:	ther zone( s of cemer	(s)? List and the second se	all such p e plug(s)	erforat	ed		
5. Give the depth t (pools) in this	co and name of an area.	y overly	ing and/or	underlyin	g oil or g	as zone:	5		

	GREENHILL PETRO	LEUM CORPORATION		WEST L	_OVINGTON UN	IT		
-	OPERATOR			LEASE				
	28	660 FSL & 198	BO FEL	6	17S	36E		
	WELL NO.	FOOTAGE LOC	ATION	SEC.	TOWNSHIP	RANGE		
	LEA COUNTY, NEW	MEXICO						
				<u>Tu</u> l	<u>bular Data</u>			
		115	Surfac	e Casing				
			<u>Durrac</u>					
			Size:_	<u>13 3/8</u> ″	Gemented w	vith	250	_sx
		133/8	TOC: _	SURFACE	feet de	etermined	by <u>CAL</u>	С
			Hole s	ize: <u>1</u>	7			
<sup>O</sup> Per	n hole		Interm	<u>ediate Cas</u>	ing			
comp	leted - 6/25/45	85%	Size:_	<u>8 5/8</u> ″	Cemented w	vith	150	SX
		~ 8 18	TOC:	1352	feet de	etermined	by CAL	ር 50%
			Hole S	ize:]	1		<u> </u>	
			Long S	tring				
			Size:_	<u>5 1/2</u> ″	Cemented w	vith	200	_sx
			TOC:	3556	feet de	etermined	by CAL	 C80%
			Hole S	ize:	7 3/4		· ·	
		5/2 4718	Total	Depth: _5	5160			
		10 5160	Inject	ion Interv	<u>al</u>			
			-	4900	feet to	F1C0	fo	~ <i>t</i> -
			(perfo	rated or C	pen-hole, ir	ndicate w	hich)	: L
Tuł	oing size <u>NON</u>	lined with					set in	na
	NONI		nacker a	(mate:	rial)	fee	 +	
·	(brand & model	)	, puonor u			100		
(or	describe any o	ther casing-tubin	g seal).					
<u>Othe</u>	er Data							
1.	Name of the in	jection formation		SAN ANDRES	DOLOMITE			
2.	Name of Field	or Pool (If appli	cable)	LO	VINGTON (SA	<u>N ANDRES)</u>	WEST	
3.	Is this a new T If no, for wha	well drilled for t purpose was the	injectio well or	n? <u>NO</u> iginally d	rilled? PR	ODUCTION		
4.	Has the well e intervals and used. NO	ver be perforated give plugging det	in any ail (sac	other zone ks of cemen	(s)? List and the constant of bridge	all such p plug(s)	perforate	∍d
5.	Give the depth (pools) in thi	to and name of a s area,	ny overl	ying and/o:	r underlying	g oil or	gas zones	5

## GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 17S 36E 660 FSL & 660 FEL 29 6 TOWNSHIP RANGE WELL NO. FOOTAGE LOCATION SEC. LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3 /8 " Cemented with 200 SX -133/8 TOC: SURFACE feet determined by <u>CALC</u> Hole size: \_\_\_\_\_\_17 1/4 \_\_\_\_\_ open hole Intermediate Casing Completed - 4/5/45-L 85/8 converted to injection Size: 8 5/8 " Cemented with 200 SX 4/10/69 TOC: 1364 feet determined by CALC 50% Hole Size: 11 -51/2 4720 Long String Size: 5 1/2 " Cemented with 200 SX TOC: 2874 \_\_\_\_\_ feet determined by <u>CALC 80%</u> Hole Size: \_\_\_\_7\_\_\_\_ Total Depth: <u>5155</u> Injection Interval 4735 feet to 5155 feet (perforated or open-hole) indicate which) Tubing size 2<sup>3</sup>/8" lined with IPC \_\_\_\_\_ set in a (material) \_\_\_\_\_ packer at \_ 4610' 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 Is this a new well drilled for injection? NO 3. 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 4. 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.

#### INJECTION WELL DATA SHEET

GREENHILL PET	ROLEUM CORPORATION	WEST LOVINGTON UNIT					
OFERAIOR			-	170	0.65		
WELL NO.	FOOTAGE LOCA	TION S	EC.		<u>36E</u> RANGE		
LEA COUNTY, N	EW MEXICO						
			Tuł	ular Data			
	1	Surface Car	ing	<u>, azaz 2000</u>			
			<u></u>		• . •	200	
		Size: 13 3/1	<u> </u>	Cemented	with	200	s
		TOC: SURFA	UE	feet d	letermined	by <u>CAL</u>	<u>C</u>
en hole		Hole size:	15	·			
pleted 3/30/45		<u>Intermediat</u>	<u>e Casi</u>	ing			
	85/8	Size: 8 5/8	3″	Cemented	with	300	S2
		тос: 1044		feet d	letermined	Ъу <u>CAL</u>	<u>C 50</u>
		Hole Size:	11				
	511	Long String					
	4729	Size: <u>5 1/</u> 2	2″	Cemented	with	400	S.
		TOC: 1861		feet d	letermined	by CAL	C 80
-	TO SISO	Hole Size:	7	3/8		·	<u>u qu</u>
		Total Depth	: 51	50			
		Injection I	nterva	a]			
		4790		feet to	5150	fe	oot
		(perforated	or or	pen-hole, i	.ndicate w	hich)	
Tubing size	IONE lined with					set i	in a
N	IONE	packer at	(mate1 	cial)	fee	t.	
(brand & mod (or describe any	lel) v other casing-tubing	g seal).					
Other Data							
1 Name of the	injection formation	SAN A	NDRES				
				VINCTON (S			
2. Name of fiel	ta of Pool (it appire	(abie)		VINCION 15	AN ANDRES	WEST	
3. Is this a ne If no, for w	w well drilled for i what purpose was the	injection? well origina	NO 11y di	cilled? P	RODUCTION		
4. Has the well intervals ar used. NO	ever be perforated nd give plugging deta	in any other ail (sacks of	zone( cemer	(s)? List nt or bridg	all such ge plug(s)	perforat	:ed

#### **GREENHILL PETROLEUM CORPORATION** WEST LOVINGTON UNIT OPERATOR LEASE 5 660 FSL & 1980 FWL 17S 31 36E FOOTAGE LOCATION SEC. TOWNSHIP WELL NO. RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: <u>13 3/8</u> " Cemented with \_\_\_\_ 190 SX Hole size: <u>17</u> open hole $-13^{3/8}$ Completed 2/22/45 Intermediate Casing Size: <u>8 5/8</u> " Cemented with <u>150</u> SX TOC: 1478 feet determined by CALC 50% Hole Size: 11 1/2 -8% Long String Size: 5 1/2 "Cemented with 150 SX TOC: 3905 feet determined by CALC 80% -1772 Hole Size: \_\_\_\_7 7/8 TO SIYO Total Depth: <u>5140</u> Injection Interval feet to 5055 4784 feet (perforated or open-hole,) indicate which) Tubing size NONE lined with \_\_\_\_\_ \_\_\_\_\_ set in a --(material) \_\_\_\_\_ packer at \_ NONE --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 Is this a new well drilled for injection? NO 3. 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 4 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

INJECTION WELL DATA SHEET

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

### GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 32 660 FSL & 1980 FEL 17S 36E 5 SEC. WELL NO. FOOTAGE LOCATION 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: <u>17</u> openhole 1370 Intermediate Casing L 300' completed - 2/13/45 Size: 8 5/8 " Cemented with 200 SX TOC: <u>1364</u> feet determined by <u>CALC 50%</u> Hole Size: <u>11</u> 2000 Long String Size: <u>5 1/2</u> " Cemented with <u>200</u> SX TOC: 3241 feet determined by CALC 80% Hole Size: <u>7 3/8</u> 4700' 51/2 Total Depth: 5080 Injection Interval D 5080' 4700 feet to 5080 (perforated or open-hole, indicate which) feet Tubing size NONE lined with \_\_\_\_ \_\_\_\_\_ set in a (material) packer at \_\_\_\_ NONE feet. (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation \_\_\_\_\_ SAN ANDRES DOLOMITE Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 2. Is this a new well drilled for injection? NO 3. 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 4. 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 5. (pools) in this area.

#### INJECTION WELL DATA SHEET

u u	REENHILL P	WEST LOVINGTON UNIT							
	OPERATOR			LEAS	E				
	33	660 FSL & 660	FEL	5		17S	36E		
	WELL NO.	FOOTAGE LOCA	TION	SEC.		TOWNSHIP	RANGE		
L	EA COUNTY,	NEW MEXICO							
					<u>Tubu</u>	<u>lar Data</u>			
		]	Surfa	ce Casing					
			Sizai	13	,,	Comented	with	225	c
			<b>D120</b> .			C .	wittin		J
.n ho	ile	13 3/8	100:	JURFALE		Ieet	determined	by <u>LAL</u>	
pleter	1- 9/15/44		Hole	size:			<u></u>		
			Inter	<u>mediate C</u>	asin	Ig			
		L 8 5/8	Size:	8 5/8	//	Cemented	with	250	S
			TOC:	1327		feet	determined	by <u>CAL</u>	.C 5
			Hole	Size:	11				
		4675	Long	 String					
		To son	Ci ao i	5 1/2	"	Comontod		200	c
		5120.		_	Cemenceu	with	200		
			TOC:	3585		feet	determined	by <u>CAL</u>	<u>.C 8</u>
			Hole	Size:	7	7/8	<u></u>		
			Total	Depth:	<u> </u>	77			
			Injec	tion Inte	<u>rval</u>	-			
			(perf	4770 orated or	Ope	feet to	5077 indicate wl	fe nich)	et
Tub	ing size	NONE lined with						set i	n a
		NONE	acker	(ma at	teri.	.al)	fee	t.	
(07.	(brand & mo	odel)	602])						
		ly other tasing-tubing	sear)	•					
<u>Othe</u>	<u>r Data</u>								
1. 1	Name of the	e injection formation		SAN ANDR	<u>ES D</u>	OLOMITE	<u> </u>		
2. 1	Name of Fie	eld or Pool (If applic	able)		LOV	INGTON (	SAN ANDRES	) WEST	
3.	Is this a m If no, for	new well drilled for i what purpose was the	njecti well o	on? <u>NO</u> riginally	dri	lled?	PRODUCTION		
4. 1	Has the wel intervals a	ll ever be perforated and give plugging deta	in any il (sa	other zo cks of ce	ne(s ment	;)? List ; or brid	all such ge plug(s)	perforat	ed

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## INJECTION WELL DATA SHEET

GREENHILL PETRO	LEUM CORPORATI	ON	WEST LOVINGTON UNIT					
OPERATOR			LEASE					
34	660 FWL &	660 FSL	4	175	36E	·····		
WELL NO.	FOOTAGE	LOCATION	SEC.	TOWNSHIP	RANGE			
LEA COUNTY, NEW	MEXICO		<u></u>		<u></u>			
			<u>Tu</u>	ibular Data				
	111	Surfac	e Casing					
		Sizet	13 3/8 "	Comented r	ri +h	2E0 SX		
		5126,		Jemericed V	· · · · · · · · · · · · · · · · · · ·	<u>200</u>		
nhole	$  _{13}^{3/8}$	TOC:	SURFACE	feet de	etermined b	y <u>CALC</u>		
leted - 11/10/44		Hole s	ize:]	.7				
	85/8	Interm	ediate Cas	sing				
		Size:	8 5/8 ^	Cemented v	with	<u>150 </u> sx		
		TOC:	1470	feet de	etermined b	у <u>_CALC 50</u> 9		
		Hole S	ize:]	.1				
	- 51/2	Long S	tring					
	4688	Size:	5 1/2 4	Cemented a	vith	150 58		
ī	-D 5161		<u> </u>	ocmetriced i	· · · · · · · · · · · · · · · · · · ·	<u>150</u> 5X		
		100: _,	3612	ieet de	etermined b	y <u>LALL 80</u> 7		
		Hole S	ize:	7 3/8				
		Total 1	Depth: <u>5</u>	0161	<u> </u>			
		<u>Inject</u>	ion Interv	<u>val</u>				
			4773	feet to	5036	feet		
		(perfo	rated or (c	open-hole) in	ndicate whi	ch)		
Tubing size <u>NON</u>	E lined w	ith	(mate	rial)		set in a		
NON	E	packer a	t <u></u>		feet.			
(or describe any o	) ther casing-to	ubing seal).						
Other Data								
1 1 6 .1 .		. •						
1. Name of the in	jection format	tion	SAN ANDRES	DULUMITE				
2. Name of Field	or Pool (If a	pplicable)	<u> </u>	OVINGTON (SA	N ANDRES)	WEST		
3. Is this a new If no, for wha	well drilled : t purpose was	for injection the well or	n? <u>NO</u> iginally c	irilled? PR	ODUCTION			
4. Has the well e	ver be perfora give plugging	ated in any detail (sac	other zone ks of ceme	e(s)? List a ent or bridge	all such pe e plug(s)	rforated		
intervals and used. NO								

(pools) in this area.

