

GREENHILL PETROLEUM CORPORATION

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Incorporated in Delaware, U.S.A.

January 27, 1992

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

Attention: Mr. David Catanach

Re: West Lovington Unit Well Numbers 10, 17, 28, 30, 31, 55, 56, 59, 82 & 99 Lea County, New Mexico

Dear Mr. Catanach:

Enclosed please find the application whereby Greenhill Petroleum Corporation proposes to convert Well Numbers 10, 17, 28, 30, 31, 55, 56, 59, and 82 from producing wells to water injection wells within the West Lovington Unit. Greenhill Petroleum Corporation also plans to drill Well Number 99 as a water injection well. I will forward the affidavit of publication and certified receipts verifying the offset operators and surface owners were notified of our application.

Please advise in the event you have any further questions.

Very truly yours,

Michael J. Newport Land Manager-Permian Basin

MJN:sjs 92.069

Enclosures

	STAT	E OF	NEW	MEXICO
ENERGY	AND	MINE	RALS	DEPARTMENT

OIL CONSERVATION DIVISION POST OFFICE BOX 2008 STATE LAND OFFICE BUILDING SANTA FE, HEW MEXICO B/SO1

APPLICATION FOR AUTHORIZATION TO INJECT

Ι.	Purpose: X Se Application q	condary Recovery	tenance 1? 🔲 ye	Disposal s no	Storage
II.	Operator:	GREENHILL PETROLEUM CORPORATION	J		
	Address:	11490 Westheimer, Suite 200, Ho	ouston, Te	<u>exas 77077</u>	
	Contact party: _	Mike Newport	Phone:	<u>(713) 589-</u>	8484
111.	Well data: Comp prop	lete the data required on the rever osed for injection. Additional she	se side of ets may be	this form for attached if	or each well necessary.
IV.	Is this an expan If yes, give the	sion of an existing project? 🗽	yes [the projec]no t R-207	· · · · ·

- 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 avai¹able 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 Land Manager-Permian Basin

Name:	michael 5: Newpore	litle Hand Handber Fermian B
Signature:	michael J. humport	Date: 1/7/92

* 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 any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

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

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

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advectisement 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 aoplications within 15 days from the date this application was mailed to them.



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

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GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 10 1982 FNL & 1981 FEL 5 17S 36E WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP 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> · - 1338 Intermediate Casing openhole completed Size: 8 5/8 " Cemented with 600 SX 2/28/45 TOC: 119 feet determined by CALC 50% Hole Size: <u>11</u> -85/8 Long String Size: 5 1/2 " Cemented with _____ 300 ____ SX TOC: 3091 _____ feet determined by CALC 80% Hole Size: <u>7 7/8</u> 51/2 4726 Total Depth: 5100 Injection Interval TO 5100 4750 feet to 5100 feet (perforated or open-hole) indicate which) Tubing size 2³/8" lined with IPC _____ set in a (material) _____ packer at _____4551'_____ feet. (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST 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 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



	GREEN	HILL PETR	OLEUM CORPORATION	l	WE	ST LOVINGTON	I UNIT		
	(OPERATOR			LEASE				
		17	1980 FSL	& 660 FEL	6	<u> </u>	36E		
	ţ	WELL NO.	FOOTAGE	LOCATION	SEC.	TOWNSHIP	RANGE		
	LEA C	OUNTY, NE	W MEXICO				. <u></u>		
					<u>T</u>	ubular Data			
				Surfac	<u>e Casing</u>				
				Size: <u>1</u>	3 3/8	" Cemented	with	250	sx
				TOC: <u>S</u>	URFACE	feet d	etermined	by <u>CAL</u>	<u>_C</u>
				Hole s	ize: <u>1</u>	7			
	upen h	olc		Interm	<u>ediate Ca</u>	sing			
(0~	pleted	3/6/47	13 3/8	Size:	8 5/8	" Cemented	with	150	sx
				TOC: <u>1</u>	518	feet d	letermined	by <u>CALC</u>	50%
			8 5/8	Hole S	ize: <u>1</u>	1			
				Long_S	tring				
				Size:	5 1/2	" Cemented	with	200	sx
			-5/2	TOC: <u>3</u>	578	feet d	letermined	by <u>CALC</u>	80%
				Hole S	ize:	7 3/4		•	
		τc) 5153	Total	Depth: <u>5</u>	153			
				Inject	<u>ion Inter</u>	<u>val</u>			
				4	750	feet to	5153	fe	et
			NONE	(berro	rated of	open-noie, i	ndicate w	nienj	_
	Tubing	g size	NUNE lined wi	th	(mat	erial)		set i	ln a
	(h)	rand f ma	NONE	packer a	t		fee	t.	
	(or des	scribe any	y other casing-tu	bing seal).					
	Other I	Data							
	1. Nar	ne of the	injection format	ion	SAN ANDRE	S DOLOMITE			
	2. Nar	ne of Fiel	ld or Pool (If ap	plicable)	,,,,,,,,,	LOVINGTON (S	AN ANDRES) WEST 4	•
	3. Is If	this a ne no, for w	ew well drilled f what purpose was	or injection the well or	n? <u>NO</u> iginally	drilled? P	RODUCTION		
	4. Has int use	s the well tervals an ed. NO	l ever be perfora nd give plugging	ted in any detail (sac	other zon ks of cem	e(s)? List ent or bridg	all such e plug(s)	perforat	ted
	5. Gir (po	ve the dep pols) in (pth to and name o this area.	f any overl	ying and/	or unde rlyin	g oil or	gas zone	25



GREENHILL PETRO	OLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR		LEASE
28	660 FSL & 1980	FEL 6 17S 36E
WELL NO.	FOOTAGE LOCAT	TION SEC. TOWNSHIP RANGE
LEA COUNTY, NEL	MEXICO	
		<u>Tubular Data</u>
		Surface Casing
		Size: 13 3/8 " Cemented withSX
	(33/8	TOC:
		Hole size:
upen hole		Intermediate Casing
-ompleted - 6/25/45	85%	Size: <u>8 5/8</u> Cemented with <u>150</u> SX
	5 7 8	TOC: feet determined by CALC_50
		Hole Size:11
		Long String
		Size: <u>5 1/2</u> " Cemented with <u>200</u> SX
		TOC: feet determined by80
	<i>C</i> ¹ / ₁ , 12	Hole Size: <u>7 3/4</u>
	- 512 4118	Total Depth: _5160
	10 5160	Injection Interval
		4800 feet to 5160 feet (perforated or open-hole, indicate which)
Tubing size <u>NON</u>	E lined with	
NON	E pa	(material) acker at feet .
(brand & model	-)	see1)
(of describe any o	cher casing-cubing	Scal).
Ucher Data		
1. Name of the in	jection formation _	SAN ANDRES DOLOMITE
2. Name of Field	or Pool (If applica	ble) LOVINGTON (SAN ANDRES) WEST
3. Is this a new If no, for wha	well drilled for in It purpose was the w	njection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
4. Has the well e intervals and used. NO	ver be perforated i give plugging detai	n any other zone(s)? List all such perforated 1 (sacks of cement or bridge plug(s)
5. Give the depth (pools) in thi	to and name of any s area.	overlying and/or underlying oil or gas zones

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GREENHILL PETROLEUM CORPORATION		ETROLEUM CORPORATION	WEST LOVINGTON UN	<u>IT</u>
	OPERATOR		LEASE	
<u> </u>	30	660 FSL & 660	FWL <u>5 17S</u>	<u>36E</u>
	WELL NO.	FOOTAGE LOCA	CION SEC. TOWNSHIP	RANGE
1	LEA COUNTY,	NEW MEXICO	······································	······································
			<u>Tubular Data</u>	
		111	Surface Casing	
			Size: 13 3/8 " Cemented w	ith 200 sx
			TOC: SURFACE feet de	termined by CALC
		_13 ³ /8		cermined by <u>oneo</u>
)cn	hole		Hole size: 15	
plet	ed 3/30/45	-	Intermediate Casing	
		85/8	Size: 8 5/8 " Cemented w	ith300SX
			TOC: <u>1044</u> feet de	termined by <u>CALC 502</u>
			Hole Size: <u>11</u>	
		<i>(</i> 1)	Long String	
		4729	Size: 5 1/2 " Cemented w	ith 400 SX
			TOC: 1861 feet de	termined by CALC 209
		-1 To 5150	Nole Size: <u>7 3/8</u>	
			Total Depth: 5150	
			Injection Interval	
			4790 feet to (perforated or open-hole,) in	<u>5150</u> feet dicate which)
Tu	bing size	NONE lined with		set in a
		NONE P	(material) acker at	feet.
·	(brand & m	nodel)	1	
(or	describe a	ny other casing-tubing	seal).	
<u>Oth</u>	<u>er Data</u>			
1.	Name of th	e injection formation	SAN ANDRES DOLOMITE	······
2.	Name of Fi	eld or Pool (If applic	able) LOVINGTON (SA	N ANDRES) WEST
3.	Is this a If no, for	new well drilled for i what purpose was the	njection? <u>NO</u> well originally drilled? <u>PR</u>	ODUCTION
4.	Has the we intervals	ll ever be perforated and give plugging deta	In any other zone(s)? List a Ll (sacks of cement or bridge	ll such perforated plug(s)