GREENHILL PETR	OLEUM CORPORATION	WEST LOVINGTON_UNIT
38	660 FSL & 660	FWL 3 175 36E
WELL NO.	FOOTAGE LOCA	TION SEC. TOWNSHIP RANGE
LEA COUNTY, NE	W MEXICO	
		<u>Tubular Data</u>
		Surface Casing
		Size: 7 5/8 " Cemented with600 SX
		TOC: feet determined byCALC
sed hole	75/8	Hole size: 97/8
verted 9/21/60	1910	Intermediate Casing
125/69		Size: Cemented withSX
		TOC: feet determined by
		Hole Size:
		Long String
		Size: <u>4 1/2</u> " Cemented with <u>200</u> SX
		TOC: <u>3704</u> feet determined by
	11/6 5000	Hole Size: <u>6 3/4</u>
	-4/2 50/2	Total Depth: 5072
		Injection Interval
		4704 feet to 4774 feet (perforated or open-hole, indicate which)
Tubing size $2$	$\frac{3}{8''}$ lined with	IPC set in a
	F	(material) packer at 4650' feet.
(brand & mode (or describe any	1) other casing-tubing	g seal).
Other Data		
1. Name of the i	njection formation	SAN ANDRES DOLOMITE
2. Name of Field	or Pool (If applic	LOVINGTON (SAN ANDRES) WEST
3 Is this a new	well drilled for i	injection? NO
If no, for wh	at purpose was the	well originally drilled? PRODUCTION
4. Has the well intervals and used. NO	ever be perforated give plugging deta	in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)
5. Give the dept	h to and name of ar	ny overlying and/or underlying oil or gas zones
(pools) in th	is area.	
GRAYB	JRG - OVERLYING	

GREENHILL PETR		WEST	LOVINGTON U	INIT			
OPERATOR	OPERATOR						
<u> </u>	618 FWL & 660	FNL	7	17S	36E		
WELL NO.	FOOTAGE LOOM	ALION	SEC.	IUWNSHIF	KANGE		
LEA CUUNIY, NE	W MEXICU						
			Tu	<u>bular Data</u>			
		<u>Surface</u>	Casing				
		Size:_1	3 3/8 "	Cemented w	with	210	_sx
	$  _{-13^{3/8}}$	TOC:	SURFACE	feet de	etermined	by <u>CALC</u>	
in hole		Hole si	ze: <u>1</u>	.7 1/4			
verted to injection		Interme	diate Cas	ing			
8/63	85/8	Size:	<u>8 5/8</u> ″	Cemented	with	450	_sx
		TOC: <u>7</u>	37	feet d	etermined	Ъу <u>CALC</u>	50%
		Hole Si	ze: <u>1</u>	.1 .	<del></del>		
		<u>Long St</u>	ring				
		Size:	5 1/2 "	Cemented	with	450	_sx
	1140	тос: _1	.663	feet d	etermined	Ъу <u>CALC</u>	80%
<del></del>	Ц р 5130	Hole Si	ze:	6 3/4			
		Total D	epth: <u>5</u>	130			
		Injecti	<u>on Interv</u>	al			
		4 (perfor	ated or 6	feet to pen-hole, in	<u>5130</u> ndicate w	fee hich)	t
Tubing size 2	" lined with		IPC			set in	а
			(mate	rial)	£		
(brand & model	.)	packer at	4095		Iee	Γ.	
(or describe any o	ther casing-tubin	g seal).					
<u>Other Data</u>							
1. Name of the ir	jection formation	SA	N ANDRES	DOLOMITE	<u> </u>		
2. Name of Field	or Pool (If appli	cable) _	LO	VINGTON (SAM	N ANDRES)	WEST	
3. Is this a new If no, for what	well drilled for it purpose was the	injection well ori	? <u>NO</u> ginally d	rilled? PR(	DUCTION		
4. Has the well e intervals and used. NO	ever be perforated give plugging det	in any o ail (sack	ther zone s of ceme	(s)? List and or bridge	all such ; e plug(s)	perforate	d
5. Give the depth (pools) in thi	n to and name of a s area.	ny overly	ing and/o	r underlyin	g oil or	gas zones	

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# INJECTION WELL DATA SHEET

GREENHILL PET	ROLEUM CORPORATION	WEST LOVINGTON UNIT				
OPERATOR			LEADE			
41 WELL NO	660 FNL & 198	BO FEL	7	17S TOWNSHIP	<u>36E</u>	<u> </u>
WELL NO.	FUNEVIOO	ATION	510.	TOWNDINT	NEIOD	
LEA COUNTY, N	EW MEXICU					
			<u>Tul</u>	<u>bular Data</u>		
		Surface	Casing			
		Size: <u>13</u>	3/8_″	Cemented v	vith	<u>220</u> s
		TOC: SU	RFACE	feet de	etermined	by CALC
	133/8	Hole siz	e: 1	6		· _
en hole		Intermed	isto Cas	ing		
pleted - 5/26/45		Circl 0	E/0 "	Comented r	.i ←h	150 5
2/18/63	951-	51ze: <u>0</u>	5/6	Cemented	with	5
		TOC: <u>15</u>	05	feet de	etermined	Ъу <u>CALC 5</u>
		Hole Siz	e: <u>1</u>	1 1/2		
		<u>Long Str</u>	ing			
	51/2	Size: <u>5</u>	<u>1/2</u> ″	Cemented v	with	<u>200</u> s
	7115	тос: <u>28</u>	69	feet de	etermined	by <u>CALC 8</u>
	) 2 5155	Hole Siz	e:	7		
·		Total De	pth: <u>5</u>	155		
		Injectio	n Interv	<u>al</u>		
		Δ7	60	feet to	5155	feet
		(perfora	ted or @	pen-hole, in	ndicate w	hich)
Tubing sizeN	ONE lined with					set in a
N	ONE	packer at	(mate	rial)	fee	t.
(brand & mode	el)	1				
(or describe any	other casing-tubir	ig seal).				
<u>Other Data</u>						
1. Name of the	injection formatior	nSA	N ANDRES	DOLOMITE		
2. Name of Field	d or Pool (If appli	cable)	L	OVINGT <mark>ON (</mark> SA	N ANDRES	_west
3. Is this a new If no, for wh	w well drilled for hat purpose was the	injection? well orig	NO inally d	rilled? PF	RODUCTION	
4. Has the well intervals and	ever be perforated d give plugging det	l in any ot ail (sacks	her zone of ceme	(s)? List ant or bridge	all such ; e plug(s)	perforated
used. NO						

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

GRI	EENHILL PETRO	LEUM CORPORATION	WEST LOVINGTON UNIT				
<u> </u>	OPERATOR		LEASE			<u></u>	
	43	660 FNL & 660	FWL 8	17S	36E		
	WELL NO.	FOOTAGE LOCA	TION SEC.	TOWNSHIP	RANGE		
LEA	A COUNTY, NEW	MEXICO			· · · · · · · · · · · · · · · · · · ·		
			Tubu	<u>lar Data</u>			
			Surface Casing				
			Size: <u>13 3/8</u> "	Cemented wi	.th	<u>200</u> sx	
_			TOC: SURFACE	feet det	ermined b	y CIRC	
		133/8 2.19 200 SX Circ	Hole size: 16				
			Intermediate Casing	g			
		cmt ret 1865	Size: <u>8 5/8</u> "	Cemented wi	.th	<u>200</u> sx	
		50' cm+ plug	TOC: SURFACE	feet det	ermined b	y <u>CIRC</u>	
. 1			Hole Size:11	1/2			
completed 12/23/44			Long String				
PiA 6/76			Size: <u>5 1/2</u> "	Cemented wi	.th	<u>200</u> sx	
			TOC: <u>SURFACE</u>	feet det	ermined b	уР&А	
		mt. let 4252	Hole Size:7_				
		W 30' Cmt	Total Depth: _516	0	<u>.                                    </u>		
		5½ , 14#4721 200 sx	Injection Interval				
	, מד ,	5153	(perforated or open	feet to n-hole, ind	icate whi	feet ch)	
Tubin	g size	lined with				set in a	
		<del></del>	(materia	al)	foot		
(b	rand & model)	P			1eec.		
(or de	scribe any ot	her casing-tubing	seal).				
<u>Other</u>	<u>Data</u>						
1. Na	me of the inj	ection formation				<u> </u>	
2. Na	me of Field o	r Pool (If applic	able)				
3. Is If	this a new w no, for what	ell drilled for in purpose was the v	njection? well originally dri	lled?			
4. Ha in us	s the well ev tervals and g ed.	er be perforated ive plugging deta	In any other zone(s Il (sacks of cement	)? List al or bridge	l such pe plug(s)	rforated	
			<b>.</b>				

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

GREENH	ILL PETROLE	UM CORPORATIO	N	WEST	LOVINGTON U	NIT
OPEI	RATOR			LEASE		
4	5	660 FNL & 19	980 FEL	8	175	36E
WELI	L NO.	FOOTAGE LO	CATION	SEC.	TOWNSHIP	RANGE
LEA CO	UNTY, NEW M	EXICO				
				Tu	bular Data	
	L	1	Surface	Coning		
			Jullace	- Casing		
			Size:	.0 3/4 _"	Cemented v	with200
used hole			TOC: _	SURFACE	feet d	etermined by <u>CALC</u>
mpleted - 11	10/45	103/4	Hole si	.ze:1	3 3/4	
2/18/63	ection		Interme	ediate Cas	ing	
			Size:	7 5/8 _"	Cemented	with 650
		178	TOC: (	MT CIRC	feet d	etermined by CALC
				701	9 7/8	
			nore 51		5 770	
	L	- 512 5099	Long St	ring		
	TD	5100	Size:	5 1/2″	Cemented	with400
			тос: _(	MT CIRC	feet d	etermined by <u>CALC</u>
			Hole Si	ze:	6 3/4	
			Total I	)epth: <u>5</u>	100	
			Injecti	on Interv	<u>val</u>	
			Derfo	.730	feet to	5060 feet
	• <u> </u>		(portion		pon noro, 1	
Tubing s:	12e / 2	<u>s.                                    </u>	1 <u> </u>	PC(mate	rial)	set in
<b></b>	·		packer at	<u> </u>	L'	feet.
(brand) (or descr:	d & model) ibe any oth	er casing-tubi	ing seal).			
Other Date	- -					
1	=					
1. Name o	of the inje	ction formatio	on <u> </u>	IN ANDRES	DOLUMITE	<u></u>
2. Name o	of Field or	Pool (If app)	licable) _	L0	VINGTON (SAN	ANDRES) WEST
3. Is this If no	is a new we , for what	ll drilled for purpose was th	injection ne well ori	n? <u>NO</u> ginally d	Irilled? PR(	DUCTION
	ne well eve	r be perforate	ed in any o	ther zone	(s)? List	all such perforated

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

N UNIT
36E
P RANGE
: <u>a</u>
d with 210 S
determined by CALC
determined by <u>one</u>
ed with <u>600</u> S
determined by <u>CALC</u>
d with 100 s
4005
: determined by <u>CALC</u>
<u></u>
o <u>5100</u> feet indicate which)
set in a
feet.
·
(SAN ANDRES) WEST
PRODUCTION
t all such perforated dge plug(s)
Lis bri  rly

#### GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT LEASE OPERATOR 49 660 FNL & 1980 FEL 9 17S 36E SEC. TOWNSHIP WELL NO. FOOTAGE LOCATION RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 10 3/4 " Cemented with 160 SX TOC: SURFACE feet determined by <u>CALC</u> -103/4 cased hole completed - 1/20/45 Hole size: <u>13 3/4</u> onverted to injection Intermediate Casing 2/18/63 Size: 7 5/8 " Cemented with 550 SX -778 TOC: <u>CMT CIRC</u> feet determined by <u>CALC</u> Hole Size: <u>9 7/8</u> 5/2 5/62 Long String Size: 5 1/2 " Cemented with 400 SX TD 5162 TOC: <u>CMT CIRC</u> feet determined by <u>CIRC</u> Hole Size: <u>6 3/4</u> Total Depth: <u>5162</u> Injection Interval feet to <u>5141</u> feet (perforated) or open-hole, indicate which) NONE lined with Tubing size \_\_\_\_ set in a (material) NONE \_\_\_\_\_ packer at \_\_ -feet. (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation \_\_\_\_\_ SAN ANDRES DOLOMITE LOVINGTON (SAN ANDRES) WEST Name of Field or Pool (If applicable) 2. NO Is this a new well drilled for injection? 3. 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 4. 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. GRAYBURG - OVERLYING

#### INJECTION WELL DATA SHEET
<u> </u>	ENHILL PETRO PERATOR	LEUM CORPORATION	L	NEST_LO EASE	VINGTON UN	<u> </u>		
	51	1980 FNL & 189	6 FWL	7	175	36F		
W	ELL NO.	FOOTAGE LOCA	TION S	EC.	TOWNSHIP	RANGE		
LEA	COUNTY, NEW	MEXICO	——————————————————————————————————————	·····				<u> </u>
				<u>Tubı</u>	<u>ilar Data</u>			
		[]]	<u>Surface Cas</u>	ing				
			Size: <u>13 3/</u>	8_″	Cemented	with	200	sx
		133/8	TOC: _SURFA	CE	feet d	etermined	by <u>CALC</u>	·
			Hole size:	17	1/4			
open noi converted	e to intection		<u>Intermediat</u>	<u>e_Casir</u>	ng			
5/25/69		- 8 5/8	Size: <u>85/</u>	8″	Cemented	with	450	sx
completed	8/11/48		TOC: <u>519</u>		feet d	etermined	by <u>CALC</u>	; 50%
			Hole Size:	11				
		- 5%	Long String					
		4746	Size: <u>51/</u>	2″	Cemented	with	450	sx
	τρ		тос: <u>1520</u>		feet d	etermined	by <u>CALC</u>	: 80%
			Hole Size:	7	3/8		ı	
			Total Depth	: 509	)4			
			<u>Injection I</u>	nterval	L			
			4810		feet to	5094	fee	et
		۶,	(perforated	or ope	en-hole, i	ndicate wl	nich)	
Tubing	size 2	2.48" lined with _	······	IPC (materi	Lal)		set in	na
(br	and & model	p	acker at	4631 <b>'</b>		fee	t.	
(or des	cribe any o	ther casing-tubing	seal).					
<u>Other D</u>	ata							
1. Nam	e of the in	jection formation	SAN AI	NDRES D	OLOMITE	·		
2. Nam	e of Field	or Pool (If applic	able)	LOV	INGTON (SA	AN ANDRES)	WEST	
3. Is If	this a new no, for wha	well drilled for i t purpose was the	njection? _ well origina	NO 11y dri	Llled? P	RODUCTION		
4. Has int use	the well e ervals and d. NO	ver be perforated give plugging deta	in any other il (sacks of	zone(s cement	s)? List t or bridg	all such e plug(s)	perforate	∍d
5. Giv (po	e the depth ols) in thi	to and name of an s area.	y overlying	and/or	underlyin	g oil or	gas zone:	5

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OPERATOR LEASE $ \frac{52}{1980 \text{ FNL & 1980 FEL}} $ $ \frac{52}{1000 \text{ FOOTAGE LOCATION}} $ $ \frac{52}{1000 \text{ FOOTAGE LOCATION}} $ $ \frac{52}{1000 \text{ FOOTAGE LOCATION}} $ $ \frac{52}{500 \text{ SX C}} $ $ \frac{50}{500 \text{ SX C}} $ $ \frac{1000 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1000 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX C}}{100 \text{ SX C}} $ $ \frac{1100 \text{ SX X}}{100 \text{ SX X}} $ $ \frac{1100 \text{ SX X}}{100 \text{ SX X}} $ $ \frac{1100 \text{ SX X}}{100 \text{ SX X}} $ $ \frac{1100 \text{ SX X}}{100 \text{ SX X}} $ $ 1100 \text{$	GREENHI	LL PETROLE	UM CORPORATION	WEST LOVINGTON UNIT
521980 FNL & 1980 FEL717S36FWELL NO.FOOTAGE LOCATIONSEC. TOWNSHIP RANCELEA COUNTY, NEW MEXICOTubular DataSurface CasingSourf (colspan="2">Sourface CasingSourface CasingSourface CasingSourface CasingSourface CasingSourface CasingCont (chancer TOC: SURFCAE feet determined by CIRCCont (chancer TOC: SURFCAE feet determined by CIRCCont (chancer TOC: SURFACE feet determined by CIRCCont (cont (chancer Cosing)Size: 8 5/8 " Cemented with 450Cont (cont (chancer Cosing)Size: 8 5/8 " Cemented with 450Sourface CasingSize: 11 1000000000000000000000000000000000	OPER	ATOR		LEASE
WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing SO SK Crof Surf 1000 Size: 13 3/8 " Cemented with 250 Cont 1000 Size: 17 1/2 250 SK Intermediate Casing g 3% @WW/c 490 \$Size: 8 5/8 " Cemented with 450 TOC: SURFACE feet determined by CIRC 25% Crof Cut 25% Crof Cut	52	2	1980 FNL & 198	30 FEL 7 17S 36F
LEA COUNTY, NEW MEXICO         Tubular_Data         Surface Casing         30 5X Croft       Size: 13 3/8 " Cemented with250         Cont (etauner TOC: SURFCAE feet determined by CIRC         12.9"       Cont (etauner TOC: SURFCAE feet determined by CIRC         250 5x       Intermediate Casing $g 3%$ " @144/a 450 \$size: 8 5/8 " Cemented with450         TOC: SURFACE feet determined by CIRC         260 5x       Intermediate Casing $g 3%$ " @144/a 450 \$size: 11         260 5x       ToC: SURFACE feet determined by CIRC         260 5x       Intermediate Casing $g 3%$ " @144/a 450 \$size: 11       Iong String         5'2 Crof Cut       Size: 5 1/2 " Cemented with450         700: SURFACE feet determined by P&A       Hole Size: 11         100 Size: 5 1/2 " Cemented with450       ToC: SURFACE feet determined by P&A         110: Size: 5 1/2 " Cemented with512       Size: 5 1/2 " Cemented with65         25 5x croft plug       Total Depth: 5110       Injection Interval         375.3 - 4004       Total Depth: 5110       feet to6et to6et to6et to6et to6et to	WELL	. NO.	FOOTAGE LOCA	TION SEC. TOWNSHIP RANGE
Tubular Data         Surface Casing         30 5% Carry       Size: 13 3/8 " Cemented with250         Carry Clear Colspan="2">Carry Clear Too: SURFCAE feet determined by CIRC         2.30 5% Carry	LEA COU	INTY, NEW M	EXICO	
$\frac{Surface Casing}{Surf 100'}$ $\frac{30 \text{ sx } \text{ cm} \text{f}}{\text{surf } 100'}$ $\frac{30 \text{ sx } \text{ cm} \text{f}}{\text{surf } 100'}$ $\frac{30 \text{ sx } \text{ cm} \text{f}}{\text{surf } 100'}$ $\frac{30 \text{ sx } \text{ cm} \text{f}}{\text{surf } 100'}$ $\frac{313 3/8}{\text{s}} \frac{43''}{2249}$ $\frac{17 1/2}{2.50 \text{ sx}}$ $\frac{17 1/2}{1.20}$ $\frac{17 1/2}{2.50 \text{ sx}}$ $\frac{11 \text{ cmatrial}}{1.200 \text{ sx}}$ $\frac{11 \text{ cmatrial}}{1.200 \text{ sx}}$ $\frac{11 \text{ sx}}{1.200 \text{ sx}}$ $\frac{11 \text{ sx}}{1.20$				<u>Tubular Data</u>
$30 \text{ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$$				Surface Casing
$\frac{25}{13} \frac{25}{2} \frac{12}{2} $		· · · · · · · ·	30 SX CM+ SULFF 100'	Size: <u>13 3/8</u> "Cemented with <u>250</u>
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Cmt letainer	TOC:
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	$\geq$	L13 3/8 48"2 240	Hole size: 17 1/2
$S = \frac{8}{3} = \frac{4}{3} = \frac{4}{3} = \frac{4}{3} = \frac{11}{3} = \frac{11}$			250 SX	<u>Intermediate_Casing</u>
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			- 8 = 1/3" @1946 450	Size: 85/8 "Cemented with 450
A - 6/20/13I $5^{12}$ C:sq Cut 2695 pulled, $65$ sx Chit. plug $25^{14} - 2739$ Hole Size: 11 Long String Size: $5 \frac{1}{2}$ " Cemented with 45030 Sx cmt plug 1946 2048Size: $5 \frac{1}{2}$ " Cemented with 45030 Sx cmt plug 1946 2048TOC: SURFACE feet determined by P&A40 Cmt plug 3783 - 4004Hole Size: $77/8$ Total Depth: $5110$ 25 Sx cmt plug 3783 - 4004Total Depth: $5110$ (perforated or open-hole, indicate which)Tubing size2"2"lined with 1PC packer at 4265'5"100 4265'5"100 feet.	aleted . Linus			TOC: feet determined by
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	A - 6/20/13		51/2 C=59 Cut 2695 pulled, 65 SX	Hole Size: 11
Size: 5 1/2 " Cemented with 450 $Size: 5 1/2 " Cemented with 450$ $ToC: SURFACE feet determined by P&A$ $Size: 7 7/8$ $Size:$			me plug 2319-2179	Long String
TOC: SURFACE feet determined by P&A $1446 \cdot 2048$ TOC: SURFACE feet determined by P&A $25  54  (nnt \ plug) \\ 3783 - 4004$ Hole Size: 77/8 $702  788900$ $40^{\circ}$ (cmt 4380' $88900$ $40^{\circ}$ (cmt 4380' $5'/2$ " 4737 450 sxInjection Interval $1000  1000  100000  100000  100000  100000  100000  100000  100000  100000  1000000  10000 $		30	SX cont pluc	Size: <u>5 1/2</u> " Cemented with <u>450</u>
Hole Size: 7 7/8 Hole Size: 7 7/8 Hole Size: 7 7/8 Total Depth: 5110 Reference feet to fe			1946-2048	TOC: SURFACE feet determined by P&A
$\frac{3783 - 4004'}{\text{RBPW} 40' \text{Cm} 4380'}$ $\frac{3783 - 4004'}{\text{RBPW} 40' \text{Cm} 4380'}$ $\frac{1000}{5'2'' 4737 450 \text{ sx}}$ $\frac{1000}{\text{feet to}}$		<b></b> 25	sx cont plug	Hole Size: 7 7/8
S'/2" 4737 450 sx       Injection Interval        feet tofeet tofeet (perforated or open-hole, indicate which)       feet tofeet indicate which)         Tubing size1ined withpacker atfeet.       IPCset infeet.		RB RB	3783-4004 Par 40'cm 4380'	Total Depth: 5110
Image: Tubing size       2"       lined with       feet to			51/2" 4737 450 SX	Injection Interval
Tubing size 2" lined with IPC set in (material) packer at 4265' feet.		Junt		feet to feet to feet to
(material) packer atfeet.	Tubing si	ze 2"	lined with	IPC set in
packer at	5			(material)
(brand & model)	(brand	& model)	P	
	<u>Other Data</u>			
<u>Other_Data</u>	1 Name o	f the inie	ction formation	
Other Data	2			
Other Data 1. Name of the injection formation	Z. Name o	r Fleid or	rool (lt applic	able)
Other Data 1. Name of the injection formation 2. Name of Field or Pool (If applicable)	3. Is thi If no,	s a new wei for what p	ll drilled for i purpose was the	njection? well originally drilled?
Other Data         1. Name of the injection formation	4. Has th interv used.	e well eve: als and giv	r be perforated ve plugging deta	<pre>in any other zone(s)? List all such perforated il (sacks of cement or bridge plug(s)</pre>
Other Data         1. Name of the injection formation	<ul> <li>4. Has th interv used.</li> <li>5. Give t (pools</li> </ul>	e well even als and giv he depth to ) in this a	r be perforated ve plugging deta o and name of an area.	<pre>in any other zone(s)? List all such perf il (sacks of cement or bridge plug(s) </pre>

## GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 36E 53 660 FEL & 1980 FNL 7 17S FOOTAGE LOCATION SEC. TOWNSHIP WELL NO. RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: <u>13 3/8</u> " Cemented with <u>250</u> SX TOC: SURFACE feet determined by CALC Hole size: <u>17 1/4</u>\_\_\_\_ Intermediate Casing completed - 4/23/48 converted to injection Size: 8 5/8 " Cemented with 450 SX 5/26/69 TOC: 505 feet determined by CALC 50% Hole Size: <u>11</u> Long String Size: <u>5 1/2</u> "Cemented with <u>450</u> SX 4717 TOC: 2265 feet determined by CALC 80% TD SILD Hole Size: <u>7 7/8</u> Total Depth: <u>5110</u> Injection Interval 4750 (perforated or open-hole,) indicate which) Tubing size 2 3/8" lined with \_\_\_\_\_ IPC \_\_\_\_\_ set in a (material) packer at 4300' feet. (brand & model) (or describe any other casing-tubing seal).

### INJECTION WELL DATA SHEET

#### Other Data

1.	Name	of	the	injec	tion	formation		SAN AN	DRES	DOLOMITE			
2.	Name	of	Fiel	d or	Pool	(If applic	able)		L(	DVINGTON	(SAN	ANDRES)	WEST

- 3. Is this a new well drilled for injection? <u>NO</u> If no, for what purpose was the well originally drilled? <u>PRODUCTION</u>
- 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.