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660 FSL & 198 FOOTAGE LOC. NEW MEXICO	LEASE 80 FWL 5 17S 36E CATION SEC. TOWNSHIP RANGE Tubular Data Surface Casing Size: 13 3/8 " Cemented with TOC: SURFACE feet determined by Hole size: 17 Intermediate Casing Size: Size: 8 5/8 " Cemented with Size: 150
660 FSL & 198 FOOTAGE LOC	80 FWL 5 17S 36E CATION SEC. TOWNSHIP RANGE Tubular Data Surface Casing Size: 13 3/8 " Cemented with SIZE: 13 3/8 " Cemented with TOC: SURFACE
FOOTAGE LOC. NEW MEXICO $- 13^{3/9}$	CATION SEC. TOWNSHIP RANGE Tubular Data Surface Casing Size: 13 3/8 " Cemented with SIZE: 13 3/8 " Cemented with SIZE: 13 3/8 " Cemented with TOC: SURFACE
NEW MEXICO	Tubular Data Surface Casing Size: 13 3/8 " Cemented with Size: 13 3/8 " Cemented with TOC: SURFACE Hole size: 17 Intermediate Casing Size: 8 5/8 " Cemented with Size: 8 5/8 " Cemented with 150
- 133/2	Tubular Data Surface Casing Size: 13 3/8 " Cemented withSX TOC: SURFACEfeet determined byCALC Hole size: 17
- 133/8	Surface Casing Size: 13 3/8 " Cemented withSX TOC: SURFACEfeet determined by CALC Hole size: Intermediate Casing Size:S5/8 _ " Cemented withSX TOC: 1478
- 133/8	Size: 13 3/8 " Cemented withSX TOC: SURFACEfeet determined by CALC Hole size: Intermediate Casing Size:S5/8 _ " Cemented withSX TOC: 1478
- 133/2	TOC: <u>SURFACE</u> feet determined by <u>CALC</u> Hole size: <u>17</u> <u>Intermediate Casing</u> Size: <u>8 5/8</u> " Cemented with <u>150</u> SX TOC: 1478 feet determined by CALC 50
- 133/2	Hole size: 17 Intermediate Casing Size: 8 5/8 "Cemented with 150 SX TOC: 1478
- - 133/8	Intermediate Casing Size: 8 5/8 " Cemented with 150 SX TOC: 1478 feet determined by CALC 50
0 5%	Size: <u>8 5/8</u> Cemented with <u>150</u> SX TOC: 1478 feet determined by CALC 50
0 5%	TOC: 1478 feet determined by CALC 50
0 5%	TOC: 1478 feet determined by CALC 50
- 250	
0 /1	Hole Size:11_1/2
	Long String
	Size: <u>5 1/2</u> "Cemented with <u>150</u> SX
55	TOC: 3905 feet determined by CALC 80
4723	Hole Size:7 7/8
-1 To sido	Total Depth: <u>5140</u>
	Injection Interval
	4784feet tofeet
	(perforated or open-hole) indicate which)
NONE lined with	set in a (material)
NONE	packer atfeet.
y other casing-tubin	ng seal).
injection formation	SAN ANDRES DOLOMITE
ld or Pool (If appli	Lcable) LOVINGTON (SAN ANDRES) WEST
ew well drilled for what purpose was the	injection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
l ever be perforated nd give plugging det	I in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)
	NONE 1 ined with NONE 1 ined with NONE 1 ined with NONE del) y other casing-tubin injection formation 1d or Pool (If appli ew well drilled for what purpose was the 1 ever be perforated nd give plugging det pth to and name of a



GREENHILL PETRO	OLEUM CORPORATION		WEST LC	DVINGTON UN	IT		
OPERATOR			LEASE				
55	1980 FNL & 19	980 FWL	8	175	36E		
WELL NO.	FOOTAGE LOCA	ATION	SEC.	TOWNSHIP	RANGE		
LEA COUNTY, NEW	M MEXICO					<u></u>	
	· · ·		<u>Tub</u>	oula <u>r Data</u>			
		<u>Surface</u>	Casing				
		Size: 1	.3 3/8 "	Cemented v	with	250	SX
		TOC	URFACE	feet d	etermined	by CAL	C.
	137/8		10				<u> </u>
		Hole si	.ze: 10)			
completed - 4/22/45		<u>Interme</u>	diate Casi	ng			
		Size:	8 5/8″	Cemented w	with	200	sx
· · · ·		тос: <u>1</u>	324	feet de	etermined	Ъу <u>CAL</u>	<u> </u>
. •	6 5/8	Hole Si	lze: <u>11</u>	1/2	<u>-</u>		
		Long St	ring				
		Size:	<u>5 1/2 </u> ″	Cemented w	with	200	SX
		TOC: <u>2</u>	884	feet de	etermined	by <u>CAL</u>	2 80%
•	- 51/2 4730	Hole Si	ze: <u>7</u>			•	
; •		Total I	Depth: <u>51</u>	50			
	TO SISU	Injecti	lon Interva	11			
		4 (perfor	775 cated or op	feet to pen-hole in	5150 ndicate w	fe fehich)	et
Tubing size2	$\frac{7}{8''}$ lined with		IPC		<u></u>	set i	n a
	1	packer at	(mater = 4636'	cial)	fee	t.	
(brand & model	L)						
(of describe any t	Juner Casing-Cubing	g sear).					
<u>Other Data</u>							
1. Name of the ir	njection formation	S/	AN ANDRES [DOLOMITE		<u> </u>	-
2. Name of Field	or Pool (If applie	cable) _	L0\	VINGTON (SA	N ANDRES)	WEST	<u></u>
 Is this a new If no, for what 	well drilled for f at purpose was the	injectior well ori	n? <u>NO</u> Lginally dr	illed? PR	ODUCTION		4
4. Has the well end intervals and used.	ever be perforated give plugging deta	in any c ail (sack	other zone(cs of cemer	(s)? List and the second se	all such e plug(s)	perforat	ed
5. Give the depth (pools) in thi	n to and name of an is area.	ny overly	ving and/or	underlyin	g oil or	gas zone	S



	OPERATOR			LEASE			<u></u>
	56	1980 FNI & 19	80 FFI	8	175	265	
	UFLL NO	FOOTAGE LOC	ATTON	SEC		BANGE	
LE	A COUNTY, NEW	MEXICO	ALION	510.	IONNOMIT	MINOL	
				<u>Tub</u>	<u>ular Data</u>		
	11	1	<u>Surface</u> Ca	asing			
			Size: 10 3	3/4″	Cemented w	ith	213
		-10 3/4	TOC: SUR	FACE	feet de	termined	by CALC
				102	1000 00	cormitted .	
d hole			Hole size	:13			
pleded -	3/14/45	_ /	<u>Intermedi</u>	<u>ate Casi</u>	ng		
		75/8	Size: <u>75</u>	5/8″	Cemented w	rith	600
			TOC: <u>CMT</u>	CIRC	feet de	termined	by <u>CALC</u>
			Hole Size	: 9	7/8		
		· · ·	Iong Stri				
			LOUG JULI				
			Size: <u>5</u>]	/2″	Cemented w	1th	400
	μ	1/1 5055	TOC: <u>1363</u>	}	feet de	termined	by <u>CALC 8</u>
			Hole Size	:6	3/4		
			Total Dep	th: <u>50</u>	55		
			Injection	Interva	11		
			4700		foot to	FOFO	foot
			(perforat	ed or op	en-hole, in	5050 ndicate wh	ich)
Tubi	ng size NONE	lined with					set in
		-	1	(mater	ial)	E	
(brand & model)	packer at _		***************************************	Ieec	•
(or d	escribe any o	ther casing-tubin	g seal).				
<u>Other</u>	Data						
א 1	ame of the in	iection formation	SAN	ANDRES F			
I . N	ame or the in	Jection formation	SAN	ANDALS_D		<u> </u>	
2. N	ame of Field	or Pool (If appli	cable)	LOY	INGTON (SAN	LANDRES) 1	VEST
3. I I	s this a new f no, for wha	well drilled for t purpose was the	injection? well origin	<u>NO</u> nally dr	illed? PRO	DUCTION	
4. H 1	as the well e ntervals and	ver be perforated give plugging det	in any othe ail (sacks	er zone(of cemen	(s)? List and to r bridge	11 such p plug(s)	erforated