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GREENHILL PETRO	LEUM CORPORATION		WEST LC	OVINGTON UN	IT		
OPERATOR			LEASE				
54	660 FWL & 1980	FNL	8	<u>175</u>	36E		
WELL NO.	FOOTAGE LOCA	ATION	SEC.	TOWNSHIP	RANGE		
LEA COUNTY, NEW	MEXICO	<u> </u>					<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
			<u>Tub</u>	oular Data			
		<u>Surface Ca</u>	asing				
		Size: 13	3/8_″	Cemented w	vith	250	sx
		TOC: <u>SUR</u>	FACE	feet de	etermined	by <u>CAL</u>	.C
en hole	L 13 3/8	Hole size:	:1	7 1/4			
moleted - 2/19/48		Intermedia	ate Casi	ng			
<u>,</u>		Size: 8	5/8 ″	Cemented v	vith	400	SX
	L 85/8	TOC: 678		feet de	termined	by CAL	 C50%
		Hole Size:	· 1'	1		<u> </u>	
		Long Stri	ng	<b>*</b> <u></u> · · · <u>.</u>	<u></u>		
		Size: 5	1/2 "	Comented r	vith	150	C Y
	- 51/2		<u>+/-</u>	Jemeniced v	· · · · ·	450	<b>5</b>
	4730	100: <u>227</u>	8	feet de	etermined	by <u>CALU</u>	<u>, 80%</u>
T	0012 0	Hole Size:	:	7_7/8			
		Total Dept	th: $_{5}$	100	<del></del>		
		<u>Injection</u>	<u>Interva</u>	<u>11</u>			
		476 (perforate	0 ed or 6t	feet to	5100 dicate w	fe fe	et
Tubing size NONF	lined with					sot i	n e
		1 .	(mater	cial)		500 1	n a
(brand & model)	) F	packer at			tee	ε.	
or describe any o	ther casing-tubing	g seal).					
<u>ther Data</u>							
. Name of the in	jection formation	SAN	<u>ANDRES [</u>	DOLOMITE			
. Name of Field	or Pool (If applic	cable)	LOV	INGTON (SAI	N ANDRES)	WEST	. <u></u>
. Is this a new v If no, for what	well drilled for i t purpose was the	injection? well origin	NO nally dr	cilled? PR	DUCTION		
A. Has the well end intervals and used. NO	ver be perforated give plugging deta	in any othe ail (sacks o	er zone( of cemer	(s)? List and the second se	all such p e plug(s)	perforat	ed
5. Give the depth (pools) in this	to and name of an s area.	ny overlying	g and/or	underlying	g oil or	gas zone	S

PERATOR 55 ELL NO. COUNTY,	1980 FNL & S FOOTAGE LOG NEW MEXICO	1980 FWL CATION	LEASE 8	175	36E		
55 ELL NO. COUNTY,	1980 FNL & S FOOTAGE LOG NEW MEXICO	1980 FWL CATION	8	175	36E		
ELL NO. COUNTY,	FOOTAGE LOG	CATION	650				
COUNTY,	NEW MEXICO		510.	TOWNSHIP	RANGE		
						·	
			<u>T</u> 1	ubular Data			
		<u>Surface</u>	Casing				
		Size: <u>1</u>	3 3/8 ′	" Cemented w	with	250	sx
		TOC: S	URFACE	feet de	etermined	by CAL	.C
	133/8	Hole si	ze: 1	16			
		Interme	diste Car	sing	····		
4/22/45				<u>, ()</u>	1	000	6.17
		Size:	8 5/8	" Cemented w	with	200	SX
	25%	TOC: <u>1</u>	324	feet de	etermined	by <u>CAL</u>	<u>C 50%</u>
	L 8-18	Hole Si	ze:	1 1/2			
		<u>Long St</u>	ring				
		Size:	<u>5 1/2</u>	" Cemented	with	200	sx
		TOC: _2	884	feet d	etermined	by <u>CAL</u>	<u>C 807</u>
	- 51/2 4730	Hole Si	ze: <u>7</u>	7		•	
• .		Total D	epth: 5	5150			
	TO SISU	<u>Injecti</u>	on Inter	val	-		
		4 (perfor	775 ated or (	feet to	<u>5150</u> ndicate w	fe hich)	≥et
, size	$2^{7}/8"$ lined with	<u>.,</u>	IPC			set i	in a
		packer at	(mate 4636	erial) '	fee	t.	
and & mo	odel) ny other casing-tubi	ng seal).					
ata							
<u>aca</u>		c.r		DOLONITE			
e of the	injection formatio	n <u>SF</u>	AN ANDRES	DULUMITE		<u> </u>	<del></del>
e of Fie	eld or Pool (If appl	icable) _	L	<u>OVINGTON (SA</u>	N ANDRES)	WEST	
this a r no, for	new well drilled for what purpose was th	injection e well ori	? <u>NO</u> ginally (	drilled? PR	ODUCTION	· · · · · <u></u> ***	
the wel ervals a d. NO	l ever be perforate and give plugging de	d in any o tail (sack	ther zone s of ceme	e(s)? List ent or bridg	all such e plug(s)	perfora	:ed
	<pre>4/22/45 g size cand &amp; mo scribe ar Data ne of the ne of Fie this a r no, for s the wel tervals a ed. NO we the de</pre>	4/22/45 4/22/45 -5% 4730 -5% 4730 TD 5750 TD 5750 Scribe any other casing-tubi Data ne of the injection formatio ne of Field or Pool (If appl this a new well drilled for no, for what purpose was th s the well ever be perforate tervals and give plugging de ed. NO we the depth to and name of	$\frac{1}{1} \frac{1}{13} \frac{1}{10} $	4/22/45 $100: 300/1402$ $4/22/45$ Intermediate Gas $93/5$ Hole size: $100: 1324$ $100: 1324$ $g 5/5$ Hole Size: $100: 1324$ $100: 1324$ $g 5/5$ Hole Size: $100: 2884$ $100: 2884$ $-51/2$ $100: 2884$ $-100: 2884$ $100: 2884$ $-100: 2884$ $100: 2884$ $-100: 2884$ $100: 2884$ $-100: 2884$ $100: 2884$ $-100: 2884$ $100: 2884$ <td>4/21/45100. <math>300</math> ANDRES DOLOMITE Internation of the injection formation <math>SAN</math> ANDRES DOLOMITE no, for what purpose was the well originally drilled? PR<math>4/21/45</math>100. <math>300</math> Andrew for any overlying and/or underlyin NO<math>4/21/45</math>100. <math>300</math> Andrew for any overlying and/or underlyin<math>4/21/45</math>100. <math>300</math> Andrew for any overlying and/or underlyin</td> <td>4/22/43100. <math>30K/RE</math>Test determined<math>4/22/43</math>Hole size: <math>16</math><math>4/22/43</math>Intermediate CasingSize: <math>85/8</math> " Cemented with<math>5ize: 85/8</math> " Cemented with<math>5ize: 51/2</math> " Cemented with</td> <td><math>4/22/47</math>Intermediate <math>\frac{16}{3.3\%}</math>Intermediate <math>\frac{16}{200}</math><math>4/22/47</math>Intermediate <math>\frac{16}{200}</math><math>4/22/47</math>Size: <math>\frac{16}{3.5\%}</math> " Cemented with <math>200</math><math>5/2 \sqrt{3}</math>Hole Size: <math>\frac{111/2}{1.2}</math><math>1000</math> Size: <math>\frac{51/2}{2}</math> " Cemented with <math>200</math><math>700</math> Size: <math>\frac{51/2}{2}</math> " Cemented with <math>200</math><math>700</math> Size: <math>\frac{51/2}{2}</math> " Cemented with <math>200</math><math>700</math> Size: <math>\frac{7}{10}</math><math>700</math> Size: <math>\frac{7}{10}</math><math>700</math> Size: <math>\frac{7}{10}</math><math>700</math> Size: <math>\frac{7}{10}</math><math>700</math> Size: <math>\frac{27/8}{100}</math><math>700</math> Size: <math></math></td>	4/21/45100. $300$ ANDRES DOLOMITE Internation of the injection formation $SAN$ ANDRES DOLOMITE no, for what purpose was the well originally drilled? PR $4/21/45$ 100. $300$ Andrew for any overlying and/or underlyin NO $4/21/45$ 100. $300$ Andrew for any overlying and/or underlyin $4/21/45$ 100. $300$ Andrew for any overlying and/or underlyin $4/21/45$ 100. $300$ Andrew for any overlying and/or underlyin $4/21/45$ 100. $300$ Andrew for any overlying and/or underlyin $4/21/45$ 100. $300$ Andrew for any overlying and/or underlyin $4/21/45$ 100. $300$ Andrew for any overlying and/or underlyin $4/21/45$ 100. $300$ Andrew for any overlying and/or underlyin $4/21/45$ 100. $300$ Andrew for any overlying and/or underlyin	4/22/43100. $30K/RE$ Test determined $4/22/43$ Hole size: $16$ $4/22/43$ Intermediate CasingSize: $85/8$ " Cemented with $5ize: 85/8$ " Cemented with $5ize: 51/2$ " Cemented with	$4/22/47$ Intermediate $\frac{16}{3.3\%}$ Intermediate $\frac{16}{200}$ $4/22/47$ Intermediate $\frac{16}{200}$ $4/22/47$ Size: $\frac{16}{3.5\%}$ " Cemented with $200$ $5/2 \sqrt{3}$ Hole Size: $\frac{111/2}{1.2}$ $1000$ Size: $\frac{51/2}{2}$ " Cemented with $200$ $700$ Size: $\frac{51/2}{2}$ " Cemented with $200$ $700$ Size: $\frac{51/2}{2}$ " Cemented with $200$ $700$ Size: $\frac{7}{10}$ $700$ Size: $\frac{7}{10}$ $700$ Size: $\frac{7}{10}$ $700$ Size: $\frac{7}{10}$ $700$ Size: $\frac{27/8}{100}$ $700$ Size: $$

OPERATOR       LEASE         56       1980 FNL & 1980 FEL       8       175       36E         WELL NO.       FOOTAGE LOCATION       SEC.       TOWNSHIP       RANGE         LEA COUNTY, NEW MEXICO       Tubular Data         Surface Casing       Size: 10 3/4 " Cemented with213         A hole       Surface Casing         Size: 10 3/4 " Cemented with213         ToC:       SURFACE	GREENHILL PETH	COLEUM CORPORATION		WEST L	OVINGTON UN	IT	
56     1980 FNL & 1980 FEL     8     175     36E       WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE       LEA COUNTY, NEW MEXICO       Tubular Data       Surface Casing       Size: 10 3/4 Cemented with13       A comparison of the size: 13 3/4       Intermediate Casing       Size: 7 5/8 Cemented with       Official Comparison of the size: 13 3/4       Intermediate Casing       Too: SURFACE feet determined by CALC       Hole size: 13 3/4       Too: SURFACE feet determined by CALC       Hole size: 9 7/8       Intermediate Casing       Size: 5 1/2 Cemented with       Size: 5 1/2       Gene to determined by CALC       Hole Size: 9 7/8	OPERATOR			LEASE			
WELL NO.       FOOTAGE LOCATION       SEC.       TOWNSHIP       RANGE         LEA COUNTY, NEW MEXICO       Tubular Data       Surface Casing       Size: 10 3/4 " Cemented with13         d hold       Size: 10 3/4 " Cemented with13       Z13	56	1980 FNL & 1	980 FEL	8	175	36E	
LEA COUNTY, NEW MEXICO         Tubular Data         Surface Casing         Size: 10 3/4 Cemented with213         A TOC: SURFACE feet determined by CALC         Hole size:13 3/4         Intermediate Casing         Size:	WELL NO.	FOOTAGE LO	CATION	SEC.	TOWNSHIP	RANGE	· <u>- · · · · · · · · · · · · · · · · · ·</u>
Image: String Size: 10 3/4 Cemented with         Size: 10 3/4 Cemented with         Image: String Size:         Size: For the determined by CALC         Hole size:         Intermediate Casing         75%         Size:         Toc: CMT CIRC         Feet determined by CALC         Hole size:         Toc: CMT CIRC         Feet determined by CALC         Hole Size:         Size:         Size:         Size:         Gots         Toc: I363	LEA COUNTY, NE	W MEXICO			·····		
Surface Casing         Size: 10 3/4 ~ Cemented with				<u>Tu</u>	bular Data		
Size: $10 3/4$ " Cemented with213 ToC: SURFACEfeet determined by CALC Hole size:13 3/4 Intermediate Casing 75% Size: $7 5/8$ " Cemented with600 ToC: CMI CIRCfeet determined by CALC Hole Size:9 7/8 Long String Size: $5 1/2$ " Cemented with00 5% ToC: $1363$ feet determined by CALC Hole Size:6 3/4 Total Depth: $5055$ Injection Interval 4720feet to5050feet 4720feet tofeet 4720feet toset in set in set in set in set in feet. (performed & model)	1	11	<u>Surface</u>	Casing			
d hole pledicd - 3/14/145-			Size: <u>1</u>	0 3/4 ″	Cemented	with	213
d hole hole size: <u>13 3/4</u> Intermediate Casing Size: <u>7 5/8</u> "Cemented with <u>600</u> TOC: <u>CMT CIRC</u> feet determined by <u>CALC</u> Hole Size: <u>9 7/8</u> Long String Size: <u>5 1/2</u> "Cemented with <u>400</u> $5^{1/2}$ 5055 TOC: <u>1363</u> feet determined by <u>CALC</u> Hole Size: <u>6 3/4</u> Total Depth: <u>5055</u> Injection Interval <u>4720</u> feet to <u>5050</u> feet (perforated) or open-hole, indicate which) Tubing size <u>NONE</u> lined with <u></u> set in <u>(material)</u> packer at <u></u> feet.		L10 3/4	TOC: <u>S</u>	URFACE	feet d	etermined	Ъу <u>CALC</u>
pleded. 3/14/45-       Intermediate Casing         7%       Size: 75/8 " Cemented with         Size: 75/8 " Cemented with       600         TOC: CMI CIRC       feet determined by CALC         Hole Size: 97/8          Long String       Size: 51/2 " Cemented with         5%       TOC: 1363	d hole		Hole si	.ze: <u>1</u>	3 3/4		
Image: 1 75%       Size: 7 5/8 " Cemented with600         TOC: CMI CIRCfeet determined by CALC         Hole Size: 9 7/8         Long String         Size: 5 1/2 " Cemented with00 $5^{1/2}$ 50:55         TOC: 1363feet determined by CALC         Hole Size: 6 3/4         Hole Size: 6 3/4         Total Depth: 5055         Injection Interval $4720$ feet to 5050         Injection Interval $4720$ feet to 5050         Injection Interval $4720$ feet to 5050	oleded - 3/14/45		Interme	diate Cas	ing		
$TOC: \underline{CMT CIRC} feet determined by \underline{CALC}$ $Hole Size: \underline{97/8}$ $Long String$ $Size: \underline{51/2}$ Cemented with <u>400</u> $5\%_{1} \ 50\%_{5}$ $TOC: \underline{1363} feet determined by \underline{CALC}$ $Hole Size: \underline{63/4}$ $Total Depth: \underline{5055}$ $Injection Interval$ $\underline{4720} feet to \underline{5050} feet$ $Injection Interval$ $\underline{4720} feet to \underline{5050} feet$ $Injection Interval$ $\underline{4720} feet to \underline{5050} feet$ $Injection Interval$ $\underline{63/4} feet$ $\underline{700} feet$ $Injection Interval$ $\underline{700} feet$ $\underline{700}$		L 75/8	Size:	7 5/8 ″	Cemented	with	600
Hole Size: 9 7/8 Long String Size: 5 1/2 " Cemented with 400 5% 5055 TOC: 1363 feet determined by CALC Hole Size: 6 3/4 Total Depth: 5055 Injection Interval 4720 feet to 5050 feet 4720 feet to 5050 feet 4720 feet to 5050 feet 4720 feet to 5050 feet 10 feet feet to 5050 feet 10 feet feet feet feet feet feet feet fee			TOC: <u>C</u>	MT CIRC	feet d	etermined	by <u>CALC</u>
Long String         Size: $5 \frac{1}{2}$ " Cemented with400 $5^{1}/_{1}$ 5055         TOC: 1363       feet determined by CALC         Hole Size:6 3/4         Total Depth: 5055         Injection Interval $4720$ feet to5050         feet determined by CALC         Will be size:6 3/4         Total Depth: 5055         Injection Interval $4720$ feet to6550         feet determined by call         (perforated) or open-hole, indicate which)         Tubing size NONE       lined with set in			Hole Si	.ze:	9 7/8		
Size: $5 \frac{1}{2}$ " Cemented with 400 $5\frac{1}{1} \frac{5055}{55}$ ToC: $1363$ feet determined by <u>CALC</u> Hole Size: <u>6 3/4</u> Total Depth: <u>5055</u> Injection Interval <u>4720</u> feet to <u>5050</u> feet <u>to perforated</u> or open-hole, indicate which) Tubing size <u>NONE</u> lined with set in <u>(material)</u> set in <u>(material)</u> feet. (brand & model) (or describe any other casing-tubing seal).			Long St	ring			
L 5½ 5055       TOC: 1363feet determined by CALC         Hole Size:       6 3/4         Total Depth:       5055         Injection Interval          4720			Size:	<u>5 1/2 </u> "	Cemented	with	400
Hole Size: <u>6 3/4</u> Total Depth: <u>5055</u> <u>Injection Interval</u> <u>4720</u> feet to <u>5050</u> feet <u>(perforated)or open-hole, indicate which)</u> <u>Tubing size NONE</u> lined with <u></u> set in <u>(material)</u> <u>NONE</u> packer at <u></u> feet. <u>(brand &amp; model)</u> (or describe any other casing-tubing seal).	L	51/2 5055	TOC: <u>1</u>	363	feet d	etermined	by <u>CALC</u>
Total Depth: 5055         Injection Interval         4720       feet to 5050       feet         feet to set in         (perforated or open-hole, indicate which)         Tubing size NONE       lined with			Hole Si	.ze:	6 3/4		·
Injection Interval         Injection Interval         4720 feet to 5050 feet         (perforated or open-hole, indicate which)         Tubing size NONE lined with			Total D	)epth: <u>5</u>	055	·····-	
4720       feet tofeet			<u>Injecti</u>	on Interv	<u>val</u>		
Tubing size <u>NONE</u> lined with <u></u> set in (material) <u>NONE</u> packer at <u></u> feet. (brand & model) (or describe any other casing-tubing seal).			4 (perfor	720 ated or o	feet to pen-hole, i	<u> </u>	fee hich)
(material) <u>NONE</u> packer atfeet. (brand & model) (or describe any other casing-tubing seal).	Tubing size <u>NO</u>	<u>VE</u> lined with					set in
(brand & model) (or describe any other casing-tubing seal).	NOI	NE	packer at		rial)	fee	t.
	(brand & mode	1) other casing-tubi	ng seal)				
	<u>Other Data</u>						
<u>Other Data</u>	1. Name of the i	njection formatio	nSA	N ANDRES	DOLOMITE		
Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE	2. Name of Field	i or Pool (If appl	icable) _	L(	VINGTON (SA	N ANDRES)	WEST
Other Data         1. Name of the injection formation	3. Is this a new If no, for wh	v well drilled for Mat purpose was th	injectior well ori	n? <u>NO</u> ginally d	Irilled? PR	ODUCTION	
Other Data         1. Name of the injection formation	4. Has the well	ever be perforate	d in any c tail (sack	ther zone	(s)? List	all such e plug(s)	perforate
Other Data         1. Name of the injection formation	used. NO	i give plugging de		.5 OI COMO		- r6(-/	

GREENHILL PETR	OLEUM CORPORATION	WEST LOVINGTON UNIT	<del> </del>
OT ERATOR			
WELL NO.	FOOTAGE LOCA	9 FEL 8 1/5 36E ATION SEC. TOWNSHIP RANGE	
LEA COUNTY, NEI	W MEXICO		
		Tubular Data	
		Surface Contra	4
		$\frac{5411400}{75}$	
		Size: / 5/0 " Gemented with	S
	L 7 5/8 360	TOC: <u>UMI LIRL</u> feet determined by _	CALC
d hole		Hole size: <u>11</u>	
pierea · 12/11/66		Intermediate Casing	
		Size: " Cemented with	S
		TOC: feet determined by _	
		Hole Size:	
		Long String	
		Size: <u>4 1/2</u> "Cemented with <u>650</u>	S
		TOC: <u>676</u> feet determined by _	CALC 8
		Hole Size: 6 3/4	
	4% 500	Total Depth: 5120	
		Injection Interval	
		4682 feet to 5028	feet
		(perforated or open-hole, indicate which)	reet
Tubing size <u>NO</u>	NE lined with	se	t in a
NO	<u>NE</u> 1	(material) packer atfeet.	
(brand & mode (or describe any	1) other casing-tubing	g seal).	
Other Data			
1 Name of the i	niection formation	SAN ANDRES DOLOMITE	
2. Name of Fleid	or Pool (II appilo	Cable)LOVINGION (SAN ANDRES) WES	1
<ol><li>Is this a new If no, for wh</li></ol>	well drilled for i at purpose was the	Injection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>	
4. Has the well intervals and used. NO	ever be perforated give plugging deta	in any other zone(s)? List all such perfo ail (sacks of cement or bridge plug(s)	rated
used. NO 5. Give the dept (pools) in th	h to and name of an is area.	ny overlying and/or underlying oil or gas z	ones

	REENHILL PETROL	EUM CORPORATION	····	WEST LO	<u>OVINGTON_UN</u>			
	OPERATOR			LEASE				
	59 NELL NO	1980 FSL & 660	FEL	7	17S	36E		
	WELL NO.	FOOTAGE LOCA		BEC.	TOWNSHILL	RANGE		
L	EA COUNTY, NEW	<u>MEXICO</u>		<u> </u>			· · · · · · · · · · · · · · · · · · ·	·····
				<u>Tub</u>	ular Data			
			<u>Surface C</u>	asing				
			Size: 10	3/4 "	Cemented w	vith	275	sx
			TOC: SUR	FACE	feet de	etermined	by CAI	С
ed ho	le	103/4	Hole size	: 15				<u> </u>
pleter	d 12/13/48		Intermedi	ate Casi	ng	<del>-</del> *		
			Size: 7	5/8 ″	Cemented v	vith	650	SX
			TOC: CMT	CIRC	feet de	etermined	by CAL	C
		- '/ <sup>5</sup> /8	Hole Size	: 9	7/8			
			Long Stri	ng				
			Size: 5	1/2 ″	Cemented v	with	650	SX
			TOC: CMT	CIRC	feet de	etermined	by CAL	 C
		L 51/2 5110 TO 5110	Hole Size	: 6	3/4		·	¥
			Total Dep	th: <u>51</u>	10			
			<u>Injection</u>	Interva	1			
			502 (perforat	) ed or op	feet to en-hole, in	<u>5106</u> ndicate wl	fe	eet
Tub	ing size <u>NONE</u>	lined with _					set i	n a
	NONE	D	acker at	(mater	ial)	fee	F.	
	(brand & model)		1					
(or d	describe any oth	her casing-tubing	seal).					
<u>Othe</u>	<u>r Data</u>							
1. 1	Name of the inj	ection formation	SAN	ANDRES I	DOLOMITE			
2. 1	Name of Field o	r Pool (If applic	able)	LOY	VINGTON (SA	N ANDRES)	WEST	·
<b>3.</b>	Is this a new we If no, for what	ell drilled for in purpose was the v	njection? well origi	<u>NO</u> nally dr	illed? PR	ODUCTION		·
	Has the well evo	er be perforated :	in any oth	er zone(	s)? List a	all such j	perforat	ed
4. I	intervals and g	ive plugging deta:	LI (SACKS	or cemen	it or bridge	e plug(s)		

# INJECTION WELL DATA SHEET

(pools) in this area.