GREENHILL PETR	OLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR		LEASE
59	1980 FSL & 660	FEL 7 17S 36E
WELL NO.	FOOTAGE LOCAT	TION SEC. TOWNSHIP RANGE
LEA COUNTY, NE	W MEXICO	
	м. М	<u>Tubular Dața</u>
		Surface Casing
		$\frac{10.2}{4}$
		Size: 10 5/4 Cemented with 2/5
		TOC: <u>SURFACE</u> feet determined by <u>CALC</u>
sed hole	L 10 3/4	Hole size:15
~pleted 12/13/48		Intermediate Casing
		Size: 7 5/8 "Cemented with 650
		TOC: CMT CIPC feet determined by CALC
	L 75/8	
		Hole Size: <u>9 //8</u>
		Long_String
		Size: <u>5 1/2</u> " Cemented with <u>650</u>
		TOC: <u>CMT CIRC</u> feet determined by <u>CALC</u>
	L 512 5110 TO 5110	Hole Size: <u>6 3/4</u>
		Total Depth: <u>5110</u>
		Injection Interval
		5020 feet to 5106 feet (perforated) or open-hole, indicate which)
Tubing size <u>NON</u>	E lined with	
NON	F na	(material)
(brand & model	.)	
(or describe any o	other casing-tubing	seal).
<u>Other Data</u>		
1. Name of the ir	jection formation	SAN ANDRES DOLOMITE
2. Name of Field	or Pool (If applica	able)LOVINGTON (SAN ANDRES) WEST
3. Is this a new If no, for wha	well drilled for in t purpose was the w	njection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
4. Has the well e intervals and usedNO	ever be perforated b give plugging detai	In any other zone(s)? List all such perforated Il (sacks of cement or bridge plug(s)
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	GREENHILL PETR	OLEUM CORPORATION		West	Lovington Unit	
	OPERATOR			LEASE	<u></u>	······································
	82	2390 FEL & 2390 1	FNL	7	T17S-R36E	
<u></u>	WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP RAN	IGE
	<u></u>	<u> </u>		Tut	ular Data	
			Surface	Casing		
			Size:	<u>3 5/8</u> ″	Cemented with	<u> </u>
			TOC:	surface	feet determi	ned by
			Nole siz	e:	12 1/4"	
			Intermed	liate Casi	.ng	
	- Andre State - Constant - Consta		Size:	″	Cemented with	SX
			TOC:		feet determi	Lned by
			Hole Siz	:e:		
	99 0 		Long Str	ing		
			Size:	<u>5 1/2</u> ″	Cemented with _	<u>1950</u> SX
	;;		TOC:	surface	feet determi	ned by
			Hole Siz	.e:	7 7/8"	
			Total De	pth:	5230'	
			Injectio	n Interva	1	
				4695	feet to 5	230 feet
			(perfora	ited or of	en-hole) indicat	e which)
Tul	bing size2	7/8" lined with	···	(mate)	·[a])	set in a
	Baker	<u>c AD1</u> p	acker at		4665	_feet.
(or	(brand & model describe any o) ther casing-tubing	seal).			
0+b	or Data					
1	Name of the in	leation formation	San Andr			
1.	Name of the in	Jection formation	Sall Allur			
2.	Name of Field	or Pool (If applic	able) Lo	vington (San Andres) West	
3.	Is this a new If no, for wha	well drilled for i t purpose was the	njection? well orig	inally di	illed? pro	duction
4.	Has the well e intervals and used. No	ver be perforated give plugging deta	in any ot il (sacks	her zone of cemer	s)? List all su at or bridge plug	ach perforated g(s)
5.	Give the depth (pools) in thi	to and name of an s area.	y overlyi	ng and/or	underlying oil	or gas zones

Grayburg



	GREENHILL PET	ROLEUM CORPORATION		West	: Lovi SE	ngton		·
	OTEMION			0	51			
	WELL NO.	FOOTAGE LOCA	TION	SEC	•	TITS-R36E TOWNSHIP P	ANGE	
				,,,,,,,,,,,,	Tubu	lar Data		
			<u>Surfa</u>	<u>ce Casin</u>	g			
			Size:	8 5/8		Cemented with	550	SX
			TOC:		:e	feet deter	mined by	_circ
			Hole	size: _		12 1/4"		
			Inter	mediate	Casin	g		
		1350	Size:		"	Cemented with	ı	SX
		85/2	TOC:			feet deter	mined by	6
			Hole	Size: _				
			Long	String				
			Size:	4 1/2	~~~~	Cemented with	1300	SX
			TOC:	surfac	e	feet deter	mined by	circ.
		5 30'	Hole	Size: _	7	7/8"		
	⊢	41/2	Total	Depth:	52	30'		
			Injec	<u>tion Int</u>	<u>erval</u>			
			<u>to be</u>	determir	ned	feet to		feet
			(perf	orated o	r ope	n-hole, indic	ate which	1)
Tu	bing size	7/8" lined with _		(m	IPC ateri	al)		set in a
	Baker (brand & mode	<u>AD-1</u> P	acker	at	<u>4970'</u>		feet.	
(or	describe any	other casing-tubing	g seal)	•				
<u>0th</u>	<u>er Data</u>							
1.	Name of the i	njection formation	·	San A	Andres			······
2.	Name of Field	l or Pool (If applic	able)	West	Lovin	gton Upper Sa	an Andres	
3.	Is this a new If no, for wh	well drilled for in the set of th	injecti well o	on? riginall	Yes y dri	11ed?		
4.	Has the well intervals and	ever be perforated I give plugging deta	in any il (sa	other z cks of c	one(s ement)? List all or bridge pl	such perf .ug(s)	Forated
	used.	No						
5.	Give the dept (pools) in th	ch to and name of an Mis area.	ıy over	lying an	d/or 1	underlying oi	l or gas	zones

overlying Grayburg

OPERATOR	ULEUM CORPORATION	- <u></u>	WEST LU	DVINGION UNI	<u> </u>		
2	660 ENI 8 1	000 EEI	E	170	265		
WELL NO.	FOOTAGE LO	ATION	SEC.	TOWNSHIP			
LEA COUNTY, NE	W MEXICO						
_		·	Tu	bular Data	- <u>,</u>		
[Surface (Casing				
		Size: 13	3/8 ″	Cemented w	ith	250	٤
nu hale		TOC: SUR	FACE	feet de	termined	Ъу <u>CALC</u>	,
npieted	13 3/8	Hole size	e: <u>17</u>	7 1/4			
5/27/45		Intermedi	ate Cas	ing			
injection		Size: <u>8</u>	<u>5/8 </u> ″	Cemented w	ith	700	s
	85/8	TOC: <u>CMT</u>	CIRC	feet de	termined	by <u>CALC</u>	
		Hole Size	e: <u>11</u>	L			
		<u>Long Stri</u>	ng				
	-51_{2}	Size: <u>5</u>	<u>1/2 </u> ″	Cemented w	ith	250	^s
	4750	TOC: <u>335</u>	8	feet de	termined	by <u>CALC</u>	8
[_ מד	5152	Hole Size	e: <u>7</u>	7/8		·	
	5135	Total Dep	oth: <u>51</u>	.00			
	•	<u>Injectior</u>	<u>Interv</u>	<u>al</u>			
		482 (perforat	0 ced or @	feet to pen-hole in	5100 dicate wi	fee hich)	ŧ
Tubing size	2" lined with	<u>• I</u>	PC			set in	1 I
. · .	-`	packer at	(mate: 	rial) 23'	fee	t.	
(brand & mod (or describe any	el) other casing-tubi	ng seal).					
		.6, .					
<u>Uther Data</u>							
1. Name of the	injection formation	n <u>SAN</u>	ANDRES	DOLOMITE	·····	<u> </u>	
2. Name of Fiel	d or Pool (If apple	Lcable)	LOVING	TON (SAN AND	DRES) WES	<u>r</u>	
3. Is this a ne If no, for w	w well drilled for hat purpose was the	injection? • well origi	NO nally d	rilled? P	RODUCTION		
4. Has the well intervals an	ever be perforated d give plugging det	l in any oth ail (sacks	ner zone of cemen	(s)? List a nt or bridge	ll such plug(s)	perforate	۶d