GRAYBURG - OVERLYING

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GREENHILL PEIRUL	EUM CORPORATION	WEST	<u>LOVINGTON_UN</u>	<u>IT</u>		
OPERATOR		LEASE	1			
60	660 FWL & 1980	FSL 8	17S	36E		
WELL NO.	FOOTAGE LOCA	ATION SEC.	TOWNSHIP	RANGE		
LEA COUNTY, NEW	MEXICO			·····	····	
		T	<u>ubular Data</u>			
	] [	<u>Surface Casing</u>				
		Size: 10 3/4	" Cemented w	with	250	SX
		TOC: SURFACE	feet de	etermined	by CAL	_C
	L 10 <sup>3</sup> /4	Hole size:	15		•	
mpleted = 6/1148		Intermediate Ca	ising			
nverted to injection		Size: 7 5/8	" Cemented w	with	960	SX
¢/10/63	-75/8	TOC: CMT CIRC	- feet de	etermined	by CAI	
		Hole Size:	9 7/8		J	
		Long String				
	Tubular Data         Surface Casing         Size: 10 3/4 Cemented with	witth	1000	CV		
		512e. <u>5172</u>	Cemented (	• • • • • • • • • • • • •	1000	07
		IOC: <u>UMI CIRC</u>		etermined	by <u>LAL</u>	<u>_L</u>
	1 51/2 4732	Hole Size:	6 3/4	<u> </u>		
	4" lines	Total Depth: _	5099	<u> </u>		
	4706-5099	Injection Inter	<u>rval</u>			
	TO 5099	5048 (perforated or	feet to open-hole, in	<u> </u>	fe hich)	eet
Tubing size	)" lined with	ipc			set i	in a
		(mat 	cerial) 4660	fee	t.	
(brand & model)	her casing-tuhin	o seal).				
		6, .				
<u>other baca</u>						
1. Name of the inj	ection formation	SAN ANDRE	<u>S DOLOMITE</u>			
2. Name of Field of	r Pool (If appli	cable)	LOVINGTON (SA	ANDRES	WEST	
3. Is this a new way If no, for what	ell drilled for purpose was the	injection? <u>NO</u> well originally	drilled? PR	RODUCTION		
4. Has the well ev intervals and g used.	er be perforated ive plugging det	in any other zor ail (sacks of cen	ne(s)? List a ment or bridge	all such e plug(s)	perforat	ced
NU						

GREENHILL PETH	ROLEUM CORPORATION		WEST L	OVINGTON UN	IT		
OPERATOR	GREENHILL PETROLEUM CORPORATION       WEST LOVINGTON UNIT         OPERATOR       LEASE         62       2970 FNL & 2310 FEL       8       17S       36E         WELL NO.       FOOTAGE LOCATION       SEC.       TOWNSHIP       RANGE         LEA COUNTY, NEW MEXICO       Tubular Data         Surface Casing       Size: 13 3/8 Cemented with 250         TOC:       SURFACE feet determined by _C						
62							
GREENHILL PETROLEUM CORPORATION       WEST LOVINGTON UNIT         OPERATOR       LEASE         62       2970 FNL & 2310 FEL       8       175       36E         WELL NO.       FOOTAGE LOCATION       SEC. TOWNSHIP RANGE         LEA COUNTY, NEW MEXICO       Tubular Data         Surface Casing       Size: 13 3/8 " Cemented with250         TOC:       SURFACE							
	GREENHIL PETROLEUM CORPORATION     MEST LOVINGTON UNIT       OPERATOR     LEASE       62     2970 FNL & 2310 FEL     8     175     36E       WELL NO.     FOOTAGE LOCATION     SEC.     TOWNSHIP     RANGE       LEA COUNTY, NEW MEXICO     Tubular Data       Surface Casing     Size: 13 3/8 " Cemented with250       TOC:     SURFACE     feet determined by C       TOC:     SURFACE     feet determined by C       TOC:     13 %     Hole size: 17       Intermediate Casing     Size: 8 5/8 " Cemented with       Size:     100     feet determined by C       TOC:     1500     feet determined by C       TOC:     3585     feet determined by C       TOC:     100     feet determined by C       TOC:     3585     feet determined by C       TOC:     3585     feet determined by C       TOC:     3585     feet to						
		Surface	Casing				
		Sizo: 13	3/8 "	Composted	at th	250	C.
		512e. <u>15</u>	5/0	Cemented	wittin	2.50	3,
		TOC: <u>50</u>	RFACE	feet d	etermined	by <u>CAL</u>	<u>.C</u>
WELL NO.       FOOTAGE LOCATION       SEC.       TOWNSHIP         LEA COUNTY, NEW MEXICO       Tubular Data         Surface Casing       Size: 13 3/8 " Cemented with         Sopen hole       Surface Casing         .ompleted 1/9/49       Size: 17         .ompleted 1/9/49       Intermediate Casing         sourted to injection       Size: 8 5/8 " Cemented with         .ompleted 1/9/49       Intermediate Casing         .ompleted 1/9/49       Size: 11         .ompleted 1/9/47       Hole Size: 11         .ompleted 2/9       Feet det         .ompleted 2/9       Intermediate Casing         .ompleted 2/9       Size: 5 1/2         .ompleted 2/9       Cemented with         .ompleted 2/9       Size: - 7 3/4         .ompleted 2/9       Interteal         .ompleted 2/9       Intection Interval         .omp							
pleted 1/9/49	REFERENCE       WEST LOVINGTON UNIT         OPERATOR       LEASE         62       2970 FNL & 2310 FEL       8       175       36E         WELL NO.       FOOTAGE LOCATION       SEC.       TOWNSHIP       RANGE         EA COUNTY, NEW MEXICO       Itabular Data         (c       Surface Casing       Size: 13 3/8 " Gemented with       250         (c       Intermediate Casing       ToC: SURFACE       feet determined by CALC         (c						
erted to injection		Size: <u>8</u>	5/8_″	Cemented	INGTON UNIT 17S 36E TOWNSHIP RANGE Lar Data Cemented with250SX feet determined by CALC G Cemented with150SX feet determined by CALC 50%  Cemented with0SX feet determined by CALC 80% 3/4 feet toS80feet n-hole indicate which) set in a al)feet.		
		LEASE 2970 FNL & 2310 FEL 8 175 36E FOOTAGE LOCATION SEC. TOWNSHIP RANGE XICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with					
	L 85/8	Hole Siz	e: 11	SE         17S       36E         TOWNSHIP       RANGE         Tubular Data         Ig         Cemented with       250         feet determined by CALC         feet determined by CALC 50%         feet determined by CALC 50%         feet determined by CALC 80%         feet determined by CALC 80%         feet determined by CALC 80%         feet to 5080         feet to 5080         feet to 5080         feet.         feet.         feet.         feet.         feet.         Set in a         material)         Y6 Y0         feet.         Set in a         material)         Y6 Y0         feet.			
		long Str					
		Long SCL					
		Size: <u>5</u>	_1/2″	Cemented	with	200	S
		TOC: <u>358</u>	35	feet d	etermined	by <u>CAL</u>	<u>C 8(</u>
	-52 4747	Hole Siz	e:7	3/4			
		Total De	pth: <u>5(</u>	080			
-		<u>Injectio</u>	<u>n Interva</u>	<u>al</u>			
	TD SOBU	47	70	feet to	5080	fe	et
		(perfora	ted or of	pen-hole in	ndicate w	hich)	
Tubing size	$3\frac{3}{8}$ lined with					set i	ln a
		packer at	(mate) 464	rial) 0	fee	t.	
(brand & mode (or describe any	1) other casing-tubin	g seal).					
		0 , -					
<u>Uther Data</u>							
1. Name of the i	njection formation	SAN	LANDRES	DOLOMITE			
2. Name of Field	or Pool (If appli	cable)		VINGTON (SA	N ANDRES)	WEST	
3. Is this a new If no, for wh	well drilled for at purpose was the	injection? well orig	<u>_NO</u>	rilled? <u>PR</u>	ODUCTION		
4. Has the well intervals and used. NO	ever be perforated give plugging det	in any ot ail (sacks	her zone of cemen	(s)? List nt or bridg	all such e plug(s)	perforat	ed

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## INJECTION WELL DATA SHEET

**GREENHILL PETROLEUM CORPORATION** WEST LOVINGTON UNIT OPERATOR LEASE 63 PA 660 FNL & 560 FWL 8 17S 36E WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data Cmt. plug 0-12 日本などの民族の行動 Surface Casing Size: 13 3/8 "Cemented with 450 SX TOC: SURFACE feet determined by CIRC 350' Hole size: <u>17</u> 1/2" Intermediate Casing Size: 8 5/8 " Cemented with 1300 SX PiA - 9/24/80 TOC: SURFACE feet determined by CIRC Cmt plug 1900'-1994' Hole Size: 12 1/4 1950' Long String Cm+ plug 2927-3180' Size: 4 1/2 " Cemented with 560 SX イン 10.5 # 3167-5138 TOC: SURFACE \_\_\_\_\_ feet determined by <u>PA</u>\_\_\_\_\_ Hole Size: \_\_\_\_7 7/8"\_\_\_\_\_ Total Depth: <u>5150</u> Injection Interval feet to feet (perforated or open-hole, indicate which) Tubing size \_\_\_\_\_ lined with \_\_\_\_\_ \_\_\_\_\_ set in a (material) feet. \_\_\_\_\_ packer at \_\_\_ (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) Is this a new well drilled for injection? 3. 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 4. 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

GI	REENHILL P	ETROLEUM CORPORATION		WEST LO	DVINGTON UN	NIT.	<del></del>	
	64	2080 FNI & 989	I FIAL	8	170	265		
<u></u>	WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	<u> </u>		
L	EA COUNTY,	NEW MEXICO						
				Tub	ular Data			
			Surface Ca	using				
			<u></u>		Compated	••f +h	700	οv
			5120: <u>20</u>	CIPC	Cemented		1	5X
				2/	Ieet a	ecermined	by <u>CAL</u>	
te spud	ded . 6/2/83	- 20"	Hole size:		<u>+</u>			
comple	ted - 6/9/88		Intermedia	ite Casi	ng			
			Size: 13 3	3/8″	Cemented	with	2200	sx
		- 13 3/0 "	TOC: <u>CMT</u>	CIRC	feet d	etermined	by <u>CAL</u>	.C
			Hole Size:	17	7 1/4			
			Long Strin	Ig				
			Size: 8	5/8_″	Cemented	with	2050	sx
		- 8 - 8 - 8 - 5200	тос: 1300	)	feet d	etermined	by Temp	. Su
		3.5 SX 6000-610	OHole Size:	12	2 1/4		, ,	
		4050-6250	Total Dept	:h: 95	500			
			Injection	Interva	1			
		TD 9500			£	5027	<b>F</b> -	
		1200	perforate	dor op	en-hole, i	ndicate w	hich)	ec
Tubi	ng size	NONE lined with					set i	n_a
		NONE P	acker at	(mater	ial)	fee	t.	
(or d	brand & mo lescribe an	odel) v other casing-tubing	seal).					
Other	Data							
<u>ocner</u>			CAN		DOLONITE			
1. N	ame of the	injection formation	SAN	ANDRES	DULUMITE			
2. N	ame of Fie	eld or Pool (If applic	able)	LO	VINGTON (S.	AN ANDRES	) WEST	
3. I I	s this a n f no, for	new well drilled for i what purpose was the	njection? well origir	NO ally dr	illed? P	RODUCTION		
4. H	as the wel	.1 ever be perforated	in any othe	er zone(	s)? List	all such	perforat	ed
1 u	sed.	and give prugging deta	II (SACKS C	er cemen	ie or bridg	e prug(s)		
	NU							

GREENHILL PET		WEST L	OVINGTON UN	IT		
OPERATOR			LEASE			
65	2610 FWL & 13	30 FSL	4	175	36E	······
WELL NO.	FOOTAGE LOCA	ATION	SEC.	TOWNSHIP	RANGE	
LEA COUNTY, N	EW MEXICO				······	
			<u>Tu</u>	<u>bular Data</u>		
		<u>Surface</u> (	Casing			
		Size: <u>13</u>	3/8_″	Cemented w	with	<u>450</u> sx
		TOC: <u>SU</u>	RFACE	feet de	etermined	Ъу <u>CALC</u>
	133/8	Hole siz	e: <u>1</u>	.7 1/2	<u>.</u>	
ased hole		Intermed	iate Cas	ing		
		Size: <u>8</u>	<u>   5/8    </u> ″	Cemented w	with	<u>375</u> SX
	1_ 85/8	тос: <u>10</u>	10	feet de	etermined	by <u>CALC 50</u>
		Hole Siz	e: <u>1</u>	2 1/2		
		<u>Long Str</u>	ing			
		Size: <u>5</u>	1/2_″	Cemented v	with	<u>770</u> sx
	5 1/2 - 5217	тос: <u>10</u>	22	feet d	etermined	Ъу <u>CALC 80</u>
-		Hole Siz	e:	7 7/8		·
		Total De	pth: <u>5</u>	230		
		Injectio	<u>n Interv</u>	al		
		47 (perfora	06 ted or o	feet to pen-hole, in		feet nich)
Tubing sizeN(	NE lined with					set in a
NC	INF	nacker at	(mate	rial)	fee	F
(brand & mode	91)	1				~ •
(or describe any	other casing-tubin	g seal).				
<u>Other Data</u>						
1. Name of the i	injection formation	SAN	ANDRES	DOLOMITE		
2. Name of Field	i or Pool (If appli	cable)	L(	OVINGTON (SA	AN ANDRES)	WEST
3. Is this a new If no, for wh	v well drilled for nat purpose was the	injection? well orig	<u>NO</u> inally d	rilled? PF	RODUCTION	
4. Has the well intervals and used. NO	ever be perforated I give plugging det	in any ot ail (sacks	her zone of ceme	(s)? List nt or bridg	all such p e plug(s)	perforated

<u>GRAYBURG - OVERLYING</u>

OPERATOR		LEASE
OT BARIOK		
00 WELL NO.	135 FSL & 1300 FE FOOTAGE LOCATION	L 5 1/S 36E SEC. TOWNSHIP RANGE
LEA COUNTY . NEW	MEXICO	
		Tubular Data
		<u>face Casing</u>
	Size	e: <u>13 3/8</u> " Cemented with <u>450</u> SX
	TOC	: <u>SURFACE</u> feet determined by <u>CALC</u>
	-13 <sup>3</sup> /8 но1е	e size: <u>17 1/2</u>
pleted - 2/23/90	Inte	ermediate Casing
	Size	e: <u>8 5/8</u> "Cemented with <u>380</u> SX
	TOC	: <u>937</u> feet determined by <u>CALC 50%</u>
	Hold	e Size:12 1/4
	Lon	g String
	Siz	e: 5 1/2 " Cemented with 1275 SX
	тос	· CMT CIPC feet determined by CALC
	-5½	· CHI CINC ICCC determined by <u>LATE</u>
	5220 HOTO	e Size:/ //8
	Total	al Depth: <u>5230</u>
	Inje	<u>ection Interval</u>
	Ge	4709 feet to 5062 feet rforated or open-hole, indicate which)
ubing size <u>NONE</u>	lined with	set in a
NONE	packe:	(material) r atfeet.
(brand & model) r describe any ot	her casing-tubing sea	1).
her Data		
<u>nor baca</u>		
Name of the inj	ection formation	SAN ANDRES DOLOMITE
Name of Field o	or Pool (If applicable	) LOVINGTON (SAN ANDRES) WEST
Is this a new w If no, for what	ell drilled for injec purpose was the well	tion? <u>NO</u> originally drilled? <u>PRODUCTION</u>
Has the well ev	ver be perforated in a give plugging detail (	ny other zone(s)? List all such perforated sacks of cement or bridge plug(s)

Humble Oil &	Humble Oil & Refining Company		N. M. State "R"				
OPERATOR			LEASE				
#1	600 FNL	& 660 FEL	9	T175	R36E		
WELL NO.	FOOTAGE	LOCATION	SEC.	TOWNSHIP	RANGE	·	
	<u> </u>		 Tu	ibular Data			
مربع می موجود از مربع ا		<u>Surface</u>	Casing				
<u>in their a</u>		Size:	10 <sup>3</sup> /4 "	Cemented v	vith 210	SX	
5054	cut 1291	TOC:	Surface	feet de	etermined by	calc	
300' to 150	L-29.3' 10 3/4	Hole si	ze:	13 3/4			
		Interme	<u>diate Cas</u>	sing			
5/14/45		Size:	<u>7<sup>5</sup>/8</u> ″	Cemented v	with600_	SΣ	
	51	TOC:	circulat	ed <b>feet d</b>	etermined by	calc	
2000-1800 - E.E.E.	1 78	Hole Si	ze:	9 <sup>7</sup> /8			
	-	Long St	ring				
		Size:	<u>5<sup>1</sup>/2</u> "	Cemented v	with400	S	
		TOC:	588' eireulat	<u>ed</u> feet de	etermined by	<u>calc</u>	
35 sx 4785 - 4499	· .	Hole Si	ze:	6 <sup>3</sup> /4		•	
	-51/2	Total D	epth:	5115			
TD 5115		Injecti	on Interv	val			
		(perfor	ated or c	feet to open-hole, in	ndicate which	_ feet )	
Tubing size	lined w:	Lth			S	et in a	
		packer at	(mate	erial)	feet.		
(brand & model	)	P = = = = = = = = = = = = = = = = =		·····			
(or describe any o	ther casing-to	iding sear).					
<u>Other Data</u>							
1. Name of the in	jection format	:ion			,		
2. Name of Field	or Pool (If a	plicable) _					
<ol> <li>Is this a new If no, for what</li> </ol>	well drilled : t purpose was	for injection the well ori	ginally c	drilled?			
<ol> <li>Has the well e intervals and used.</li> </ol>	ver be perfor: give plugging	ited in any o detail (sack	ther zone s of ceme	e(s)? List a ent or bridge	all such perf e plug(s)	orated	
<ul> <li>used.</li> <li>5. Give the depth (pools) in thi</li> </ul>	to and name of area.	of any overly	ing and/c	or underlyin	g oil or gas	zones	

### State "AU" Cities Service Oil Company OPERATOR LEASE #1 660 FNL & 660 FWL 10 T17S R36E WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE Tubular Data Surface Casing <sup>10</sup> plug Size: $13^{3/8}$ " Cemented with 300 SX TOC: Surface \_\_ feet determined by \_\_\_\_\_\_ Hole size: $17^{1/4}$ 13 3/8 299 Intermediate Casing PiA 11/10/55 Size: "Cemented with SX TOC: \_\_\_\_\_\_ feet determined by \_\_\_\_\_ Hole Size: \_\_\_\_\_ 20 SX -- 85/8 4140 4170' 4110' Long String Size: 8 5/8 " Cemented with 2150 SX TOC: <u>circulated</u> feet determined by <u>calc</u> Hole Size: $11^{1/4}$ Total Depth: 8641 50 sx Injection Interval TN 8641 8641'- 8481' 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 Name of Field or Pool (If applicable) 2. Is this a new well drilled for injection? 3. 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 4. intervals and give plugging detail (sacks of cement or bridge plug(s) used.

INJECTION WELL DATA SHEET

OPERATOR	<u></u>	LEASE	JLALE	- <u></u>	
#1	1958 FNL & 330 FEL	4	T17S	R36E	
WELL NO.	FOOTAGE LOCATION	SEC.	TOWNSHIP	RANGE	



OPERATOR	<u>:an Petroleum Corporat</u>	LEASE
#2 WELL NO.	660 FSL & 660 FOOTAGE LOCA	FWL 6 T17S R36E TION SEC. TOWNSHIP RANGE
		<u>Tubular Data</u>
	10 SX	Surface_Casing
		Size: $8^{5}/8$ " Cemented with 300 S
		TOC: <u>Surface</u> feet determined by <u>calc</u>
		Hole size: $12^{1/4}$
4 12/18/70	402'	Intermediate Casing
		Size: Cemented withS
		TOC: feet determined by
		Hole Size:
	- 5'2	Long String
	5100 / Comment	Size: $5^{1/2}$ " Cemented with 500 S
		2040' feet determined by calc
		Hole Size: $7^{7/2}$
		Total Depth: 510/
		Intertion Interval
		Injection Interval
		(perforated or open-hole, indicate which)
ubing size	lined with	
	p	(material) packer at feet.
(brand & mo or describe ar	del) v other casing-tubing	seal).
her Data		
Name of the	injection formation	
Name of Fie	ld or Pool (If applic	able)
Is this a r If no, for	ew well drilled for i what purpose was the	njection? well originally drilled?
Has the wel	1 ever be perforated	in any other zone(s)? List all such perforated

\_\_\_\_\_

### State "AJ" Carper Drilling Company LEASE OPERATOR 660 FNL & 660 FEL 12 T17S R35E #1 WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE Tubular Data Surface Casing Size: $13^{3}/8$ "Cemented with unk SX TOC: unk feet determined by \_\_\_\_\_ 365 Hole size: \_\_\_\_\_unk\_\_\_\_ PiA 2/17/65 Intermediate Casing Size: 8<sup>5</sup>/8 "Cemented with unk SX 1545 (cut) TOC: unk feet determined by Hole Size: \_\_\_\_\_unk\_\_\_\_\_ Long String 4845 Size: \_\_\_\_\_ Cemented with \_\_\_\_\_ SX و کر کی م TOC: \_\_\_\_\_\_ feet determined by \_\_\_\_\_ Hole Size: Total Depth: \_\_\_\_\_10803\_\_\_\_\_ Injection Interval 25 SK TD 10,803 \_\_\_\_\_feet to \_\_\_\_\_\_ 10,803 feet 10,723 (perforated or open-hole, indicate which) Tubing size \_\_\_\_ lined with \_\_\_\_ \_\_\_\_\_ set in a (material) \_\_\_ \_\_\_\_\_feet. \_\_\_\_\_ packer at \_\_\_ (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation \_\_\_\_\_ Name of Field or Pool (If applicable) 2. Is this a new well drilled for injection? 3. 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 4. intervals and give plugging detail (sacks of cement or bridge plug(s) used.

### INJECTION WELL DATA SHEET

OPERATOR			TEACE			
1	1980' ENI	& 46201 FFI	LEASE	T175 D26F		
WELL NO.	FOOTAGE	LOCATION	SEC.	TOWNSHIP RA	NGE	
• <u>•••</u> ••••••••••••••••••••••••••••••••	<del></del>		Tub	ular Data		
10 5	×	Surface	Casing			
		<b>Si</b> ze: <u>13</u> -	-3/8 "	Cemented with	175	sx
300' 255 sx 13 3	18	TOC: Sur	face	feet determ	ined by	Calc
31	ı	Hole si:	ze: 17	-1/4		
	x	Intermed	liate Casi	ng		
1950	)<5V	Size:	3-5/8 "	Cemented with	200	sx
5	5/8	TOC:	1194	feet determ	ined by	Calc. 50%
20	241	Hole Si:	ze: <u>12-</u>	1/2		
7 7 3480	" cut	Long St:	ring			
405	с Х	Size:	<u>i-1/2</u> ″	Cemented with	400	SX
PiA - 47:	-5	TOC:	2546	feet determ	ined by	<u>Calc. 80%</u>
Completed		Hole Si:	ze:	7/8		•
7/10/45 TO 5	515	Total De	epth: _50.	57'		
o pen noie		Injectio	on Interva	<u>1</u>		
		(perfora	ated or op	feet to en-hole, indica	te which	_ feet )
Tubing size	lined w	ith			s	et in a
	_	packer at	(mater	ial)	feet.	
(brand & model) (or describe any other	casing-t	ubing seal).		- / - <b>1</b> ₩ - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
Other Data						
1 Nors of the inicat	ton forma	tion				
I. Name of the inject						
2. Name of Field or P	ool (lt a	pplicable)		<u></u>	····· ····	
<ol><li>Is this a new well If no, for what pu</li></ol>	drilled rpose was	for injection the well ori	7 ginally dr	illed?		
<ol> <li>Has the well ever intervals and give used.</li> </ol>	be perfor plugging	ated in any o detail (sack	ther zone( s of cemen	s)? List all s at or bridge plu	uch perf ug(s)	orated

STANOLIND OIL &	GAS	ç	STATE "V"	!	
OPERATOR			LEASE		
1	1980' FNL &	660' FEL	12	T17S-R35E	
WELL NO.	FOOTAGE L	OCATION	SEC.	TOWNSHIP	RANGE

		<u>Tubular Data</u>
	25 SX	Surface Casing
	- 239	Size: 13-3/8 " Cemented with 300. SX
		TOC: <u>Surface</u> feet determined by <u>Calc.</u>
	85/8	Hole size: 17-1/2
	1997	Intermediate Casing
	∂0,32 [] J2 2X	Size: 8-5/8 " Cemented with 1300 SX
		TOC: <u>Circulated</u> feet determined by <u>Calc.</u>
	- 5/2	Hole Size: 12-1/4
		Long String
	TD 5225	Size: <u>5-1/2</u> " Cemented with <u>520</u> SX 1046 8070
		TOC: feet determined by <u>Calc.</u>
P	CA 12/21/52	Hole Size: 7-3/8
	Completed 10/31/49	Total Depth: 5225'
	open note.	Injection Interval
	· · ·	feet to feet (perforated or open-hole, indicate which)
Tubi	ng size lined with	set in a
	P	(material) acker atfeet.
() (or d	brand & model) escribe any other casing-tubing	seal).
<u>Other</u>	Data	
1. N	ame of the injection formation	
2. N	ame of Field or Pool (If applic	able)
3. I: I:	s this a new well drilled for i f no, for what purpose was the	njection? well originally drilled?
4. Ha 11 us	as the well ever be perforated ntervals and give plugging deta sed.	in any other zone(s)? List all such perforated il (sacks of cement or bridge plug(s)

#### HUMBLE OIL & REFINING COMPANY NEW MEXICO "P" STATE OPERATOR LEASE 2080' FNL & 660' FWL 5 9 T17S-R36E FOOTAGE LOCATION SEC. TOWNSHIP WELL NO. RANGE Tubular Data 0-10' Surface Casing 10 5X Size: $\frac{11-3}{4}$ " Cemented with 375 . SX 113/1 TOC: Surface feet determined by Calc. 425-385 369 lsχ Hole size: 15 1950 1910 25 5x Intermediate Casing 2800-5740 cut 2750' Size:\_\_\_\_\_ Cemented with \_\_\_\_\_ SX 25 SX TOC: \_\_\_\_\_\_ feet determined by \_\_\_\_\_ 8 5/8 Hole Size: as sx - Erers 5199 5250-5140 Long String date completed Size: 8-5/8 Cemented with 450 SX 4/16/68 6170-6080 80% calc TOC: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_feet determined by \_\_\_\_\_\_\_ 25 SX 4/16/68 PiA 255x 1858-7770 Hole Size: <u>11</u> Total Depth: 8700' -TO 8700 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 \_\_\_\_\_ 1. Name of Field or Pool (If applicable) \_\_\_\_ 2. Is this a new well drilled for injection? 3. 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 4. intervals and give plugging detail (sacks of cement or bridge plug(s) used. 5.