GRAYBURG - OVERLYING

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GREENHILL PET	ROLEUM CORPORATION		WEST LO	DVINGTON_UN	IT	<u> </u>
OPERATOR]	LEASE			
3	660 FNL & 66	D FEL	5	<u>175</u>	<u>36E</u>	
WELL NO.	FOOTAGE LOCA	TION	SEC.	TUWNSHIP	RANGE	
LEA COUNTY, N	IEW MEXICO		·			
			Tub	<u>ular Data</u>		
1	1 1	Surface Ca	<u>sing</u>			
		Size: <u>12_3/</u>	/4″	Cemented w	with	<u>200</u> sx
		TOC: SURFA	\CE	feet de	etermined	by <u>CAL</u>
	L 13 3/8	Hole size:	14	1/2		
open hole		Intermedia	<u>te Casi</u>	ng		
completed 1/11/45		Size: <u>8 5/</u>	<u>′8_</u> ″	Cemented w	with	<u>200</u> sx
converted to	L8 5/5	тос: <u>1374</u>		feet de	etermined	by <u>CALC 50%</u>
injection 4/2/69		Hole Size:	10	3/4	<u></u>	
		Long Strin	g			
	- 5½"	Size: <u>5 1/</u>	<u>'2</u> ″	Cemented v	with	<u>400</u> sx
	1120	TOC: <u>2263</u>		feet de	etermined	by <u>CALC 80%</u>
Τι	0 5125	Hole Size:	7 5/	8		
		Total Dept	h: <u>512</u>	5	·	
		Injection	Interva	<u>1</u>		
		4750 (perforate)	d or Op	feet to en-hole, in	5125 ndicate wi	feet hich)
Tubing size	$2^{3/8"}$ lined with _	IPC				set in a
	p	acker at	(mater 4653	ial) "	fee	t.
(brand & mo	odel)	seal)				
(UI describe a	iy other casing-cubing	, star).				
<u>Other Data</u>						
1. Name of the	e injection formation	San A	ndres D	olomite		
2. Name of Fic	eld or Pool (If applic	able)	Lovingt	on (San An	dres) Wes	<u>t</u>
3. Is this an If no, for	new well drilled for i what purpose was the	njection? well origin	no ally dr	illed?	PRODUCTI	DN
4. Has the we intervals a used. NO	ll ever be perforated and give plugging deta	in any othe il (sacks o	r zone(f cemen	s)? List a t or bridge	all such p e plug(s)	perforated
5. Give the de	epth to and name of an	y overlying	and/or	underlyin	g oil or ;	gas zones

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(pools) in this area.

GREENHILL PETROLEUM CORPORATIC)N	West L	ovington Unit		
OPERATOR		LEASE			
7 660 FEL & 1980	FNL	6	17S	36E	
WELL NO. FOOTAGE L	OCATION	SEC.	TOWNSHIP	RANGE	<u> </u>
		I	ubular Data		
1 : 1	<u>Surfac</u>	<u>e Casing</u>			
	Size:_	13 3/8	" Cemented w	200	sx
	TOC: _	surface	feet de	termined by	?
1 292 '	Hole s	ize:	?		ъ.
13=18	<u>Interm</u>	<u>iediate Ca</u>	sing		
	Size:_	8 5/8	" Cemented w	rith425	SX
	TOC: _	486	feet de	termined by	<u>60% calc</u>
	Hole S	ize:	11		
(0.20)	Long_S	tring			
25/8"	Size:_	5 1/2	" Cemented w	425	SX
	TOC: _	2861'	feet de	termined by	60% calc
	Hole S	ize:	7 7/8"		
<pre>> 4/(5 </pre>	Total	Depth:	5122	······	
S	Inject	ion Inter	<u>val</u>		
TD TD	. <u></u>	4715	feet to	5122	feet
	(perio	rated or	open-hole, in	dicate which	a)
Tubing size 2 3/8_ lined wit	:n	1 (mat	PC erial)	{	set in a
	packer a	it4	616	feet.	
(brand & model) (or describe any other casing-tub	ing seal).				
<u>Other Data</u>	-				
1. Name of the injection formati	on <u>San</u>	Andres			
2. Name of Field or Pool (If app	licable)	Upper 1	Lovington San	Andres West	
3. Is this a new well drilled fo If no, for what purpose was t	r injectio he well or	n? <u>N</u> iginally	o drilled?	producti	on
4. Has the well ever be perforat intervals and give plugging d used. No	ed in any letail (sac	other zon ks of cem	e(s)? List a ent or bridge	ll such peri plug(s)	Eorated
5. Give the depth to and name of (pools) in this area.	any overl	ying and/	or underlying	, oil or gas	zones

Grayburg-overlying

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GREENHILL PETRO	DLEUM CORPORATION		WEST LO	OVINGTON UN	IT		
OPERATOR			LEASE				
9	1980 FWL &	1980 FNL	5	<u>175</u>	<u>36E</u>		
WELL NO.	FOOTAGE LOCA	ATION	SEC.	TOWNSHIP	RANGE		
LEA COUNTY, NEW	MEXICO						
			Tut	oular Data			
		Surface	Casing				
		Size: 13	3/8″	Cemented	with	180	_sx
		TOC: SL	IRFACE	feet d	etermined	by CALC	`
	12 3/2	Hole siz	ie: <u>1</u> 4	4 1/2			•
	_/ 3 / 6	Intermed	liate Casi	ing			
acaphole		Size: <u>8</u>	5/8″	Cemented	with	300	sx
open hole		тос: 10	71	feet d	etermined	by <u>CALC</u>	50%
	L 8 5/8	Hole Siz	:e: <u>1</u>]	1			
		Long Str	ing				
	•	Size: <u>5</u>	1/2″	Cemented	with	400	SX
	-51/2	тос: <u>25</u>	82	feet d	etermined	by <u>CALC</u>	80%
	4761	Hole Siz	:e:	7 7/8			
To	5140	Total De	pth: <u>5</u>]	.40			
		Injectio	on Interv	<u>al</u>			
		48 (perfora	00 ited or of	feet to pen-hole i	5140 ndicate wl	fee hich)	€t
Tubing sizeN	ONE lined with	<u> </u>			<u>-</u>	set in	<u>n a</u>
N	ONE	packer at	(mate)		fee	t.	
(brand & mode (or describe any	el) other casing-tubin	g seal).					
Other Data		5, .					
<u>Other Data</u>		C		DOLONITE			
1. Name of the I	injection formation	5/	AN ANDRES	DULUMITE	······································		
2. Name of Field	i or Pool (If appli	cable)	<u> </u>	OVINGTON (S	AN ANDRES) WEST	
3. Is this a new If no, for wh	w well drilled for nat purpose was the	injection? well orig	NO NO	rilled? P	RODUCTION		
4. Has the well intervals and used. NO	ever be perforated I give plugging det	in any ot ail (sacks	ther zone of cemen	(s)? List nt or bridg	all such p e plug(s)	perforate	ad
5 Give the dept	to and name of a	ny overly	ng and/o	r underlvin	g oil or	PAS ZODA	 S
(pools) in th	nis area.	ng overtyj	ing and/o	- unuertyth	O OIL OI	Pag Tous	-

			·	INJECT	TION WELL DA	TA SHEET			•	
(GREENHIL	L PETR	ROLEUM CO	RPORAT	ION	WEST L	OVINGTON UN	IT		
	OPERAT	ror				LEASE				
	11		. 66	50 FEL	& 1980 FNL	5	175	36E		
	WELL N	10,	F	OOTAGE	LOCATION	SEC.	TOWNSHIP	RANGE		
l	LEA COUN	TY, NE	W MEXICO	 						
				•		Tu	<u>bular Data</u>			•
		ſ	11		<u>Surfac</u>	<u>e Casing</u>				
					Size:_	<u>13 3/8</u> ″	Cemented w	with	200	_SX
					TOC:	SURFACE	feet d	etermined	by CAL	
			133	8"	Hole s	1ze:	14 1/2			
					Interm	ediate Cas	ing			,
					Size:	85/8 "	Cemented	with	200	SX
			85/	8		1400	feet d	etermined	by CAL	,
				. ·	Hole S	ize:	10 3/4	C COLIMETICO		
					Long S	tring				
						5 1/2 "	Cemented	with	350	SX .
			51/2"		TOC.	2643	feet d	etermined		
		Ĩ	4740			4040	7 5/0	CCCLMLIICG	· ·	<u> </u>
		-			Total	Depth:	_7_ <u>970</u>			
			<u>r</u>	-	Inject	ion Interv	val			
		10	2120		<u> Anjece</u>		foot to	E105 (1	DITD) foo	
					(perfo	rated or o	pen-hole i	ndicate wh	ich)	
Tub	oing size	. 2-	-3/8" 1	ined w	1th	IPC			set in	a
	Baker	-51	2.		packer a	(mate) t 4720	rial)	feet	•	• •
(or	(brand & describe	& mode a any	1) other ca	sing-t	ubing seal).			· ·	•	•
<u>Othe</u>	r_Data	·		-						
1.	Name of	the i	njection	forma	tion SAN	ANDRES DOLO		·····		
2.	Name of	Field	or Pool	(If a	pplicable)	LOI	INGTON (SAN	ANDRES)	VEST	
3.	Is this If no, f	a new Eor wh	well dr. at purpo	illed : se was	for injection the well or	n? <u>NO</u> iginally d	Irilled? P	RODUCTION		·
4.	llas the interval used.	well Ls and NO	ever be give pl	perfor. ugging	ated in any detail (sac	other zone ks of ceme	(s)? List ont or bridg	all such p e plug(s)	erforate	d
5.	Give the	e dept in th	h to and	name	of any overl	ying and/o	or underlyin	g oil or g	as zones	·
	1200201									

GRAYBURG - OVERLYING

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GREENHILL PETROLEUM CORPORATIO	ON WEST LOVINGTON UNIT
OPERATOR	LEASE
12 660 FWL WELL NO. FOOTAGE	<u>& 1980 FNL 4 17S 36F</u> LOCATION SEC. TOWNSHIP RANGE
LEA COUNTY, NEW MEXICO	WEST LOVINGTON FIELD
	Tubular Data
· 1 · 1 · 1	<u>Iubular Daca</u>
	Surface Casing
	Size: 10 3/4 " Cemented with SX
103/4	TOC: _SFC @ 75%EFFfeet determined byCALC
	* Hole size: <u>12 1/4</u>
	Intermediate Casing
75/8	Size: 7 5/8 " Cemented with600 SX
	TOC: 350'@ 50%EFF feet determined by CALC
	* Hole Size: <u>9 7/8</u>
<u>51/2</u>	Long String
	Size: <u>5 1/2</u> " Cemented with <u>400</u> SX
	TOC: 2300'0 50% feet determined by <u>CALC</u>
	* Hole Size: <u>6 3/4</u>
Shoe at	Total Depth: 5100 FT
	Injection Interval
	4750 feet to 5095 feet
	(perforaced of open-noile) indicate which)
Tubing size <u>2-3/8</u> lined wi	ith set in a (material)
Baker (brand & model)	packer at4730feet.
(or describe any other casing-tu	ubing seal).
<u>Other Data</u>	
1. Name of the injection format	tion SAN ANDRES
2. Name of Field or Pool (If ap	pplicable) LOVINGTON (SAN ANDRES) WEST
3. Is this a new well drilled f If no, for what purpose was	for injection? <u>NO</u> the well originally drilled? <u>PRODUCTION</u>
 Has the well ever be perform intervals and give plugging used. NO 	ated in any other zone(s)? List all such perforated detail (sacks of cement or bridge plug(s)
5. Give the depth to and name o (pools) in this area.	of any overlying and/or underlying oil or gas zones
GRAYBURG - OVERLYING	

* EST.

GREENHILL PETRO	LEUM CORPORTION		Ь	lest Lovingto	on Unit	
OPERATOR			LEASE			
16	1980 FSL & 198	O FEL	6	17S	36E	
WELL NO.	FOOTAGE LOCA	ATION	SEC.	TOWNSHIP	RANGE	
			Tu	bular Data		
[1]		<u>Surfac</u>	<u>e Casing</u>			
		Size:	<u>13 3/8</u> ~	Cemented w	ith 250	sx
		TOC:	surface	feet de	termined by	
	- <u>25</u> 4 13376	Hole s	ize: <u>17</u>	1/4"		
		Interm	<u>ediate Cas</u>	ing		
	1650	Size:	<u> </u>	Cemented w	ith 450	sx
	150 (5 p)	TOC: _	745	feet de	stermined by	60% calc
		Hole S	ize:11	L		
		Long S	tring			
		Size:	<u>5 1/2</u> ″	Cemented w	vith4	<u>50 _sx</u>
		TOC: _	2473	feet de	termined by	<u>60% cal</u>
3		Hole S:	Lze:	7 3/8"		
	Sizol	Total 1	Depth:	5120'		
		<u>Inject</u>	<u>ion Interv</u>	<u>al</u>		
			4780	feet to	5120	feet
		(perfo	rated or o	pen-hole, ir	dicate whic	h)
Tubing size	2 7/8" lined with		IPC			set in a
Baker AD1	T	acker a	(mate 4688	rial) 3	feet.	
(brand & model	L)	r con1)				
Other Data	Cher Casing-Cubing	5 Seal/.				
1 Name of the da	- I		Sar	Andres		
1. Name of the in	ijection formation	<u></u>				
2. Name of Field	or Pool (If applie	cable) _	Upp	per Lovington	n San Andres	West
3. Is this a new If no, for what	well drilled for in the second	Injection well or:	n? <u>No</u> Iginally d	rilled?	roduction	
4. Has the well e intervals and used.	ever be perforated give plugging deta	in any o ail (sacl	other zone ks of ceme	(s)? List and the second se	all such per plug(s)	forated
No	<u></u>	<u></u>		·		
5. Give the depth	n to and name of ar	y overly	ving and/o	r underlying	oil or gas	zones

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

Grayburg overlying

INJECTION WELL DATA SHEET

GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 18 1980 FSL & 660 FWL 5 17S 36E SEC. TOWNSHIP FOOTAGE LOCATION WELL NO. 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> 3/4 -13 3/8 Intermediate Casing open hole Size: 8 5/8 " Cemented with 300 SX 8 7/8 Completed 7/30/45 TOC: 1044 feet determined by CALC 50% Converted to injection - 2/18/63 Hole Size: 11 Long String Size: <u>5 1/2</u> " Cemented with <u>400</u> SX -51/2 4749 TOC: 1881 feet determined by CALC 80% Hole Size: <u>7 3/8</u> TD 5150 Total Depth: 5150 Injection Interval 4780 feet to 5150 feet (perforated or open-hole, indicate which) Tubing size _____2 3/8" lined with _____ _ set in a TPC (material) feet. _____ packer at _____ 4627' (brand & model) (or describe any other casing-tubing seal). Other Data Name of the injection formation _____ SAN ANDRES DOLOMITE 1. 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST Is this a new well drilled for injection? 3. NO If no, for what purpose was the well originally drilled? **PRODUCTION** Has the well ever be perforated in any other zone(s)? List all such perforated 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. **GRAYBURG** - OVERLYING

INJECTION WELL DATA SHEET



GRAYBURG - OVERLYING - PRODUCTIVITY NEVER DETERMINED

GREENHILL P	ETROLEUM CORPORATION		WEST L	OVINGTON U	NIT		
OPERATOR			LEASE				_
20	1980 FSL &	1980 fEL	5	<u>175</u>	<u>36E</u>		
WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE		
LEA COUNTY,	NEW MEXICO		<u></u>				<u>_</u>
		۰.	<u>Tub</u>	ular Data			
i	1 1	<u>Surface (</u>	asing				
		Size: <u>13</u>	3/8″	Cemented	with	200	sx
		toc: <u>SU</u>	RFACE	feet d	etermined	by <u>CAL</u>	<u>c</u>
	L 13 3/8	Hole size	e: <u>1</u>	7			
		Intermedi	<u>ate Casi</u>	ng			
		Size: <u>8</u>	<u> 1/4 </u> ″	Cemented	with	200	sx
converted to	L	TOC: <u>13</u>	64	feet d	etermined	by <u>CAL</u>	<u>C 50%</u>
1njection 2/18/63		Hole Size	e: <u>1</u>	1			
Completed 3/3/45 Openhole		Long Stri	ing				
	-5%	Size: <u>5</u>	1/2″	Cemented	with	200	_sx
		тос: <u>36</u>	10	feet d	etermined	by <u>CAL</u>	<u>C_80</u> %
		Hole Size	:ī	7_7/8		•	•
	5104	Total Dep	oth: _5]	104	·		
	· .	Injection	<u>Interva</u>	1			
		47((perforat)0 ced or (on	feet to	5104 ndicate w	fe hich)	et
Tubing size	2". lined with	TP	c			cot i	n a
1001ng 5126			(mater	ial)		3ec 1	, ,
(brand & mo	P del)	acker at _	4663	• •	fee	t.	
(or describe an	y other casing-tubing	seal).					
<u>Other Data</u>	·						
1. Name of the	injection formation	SAN	ANDRES I	DOLOMITE			
2. Name of Fie	ld or Pool (If applic	able)	LOV	VINGTON (SA	N ANDRES)	WEST **	
3. Is this a n If no, for	ew well drilled for i what purpose was the	njection? well origi	NO Inally dr	illed? PF	RODUCTION		
4. Has the wel intervals a used. NO	l ever be perforated nd give plugging deta	in any oth il (sacks	ner zone(of cemen	s)? List at or bridg	all such e plug(s)	perforat	ed
5. Give the de (pools) in	pth to and name of an this area.	y overlyir	ng and/or	underlyin	g oil or	gas zone	 S
CPAN	BURG - OVERLYING						