### INJECTION WELL DATA SHEET

- 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

"A "

K-5	8 T 175	R36E				
Company Address Lease Well Sample	Y B Pt.	: GREENHILL PETROLEUM : HOBBS,NM : WEST LOVINGTON UNIT : SOUTHWEST WINDMILL : WINDMILL		Date Date Sampled Analysis No.	: 7-17-90 : 7-17-90 : 2	
-	ANALYS	IS 		mg/L		* meg/L
1. 2. 3	pr H2S Specify	NEG.				
4. 5.	Total I Suspend	Dissolved Solids ded Solids		690.5		
6. 7.	Dissol	ved Oxygen ved CO2				
8. 9.	Oil In Phenoly	Water phthalein Alkalinity	(CaCO3)			
10.	Methyl	Orange Alkalinity (C	aCO3)			
11.	Bicarbo	onate	HC03	2.0	HCO3	0.0
12.	Chlorid	de	C1	321.0	Cl	9.1
13.	Sulfate	9	SO4	125.0	SO4	2.6
14.	Varciu	n Saama	Ca	180.0	Ca	9.0
15.	Codium	(celculated)	Mg		Mg No	0.0
17	Trop	(carcuraced)	Na Fe	02.0	Na	2.1
18.	Barium		re Re	0.5		
19.	Stront	ium	Sr	0.0		
20.	Total H	Hardness (CaCO3)	~~	450.0		

#### PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	- Equiv wt >	( meq/L =	mg/L	
+ + +	+ <b></b> +				·
/===>  =		CaSO4	68.1	2.6	177
0 *Mg> *SO4	3	CaCl2	55.5	6.3	352
/ -		Mg (HCO3 ) 2	73.2		
3 *Na> *Cl	9	MgSO4	60.2		
+	+	MgCl2	47.6	0.0	0
Saturation Values Dist. Water	20 C	NaHCO3	94.0		
CaCO3 13 mg/	L	Na2SO4	71.0		
CaSO4 * 2H2O 2090 mg/	L	NaCl	58.4	2.7	158
BaSO4 2.4 mg/	L				

1000 07 17

**REMARKS:** 

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Petrolite Oilfield Chemicals Group

Respectfully submitted, R. MATTHEWS

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WATER ANALYSIS REPORT

Company Address Lease Well Sample	y s Pt.	: GREENHILL PET : HOBBS,NM : WEST LOVINGTO : NORTH WINDMIL : WINDMILL	ROLEUM N UNIT L	Da Da Ana	te te Saπpled alysis No.	: 7-17-90 : 7-17-90 : 1	
	ANALYSI	[S			mg/L		* meg/L
1. 2. 3. 4. 5. 6. 7. 8.	pH H2S Specifi Total I Suspend Dissolv Dissolv Oil In	 Dissolved Solid Ned Solids Yed Oxygen Yed CO2 Water	7.6 NEG. 1.001 s		724.6		• • • • • • • • •
9. 10.	Phenolp Methyl	ohthalein Alkal: Orange Alkalin:	inity (Ca ity (Caco	1CO3)			
11. 12. 13. 14. 15. 16. 17. 18. 19. 20.	Bicarbo Chlorid Sulfate Calcium Magnesi Sodium Iron Barium Stronti Total H	um (ardness (CaCO3)	)	HCO3 Cl SO4 Ca Mg Na Fe Ba Sr	2.0 350.0 135.0 190.0 30.5 16.7 0.4 0.0 0.0 600.0	HCO3 C1 SO4 Ca Mg Na	0.0 9.9 2.8 9.5 2.5 0.7

# PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	- Equiv wt	X meq/L =	mg/L
9 *Ca < *HCO3 0 /> 3 *Mg> *SO4 3  1 *Na> *Cl 10	Ca(HCO3)2 CaSO4 CaCl2 Mg(HCO3)2 MgSO4 MgCl2	81.0 68.1 55.5 73.2 60.2 47.6	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	NaHCO3 Na2SO4 NaCl	84.0 71.0 58.4	0.7	43

#### **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. VIII

CYPRESS PETROLEUM CONSULTANTS

WELL NAME - TEXACO INC. (UNIT 18) LOCATION - 660 FNL 660 FEL 5-175-36E WLU WELL DATA - DF 3913, TD 5150, 5-1/2 4746 LOGS - WORTH GRN (11-15-62) LOG PARAMETERS-

#### DATA FILE NAME: wlui8.1gi

DATE OF PLOT: 3/23/1989



#### 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'. <u>Do not take scraper below 4675'</u>.] 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  $\pm 4650'$ . 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:

Α.	5150-5100	E	<b>8-</b> 10	Ε.	4850 <b>-</b> 40	C-7
Β.	<b>5070-50</b> 30	E	1-4	F.	4820-4780	B-3 to C-2
С.	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.
- 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  $4160'\pm$ .

.

- 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.



P. O. BOX 1468

MONAHANS, TEXAS 79756

PH. 943-3234 OR 563-1040

# X |

Martin Water Laboratories, Inc.

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

#### RESULT OF WATER ANALYSES

					LABORATORY NO.	989178
TO	Mr. Dan We	estover _			SAMPLE RECEIVED	9-13-89
12777	Jones Road	I, Suite 3	75, Houston,	TX	RESULTS REPORTE	D_9-20-89

# COMPANY \_\_ Greenhill Petroleum Corporation LEASE \_ West Lovington Unit

FIELD OR POOL \_\_\_\_\_ Lovington

SURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Raw water - taken from water supply well #4084. 9-13-89

NO. 2 Raw water - taken from water supply well #4085. 9-13-89

NO. 3 Produced water - taken from injection pump discharge. 9-13-89

NO. 4 \_\_\_\_

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					
Sulfate 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, XMARKE - 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					
Results Reported As Milligrams Per Liter								
Additional Determinations And Remarks Letter of recommendation attached.								
				1				

Form No. 3

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#### AFFIDAVIT OF PUBLICATION

State of New Mexico, County of Lea.

 $_{\rm L}$  Don Teer

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\_\_\_

<u>Two</u> weeks. Beginning with the issue dated

 $\underline{July 31}_{nd ending with the issue dated}$ 

August 7\_\_\_\_, 1990

بعد

Business Manager Sworn and subscribed to before

me this day of onda Notary Public.

My Commission expires\_\_\_\_

July 24 , 1991 (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 July 31, August 7, 1990 Greenhill Petroleum Corporation 12777 Jones Road Suite 375 Houston, TX 77070 Phone (713)955 1146 Contact Mike Newport Greenhill Petroleum Corporation plans to convert the following produc ing oil wells to injection wells within the West Lov ington Field Area. The purpose of the proposed injection wells is to in crease reservoir pressure in order to improve the recovery of hydrocarbons. The location of the pro posed injection wells are the following well numbers within Sections 4, 5, 7, 8, 9, TI7S R36E, Lea Co. NM.

Well Nos. 11, 12, 13, 19, 23, 25, 35, 36, 37, 40, 42, 44, 46, 48, 50 and 61 The injection intervals

Are approximately be tween the depths of 4600° and 5200° in the San Andres formation. The maximum injection rates and pre ssures 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.

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# GREENHILL PETROLEUM CORPORATION

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

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Incorporated in Delaware, U.S.A.

CERTIFIED MAIL

Surface owner notification

July 23, 1990

U-BAR RANCH P.O. Box 1471 Midland, TX 79702

Attn: Mr. Clarence Scharbauer III

RE: West Lovington Unit Lea County, New Mexico

Dear Mr. Scharbauer:

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

Well Numbers: 40, 42, 44 46, 48, 50 and 61.

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

Very truly yours,

bael J. hungert

Michael J. Newport Landman

MJN:ntd Enclosures

WLU025



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# 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.

#### CERTIFIED MAIL

Surface owner notification

July 23, 1990

Ms. Eleanor Graham P.O. Box 1117 Lovington, New Mexico 88260

RE: West Lovington Unit Lea County, New Mexico

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 Numbers: 11, 12, 13, 19, 23, 25, 35, 36 and 37.

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

Very truly yours,

Richael J. hupart

Michael J. Newport Landman

MJN:ntd Enclosures

WLU024



# 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.

#### Certified Mail

July 30, 1990

Yates Energy Corporation P. O. Box 2323 Sunset Centre, Suite 1010 Roswell, NM 88202-2323

Re: West Lovington Unit Lea County, New Mexico

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: 11, 12, 25, 36, 37

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

Very truly yours,

Michael J. Newport Landman

MJN:ntd WLU033



# GREENHILL PETROLEUM CORPORATION

13

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

Incorporated in Delaware, U.S.A.

#### Certified Mail

July 30, 1990

Mobil Exploration & Producing 1250 Poydras Building New Orleans, LA 70113

Re: West Lovington Unit Lea County, New Mexico

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 Number: 50

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

Very truly yours,

Michael J. Newport Landman

MJN:ntd WLU033



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# **GREENHILL PETROLEUM CORPORATION**

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

Incorporated in Delaware, U.S.A.

Certified Mail

July 30, 1990

Exxon Company U. S. A. P. O. Box 1600 615 W. Missouri Midland, TX 79702-1600

Re: West Lovington Unit Lea County, New Mexico

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: 25, 13, 19, 40, 61, 35, 36, 37, 48, 46

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

Very truly yours,

'Newport

Michael J. Ne Landman

MJN:ntd WLU033


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

Incorporated in Delaware, U.S.A.

Certified Mail.

July 30, 1990

Phillips Petroleum Company 4001 Penbrook Odessa, TX 79762

Re: West Lovington Unit Lea County, New Mexico

Dear Sirs:

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

Well Numbers: 37, 25

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

Very truly yours,

put

Michael J. Newport Landman

MJN:ntd WLU033



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

Incorporated in Delaware, U.S.A.

#### Certified Mail

July 30, 1990

Texaco Inc. P. O. Box 52332 Houston, TX 77052

Re: West Lovington Unit Lea County, New Mexico

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: 12, 13, 50, 61, 46

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

Very truly yours,

mike Maupot

Michael J. Newport Landman

MJN:ntd WLU033



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

Incorporated in Delaware, U.S.A.

Certified Mail.

July 30, 1990

OXY U.S.A. Inc. P. O. Box 27570 Houston, TX 77027

Re: West Lovington Unit Lea County, New Mexico

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: 25, 37

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

Very truly yours,

Michael J. Newport Landman

MJN:ntd WLU033



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

Incorporated In Delaware 1..5,A.

August 21, 1993

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YATES ENERCY CORPORATION P. O. Box 2323 Sunset Centre, builts 1010 Roswell, New Maxico 88202-1313

Re: West Lowington Unit Lea County, New Mexing

Enclosed find the complete appliest the secage povering the conversion to injection wells in the West limit — ea. The following wells have been proposed to be converted:

Well Numberst 11, 12, 13 1 . 5, 5, 36, 37, 40, 12, 42, 42, 42 . 1

Very truly yourd

haef Alup A

Michael J. Newport Landman

MJN:ntd Enclosures WLU047



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

Incorporated in Delaware, U.S.A.

August 21, 1990

TEXACO, INC. P. O. Box 52332 Houston, Texas 77052

Re: West Lovington Unit Lea County, New Mexico

Enclosed find the complete application package covering the conversion to injection wells in the West Lovington Area. The following wells have been proposed to be converted:

Well Numbers: 11, 12, 13, 19, 23, 25, 35, 36, 37, 40, 42, 44, 46, 48, 50, 61

Very truly yours,

ibaef

Michael J. Newport Landman

MJN:ntd Enclosures WLU047 3.a - 13

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

Incorporated in Delaware, J.S.A.

EXXON CD., U.S.A P. O. Box 1600 Midland, TX 19702-1600

Re: Nest Lovington Unit Lea County, New Mexico

Enclosed find the complete application gaskags covering the conversion to injection wells in the West Loving on Great The following wells have been proposed to be converted.

Well Numbers: 11, 22 13, 31 13 25, 35, 36, 37, 40, 42, 64 46, 5, 50, 61

Very truly yours

ichael Muset

Michael J. Newport Landman

MJN:ntd Enclosures WLU047

ARREY CARRUTHERS	STATE OF NEW MEXICO AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE	от село село село село село село село село
OIL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501 RE: Proposed: MC DHC NSL NSP SWD WFX PMX Gentlemen:	#11-14 5 # 12-E 4- # 13-F 4-1 # 19-K 5- # 23-K 4-1 # 25-I 4- # 35-N 4-	- 17-36 17-36 17-36 17-36 17-36 17-36 17-36
I have examined the application $\frac{Arenhell fiels}{Operator}$ and my recommendations are $Our Mov$ urefullion	ation for the: $ \frac{\# 36-0}{\# 37-P 4} $ $ \frac{\# 37-P 4}{\# 40-C} $ $ \frac{\# 40-C}{\# 42} $ as follows: $ \frac{\# 42}{\# 42} $ $ \frac{\# 42}{\# 46-A} $ $ \frac{\# 48-C}{\# 50-C} $ $ \frac{\# 61-K}{\# 61-K} $	-17-36 7-17-36 8-17-36 8-17-36 9-17-36 7-17-36 7-17-36 8-17-36 8-17-36

Jerry Sexton Supervisor, District 1

/ed