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,	GREENHILL	PETROLEUM CORPORAT	ION	WEST L	OVINGTON UNI	T		
	OPERATOR			LEASE				
	21	1980 FSL	& 660 FEL	5	175	<u>36E</u>		
	WELL NO.	FOOTAGE	LOCATION	SEC.	TOWNSHIP	RANGE		
<u>. </u>	LEA COUNTY	, NEW MEXICO	<u></u>	•				
				Tu	<u>ubular Data</u>			
	ł		Surface	<u>Casing</u>				
			Size:	13_3/8~	Cemented v	with	200	sx
			TOC:	SURFACE	feet de	etermined	by <u>CAl</u>	
			Hole s:	lze:	17 1/4			
		13 78	Interm	<u>ediate Cas</u>	sing			
complete	:d 11/4/44		Size:	<u>85/8</u> ^	Cemented w	with	200	sx
Open b	hole	& 5/g	TOC:	1364	feet de	etermined	by <u>CAL</u>	<u>.C 50%</u>
			Hole S	ize:	11			
			Long S	tring				
		-51/2 4700	Size:	5 1/2	" Cemented	with	200	SX
			TOC:	3266	feet d	etermined	by <u>CAL</u>	<u>C 80%</u>
			Hole S	ize:	7 3/8	<u> </u>	٠	
	Т	0 5100	Total	Depth:	5100			
			<u>Inject</u>	<u>ion Interv</u>	val			
			(perfo	4767 rated or (feet to		fe hich)	et
Tub	oing size	NONE lined wi	.th				set i	n a
		NONE	nastor	(mate	erial)	faa	**	
	(brand & m	odel)	packer a		······	ree	L.,	
(or	describe a	ny other casing-tu	bing seal).					
<u>Othe</u>	er Data							
1.	Name of th	e injection format	ion	SAN ANDRES	DOLOMITE			
2.	Name of Fi	eld or Pool (If ap	plicable)	<u> </u>	OVINGTON (SA	ANDRES	WEST	
3.	Is this a If no, for	new well drilled f what purpose was	for injection the well or	n? <u>NO</u> iginally c	irilled? PF	RODUCTION		
4.	Has the we intervals used. NO	11 ever be perfora and give plugging	ted in any detail (sac	other zone ks of ceme	e(s)? List a ent or bridg	all such ; e plug(s)	perforat	ed
5.	Give the d	epth to and name o	of any overl	ying and/o	or underlyin	g oil or	gas zone	S
	(pools) in	this area.						
	un	HOUNG - OFERLING						

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GREENHILL PETRO	LEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR		
	FOOTAGE LOCAT	FWL 6 17S 36E LON SEC. TOWNSHIP RANGE
IFA COUNTY NEW	MEXICO	
	PIEXT00	
		<u>Tubular Data</u>
		Surface Casing
	5	Size: <u>13</u> "Cemented with <u>250</u> SX
	113 1	TOC:
open hole	I	Hole size:17 1/4
Completed 5/30/45 Converted to injection	3	Intermediate Casing
4/12/69	95/6	Size: <u>85/8</u> " Cemented with <u>600</u> SX
	Ţ	TOC:
	1	Hole Size:11
	_ 51/2]	Long String
	4717	Size: 5 1/2 "Cemented with 400 SX
		$FOC: 2394 \qquad \text{feat determined by CALC 80%}$
	דרוז מד	$\frac{100}{100} = \frac{100}{100} = \frac{7.3}{4}$
	r	$\frac{73/4}{5126}$
	i I	Total Depth:
]	Injection Interval
		4770 feet to 5175 feet (perforated or open-hole) indicate which)
Tubing size $2^{3/2}$	8" lined with	set in a
	pac	(material) cker at <u>4667</u> feet.
(brand & model) (or describe any ot	her casing-tubing :	seal).
<u>Other Data</u>		· ·
1. Name of the inj	ection formation	SAN ANDRES DOLOMITE
2. Name of Field o	r Pool (If applicat	ble) LOVINGTON (SAN ANDRES) WEST
3. Is this a new we If no, for what	ell drilled for inj purpose was the we	jection? <u>NO</u> ell originally drilled? <u>PRODUCTION</u>
4. Has the well even intervals and g used. NO	er be perforated in ive plugging detail	n any other zone(s)? List all such perforated l (sacks of cement or bridge plug(s)
5. Give the depth	to and name of any	overlying and/or underlying oil or gas zones
(pools) in this	area.	
GRAYBUR	G - OVERLYING	

DPERATOR 29 NELL NO. COUNTY, NEW COUNTY, NEW	$\frac{660 \text{ FSL } \& 660 \text{ F}}{\text{FOOTAGE LOCA}}$ $MEXICO$ $ $	LEASE EL 6 17S 36E TION SEC. TOWNSHIP RANGE Tubular Data Surface Casing Size: 13 3 /8 " Cemented with SURFACE
29 NELL NO. COUNTY, NEW COUNTY, NEW 4/5/45- to injection	$\frac{660 \text{ FSL } \& 660 \text{ FOOTAGE LOCA}}{\text{FOOTAGE LOCA}}$	EL 6 17S 36E TION SEC. TOWNSHIP RANGE Tubular Data Surface Casing Size: 13 /8 " Cemented withOOSX TOC: SURFACE feet determined byCALC Hole size: 17 1/4 Intermediate Casing Size: 8 5/8 Cemented with 200
NELL NO. COUNTY, NEW COUNTY, NEW 4/5/45 of injection	FOOTAGE LOCA MEXICO $ = \frac{13^{3/8}}{8^{5/6}}$	TION SEC. TOWNSHIP RANGE Tubular Data Surface Casing Size: 13 3 /8 " Cemented with 200SX TOC: SURFACEfeet determined byCALC Hole size:17 1/4 Intermediate Casing Size:8 5/8 Cemented with200SX
COUNTY, NEW	MEXICO	Tubular Data Surface Casing Size: 13 3 /8 _ " Cemented with 200 SX TOC: SURFACE feet determined byCALC Hole size: 17 1/4 Intermediate Casing Size: 8 5/8 _ " Cemented with 200SX
le 4/5/45- to injection		Tubular Data Surface Casing Size: 13 3 /8 _ Cemented with Size: 13 3 /8 _ Cemented with TOC: SURFACE feet determined by CALC Hole size: 17 1/4 Intermediate Casing Size: Size: Cemented with 200
GREENHILL PETROLEUM CORPORATION OPERATOR 29 660 FSL & 660 WELL NO. FOOTAGE LOC LEA COUNTY, NEW MEXICO $-13.3/8$	Surface Casing Size: 13 3 /8 " Cemented with 200SX TOC: SURFACE feet determined by CALC Hole size:17 1/4 Intermediate Casing Size:8 5/8 Cemented withSX	
GREENHILL PETROLEUM CORPORATIO OPERATOR 29 660 FSL & 660 WELL NO. FOOTAGE LO LEA COUNTY, NEW MEXICO $ _{13}^{3/p}$ $ _{13}^{3/p}$ $ _{13}^{3/p}$ $ _{13}^{3/p}$ $ _{13}^{3/p}$ $ _{13}^{3/p}$ $ _{13}^{3/p}$ $ _{13}^{3/p}$ $ _{13}^{5/q}$ $ _{13}^{5/q}$ $ _{13}^{5/q}$ $ _{13}^{5/q}$ $ _{13}^{5/q}$ $ _{15}^{5/q}$ ubing size $2^{3/8"}$ lined with $ _{15}^{-5/2}$ 4720 $ _{15}^{-5/2}$ $ _{15}^{-5/2}$ $ _{15}^{-5/2}$ Name of the injection formation Name of the injection formation Name of Field or Pool (If app) Is this a new well drilled for If no, for what purpose was th Has the well ever be perforated intervals and give plugging do used. NO	- 85/s	Size: <u>13 3 /8</u> "Cemented with <u>200</u> SX TOC: <u>SURFACE</u> feet determined by <u>CALC</u> Hole size: <u>17 1/4</u> <u>Intermediate Casing</u> Size: <u>8 5/8</u> "Cemented with <u>200</u> SX
	_ 13 ³ /8 _ 8 ⁵ /8	TOC: <u>SURFACE</u> feet determined by <u>CALC</u> Hole size: <u>17 1/4</u> <u>Intermediate Casing</u> Size: <u>8 5/8</u> " Cemented with <u>200</u> SX
	85/8	Hole size: 17 1/4 Intermediate Casing Size: 8 5/8 " Cemented with
	85/6	Hole size: <u>1/ 1/4</u> <u>Intermediate Casing</u> Size: <u>8 5/8</u> " Cemented with <u>200</u> SX
4/5/45- to injection	85/8	Intermediate Casing Size: <u>8 5/8</u> "Cemented with <u>200</u> SX
o injection		Size: <u>85/8</u> " Cemented with <u>200</u> SX
erted to injection 4/10/69 — Ti		
		TOC: 1364 feet determined by <u>CALC 50%</u>
	-51/2 4720	Hole Size: 11
Tr		Long String
	D 5155	Size: 5 1/2 "Cemented with 200 SX
10 5155		$TOC: 2074 \qquad \text{foot determined by CALC 000}$
		100: <u>2074</u> reet determined by <u>CALL BUR</u>
		Hole Size:/
		Total Depth: <u>5155</u>
		Injection Interval
	· ·	4735 feet to 5155 feet
	3/ou lined with	IPC Indicated which,
g size <u> </u>	<u>·o</u> IIned with _	(material)
cand & model	· · · · · · · · · · · · · · · · · · ·	packer atfeet.
scribe any o	ther casing-tubing	; seal).
Data		
ne of the in	jection formation	SAN ANDRES DOLOMITE
ne of Field	or Pool (If applic	able)LOVINGTON (SAN ANDRES) WEST
this a new no, for wha	well drilled for i t purpose was the	njection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
s the well e tervals and ed. NO	ver be perforated give plugging deta	in any other zone(s)? List all such perforated il (sacks of cement or bridge plug(s)
	g size7 rand & model scribe any o Data me of the in me of Field this a new no, for wha s the well e tervals and ed. NO we the depth	$\frac{-1}{TD} \frac{3}{5!55}$ g size $2\frac{3}{8"}$ lined withF rand & model) scribe any other casing-tubing Data me of the injection formation me of Field or Pool (If applic this a new well drilled for f no, for what purpose was the s the well ever be perforated tervals and give plugging deta ed. NO

GREENHILL PETROLE	UM CORPORATION	WEST LOVINGTON UNIT
OPERATOR	<u></u>	LEASE
32	660 FSL & 1980	FEL <u>5</u> 17S 36E
WELL NO.	FOOTAGE LOCA	TION SEC. TOWNSHIP RANGE
LEA COUNTY, NEW M	EXICO	
	•	Tubular Data
		Surface Casing
		$\frac{2}{2} \frac{1}{2} \frac{2}{9} \frac{2}{9} \frac{1}{9} \frac{1}$
		Size. <u>15 5/6</u> Cemenced with <u>200</u> SX
		TOC: <u>SURFACE</u> feet determined by <u>CALC</u>
an hala	1370	Hole size: <u>17</u>
Completed - 2/13/45	L 300'	Intermediate Casing
		Size: 8 5/8 " Cemented with SX
		TOC: 1364 feet determined by CALC 50%
·	•5/11	Hole Size: <u>11</u>
	1000'	Long String
		Size: 5 1/2 " Cemented with 200 SX
		TOC: 32/1 feet determined by CALC 20%
		100. <u>5241</u> reet determined by <u>LALC 806</u>
	4700' 51/2	Hole Size: <u>/ 3/8</u>
	}	Total Depth: <u>5080</u>
		Injection Interval
	- TD 5080	4700 feet to 5080 feet (perforated or open-hole) indicate which)
Tubing size NONE	lined with	set in a
NONE		(material)
(brand & model)	p	acker atIeet.
(or describe any oth	er casing-tubing	; seal).
<u>Other Data</u>		
1. Name of the inje	ection formation	SAN ANDRES DOLOMITE
2. Name of Field or	: Pool (If applic	able)LOVINGTON (SAN ANDRES) WEST >
3. Is this a new we If no, for what	all drilled for i purpose was the	njection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
4. Has the well eve intervals and gi used. NO	er be perforated ve plugging deta	<pre>in any other zone(s)? List all such perforated il (sacks of cement or bridge plug(s)</pre>
5. Give the depth t (pools) in this	o and name of an area.	y overlying and/or underlying oil or gas zones
GRAYBURG	G - OVERLYING	

GREENHILL PET	ROLEUM CORPORATION		WEST	LOVINGTON U	NIT		
OPERATOR			LEASE				
33	660 FSL & 660	FEL	5	175	36E		
WELL NO.	FOOTAGE LOCAT	TION	SEC.	TOWNSHIP	RANGE		
LEA COUNTY, N	EW MEXICO						
			Tub	<u>oular Data</u>			
		Surface	Casing				
		Size: 13	}″	Cemented v	with	225	SX
a. h.t		TOC: SI	IRFACE	feet d	etermined	by CAL	С
pen nore	L 13 78	Hole siz	e: 1	7			
mprered 1/15/47		Intermed	iate Casi	ng			·
	95/4		2 5 / 8 <i>m</i>	Comented	: 	250	CV
	- 2 - 1 2	DIZE;		Cemented	w1.011	1	^{3A}
		TUC: <u>1</u> 3		feet d	ecermined	by <u>UAL</u>	<u>u 50%</u>
	-51/2	Hole Siz	e: <u>1</u>	1			
-		Long Str	ing				
		Size: 5	5 1/2 "	Cemented	with	200	sx
		тос: <u>35</u>	585	feet d	etermined	by <u>CAL</u>	<u>C_80</u> 2
		Hole Siz	e:	7 7/8		·	
		Total De	pth: 50	077			
		Injectio	n Interva	1			
		47	70	feet to	5077	fe	et
		(perfora	rea or OI	en-nole, 1	ndicate W	licn)	
Tubing sizeN	<u>DNE</u> lined with _		(mate)	cial)		set i	n a
Ni (hanna f. mada	<u>DNE</u> pr	acker at			fee	t.	
(or describe any	other casing-tubing	seal).					
<u>Other Data</u>				:			
1. Name of the t	Injection formation	SA	N ANDRES	DOLOMITE			
2. Name of Field	i or Pool (If applic)	able)	<u> </u>	<u>DVINGTON (S</u>	AN ANDRES) WEST	
3 Is this a new	well drilled for i	iection?	NO				
If no, for wh	at purpose was the w	vell orig	inally di	cilled? P	RODUCTION		
4. Has the well intervals and used. NO	ever be perforated i i give plugging deta	in any ot 11 (sacks	her zone of cemer	(s)? List at or bridg	all such p e plug(s)	perforat	ed
5. Give the dept	th to and name of an	v overlvi	ng and/oi	underlvin	g oil or	gas zone	 S
(pools) in th	nis area.		. , .		_	-	
GRAYE	3URG - OVERLYING						

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6	GREENHILL PETRO	OLEUM CORPORATION	WEST	LOVINGTON UNI	[T	
	OPERATOR		LEAS	E		
	40	1980 FWL & 660	FNL 7	175	36E	NMPM
	WELL NO.	FOOTAGE LOCAT	CION SEC.	TOWNSHIP	RANGE	
h	EST LOVINGTON	FIELD, LEA COUNTY,	NEW MEXICO		···	
		$\frac{13^{3/8}}{221}$	Surface Casing Size: <u>13 3/8</u> TOC: <u>22'0 100</u> Hole size: Intermediate C	<u>Tubular Data</u> _" Cemented w <u>'FILL</u> feet de <u>19</u> " asing	with <u>150</u>	sx calc
			Size: 8 5/8	" Cemented y	with 250	SX
			TOC: 723'@ 10	0%FILL feet de	etermined by	CALC
		85/8	Hole Size:	11"	·	
		2020	Long String	17S 36E NMPM SE TOWNSHIP RANGE Tubular Data 3		
			Size: 5_1/2	Cemented	<u>36E</u> NMPM RANGE NMPM RANGE NMPM RANGE NMPM SX determined by <u>CALC</u> SX determined by <u>SX</u> SX SX SX SX SX SX SX SX SX SX SX SX SX	
	OPERATORLEASE401980 FML & 660 FNL717536EWELL NO.FOOTAGE LOCATIONSEC.TOWNSHIP RANGEWEST LOVINGTON FIELD, LEA COUNTY, NEW MEXICOTubular DataSurface CasingSize: 13 3/8 Comented withSize: 13 3/8Commented withUNINGTON FIELD, LEA COUNTY, NEW MEXICOTubular DataSurface CasingSize: 13 3/8	CALC				
	J	51/2	Hole Size:	WEST LOVINGTON UNIT LEASE 7 175 36E NMPM SEC. TOWNSHIP RANGE ICO Tubular Data Casing 3.3/8 " Cemented with150 SX 2'@ 100'FILL feet determined byCALC		
		4112	LEASE IDENTITY INTERNITY IDENTITY INTERNITY IDENTITY INTERNITY TOUR ACE LOCATION SEC. TOWNSHIP RANGE D. LEA COUNTY, NEW MEXICO Tubular Data Surface CasIng Size: 13 3/8 " Cemented with150SX TOC: 22'0 100'FILL feet determined byCALC (13 3/8 " Cemented with250SX TOC: 22'0 100%FILL feet determined byCALC (13 3/8 " Cemented with250SX TOC: 723'0 100%FILL feet determined byCALC Size: 8 5/8 " Cemented with200SX TOC: 723'0 100%FILL feet determined byCALC Mole Size:11" Long String Size: 5 1/2 " Cemented with200SX TOC: 3088 0 100%FILL feet determined byCALC TOC: 3088 0 100%F			
		77 PB 5144				
		- TD 5160	4112 (perforated or	feet to open-hole, in	<u>5144 (fill)</u> ndicate which	_ feet)
Tut	oing size <u>23</u>	/8"lined with	IPC		S(et in a
	BAK	KER p	(ma acker at	terial) 4642'	feet.	
(or	(brand & mode) describe any o	1) other casing-tubing	seal).			,
<u>Othe</u>	er Data					
1.	Name of the in	njection formation	SAN ANDRE	ES DOLOMITE		
2.	Name of Field	or Pool (If applica	able)	LOVINGTO	N (SAN ANDRES) WEST
3.	Is this a new If no, for what	well drilled for in at purpose was the	njection? well originally	NO drilled?	PRODUCTION	
4.	Has the well of intervals and used.	ever be perforated give plugging deta	in any other zo il (sacks of ce	ene(s)? List ement or bridg	all such perfe e plug(s)	orated

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

GRAYBURG - OVERLYING - UNEVALUATED

	GREENHILL PET	ROLEUM CORPORATION		WEST	LOVINGTON U	NIT		
	01 ERRICK		00 551			•		
	WELL NO.	FOOTAGE LO	BU FEL	SEC.	175 TOWNSHIP	<u> </u>		
GREENVILL PETROLEUM CORPORATION VEST LOVINGTON UNIT 0PERATOR 1 660 FNL & 1980 FEL 7 175 36F 41 660 FNL & 1980 FEL 7 175 36F WELL NO. POUTAGE LOCATION SEG. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data 0pan hold Surface Casing 0pan hold Size: 13 3/8 " Gemented with200 13 3/r Hole size:								
	GREENHILL PETROLEUM CORPORATION OPERATOR 41 660 FNL & 1980 WELL NO. FOOTAGE LOCA LEA COUNTY, NEW MEXICO	<u></u>	Tu	bular Data			<u> </u>	
	[<u>Surface</u>	Casing				
	GREENHILL PETE OPERATOR 41 WELL NO. LEA COUNTY, NE LEA COUNTY, NE pen hole mpleted - 5/26/45 Druer ted to injection 2/18/63 Tubing size <u>NO</u> NO (brand & mode (or describe any <u>Other Data</u> 1. Name of the 1 2. Name of Field 3. Is this a new If no, for wh 4. Has the well intervals and used. <u>NO</u> 5. Give the dept (pools) in th		Size:	<u>13 3/8 </u> ″	Cemented	with	220	sx
			TOC:	SURFACE	feet d	etermined	by <u>CALC</u>	
		L13∛r	Hole si	lze:]	6			
Comple			Interme	ediate_Cas	ing			
Conver			Size:	8 5/8″	Cemented	with	150	_sx
2/1	8/63	85/8	TOC:	1505	feet d	etermined	by <u>CAL</u> (<u> </u>
			Hole Si	lze: <u>1</u>	1 1/2			
	- - - -		Long St	ring	· .			
		51/2	Size:	<u>5 1/2 </u> "	Cemented	with	200	sx
	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	2869	feet d	etermined	by <u>CAL(</u>	<u>. 80%</u>		
			Hole Si	lze:	7		•	
			Total I	Depth: 5	5155			
			Injecti	<u>lon Interv</u>	val			
			(perfor	1760 cated or @	feet to	<u>5155</u> ndicate w	fee hich)	et
OPERATOR LEASE 41 650 FNL & 1980 FEL 7 175 36F WELL NO. FOOTAGE LOCATION SRC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular. Data Tubular. Data Surface Casing Size: 13 3/8 Cemented with220 Toc: SURFACEfeet determined by CALC Completiciesfeet determined by CALC Completiciesfeet determined by CALC Toc: SURFACEfeet determined by CALC Completicies	n a							
 (o	(brand & mod or describe any	el) other casing-tubi	ng seal).					
<u>0t</u>	<u>her Data</u>							
1.	Name of the	injection formatio	nS	AN ANDRES	DOLOMITE			
2.	Name of Fiel	d or Pool (If appl	icable)	<u> </u>	OVINGTON (S	AN ANDRES	WEST	<u> </u>
3.	Is this a ne If no, for w	w well drilled for hat purpose was th	EUM CORPORATION WEST LOVINGTON HINT LEASE 660 FNL & 1980 FEL 7 175 36F FOOTAGE LOCATION SEC. TOWNSHIP NANGE MEXICO Tubular Data Surface Casing Size: 13 3/8 Cemented with220SX TOC: SURFACE feet determined by CALC					
GREENVILL PETROLEUM CORPORATION MEST LOVINGTON INFT OPERATOR 1000 FEL 172 36F WELL NO. FOUTAGE LOCATION SEC. TOWNSHIP NELL NO. FOUTAGE LOCATION SEC. TOWNSHIP WELL NO. FOUTAGE LOCATION SEC. TOWNSHIP NUMBER Data Surface Gasing Size: 13 3/8 " Gemented with 220 TOC: SURFACE feet determined by CAL Completed - \$721/47 Intermediate Gasing Size: 16 Completed - \$721/47 Intermediate Gasing Size: 150 Completed - \$721/47 Size: 11/2 Intermediate Gasing Completed - \$721/47 Size: 5165 feet determined by CAL Completed - \$721/47 Size: 5172 " Cemented with	perforate	∍d						
5.	Give the dep	th to and name of	any overly	ving and/o	or underlyin	g oil or	gas zone:	5
	(pools) in t	EENHIL PETROLEUM CORPORATION VEST LOVINGTON UNIT OPERATOR LEASE 41 660 FNL & 1930 FEL 7 YELL NO. FOOTAGE LOCATION SEC. YELL NO. SUBJECTION SEC.						
	GRAY	BURG - OVERLYING						

INJECTION WELL DATA SHEET GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 42 660 FNL & 660 FEL 7 17S 36E NMPM WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE WEST LOVINGTON FIELD, LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with 250 SX 133/2 TOC: CIRC @ 50%EFF feet determined by CALC 204 16" Hole size: Intermediate Casing Size: 8 5/8 "Cemented with 150 SX TOC: 1590 @ 75%EFF feet determined by CALC 85/8 Hole Size: 11 1/2 2008 Long String Size: 5 1/2 " Cemented with ____ 200 SX TOC: 3011'0 75%EFF feet determined by CALC 7" 5% Hole Size: 4727 Total Depth: 5160 Injection Interval TD 5160 5160 feet 4727 <u>feet</u> to (perforated or open-hole) indicate which) Tubing size 2-3/8" lined with _ IPC _ set in a (material) 💊 Baker 🚈 🍈 _____ packer at ____ 4707feet. (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) 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.

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

GRAYBURG - OVERLYING - UNEVALUATED

GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 660 FNL & 660 FWL 43 8 17S 36E WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with _____ 200 SX TOC: SURFACE feet determined by CIRC 1336 219 Hole size: 16 200 SX Circ Intermediate Casing cmt ret 1965 Size: 8 5/8 " Cemented with 200 SX 8 5/2 csg cut @ 2309 50' cmt plug TOC: SURFACE feet determined by CIRC Hole Size: 11 1/2 completed Long String 12/23/44 Size: 5 1/2 " Cemented with _____ 200 SX P. A 6/76 TOC: <u>SURFACE</u> feet determined by <u>P&A</u> Hole Size: 7 Cm1. 1et 4252 W 30' Cmt Total Depth: 5160 512 11 4721 Injection Interval 200 sx TO SIS3 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? 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.

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.

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GREENHILL PETROLI	EUM CORPORATION		WEST	LOVINGTON UN	<u>IT</u>	······
OPERATOR			LEASE		•	
44 UELL NO	1980 FWL & 66	50 FNL	8	175	36E	NMPM
WELL NO.	FOUNDE LOOM		SEC.	TOWNSHILL		
WEST LOVINGTON FI	<u>ELD, LEA COUNTY, NE</u>	EW MEXICO	<u> </u>			
1			T	ubular Data	•	
		<u>Surface (</u>	asing		•	
	173/	Size: <u>13 (</u>	3/8	" Cemented	with	<u>40</u> sx
	197'	TOC: <u>CIR</u>	<u>.</u>	feet d	etermined b	y <u>CALC</u>
		Hole size	: _1	6"		
		<u>Intermedi</u>	<u>ate Ca</u>	sing		
		Size: 8	5/8	" Cemented	with	<u>150</u> sx
	85/8	тос: 148	5 0 80%	feet d	etermined h	y <u>CALC</u>
	2018	Nole Size	: _1	1 1/2		•
		Long Stri	ng	•	1	
		Size: 5	1/2	" Cemented	with	<u>200</u> sx
	51/2	TOC: 253	9 @ 80%	EFF feet d	etermined h	y <u>CALC</u>
	4730 '	Hole Size	e:	7		•
\rangle		Total Der	th: <u>5</u>	160	·	
·)		Injection	<u>ı Inter</u>	val		
$-\tau_{c}$	5160	473)	feet to	5160	feet
		(perforal	ed or	open-hole i	ndicate whi	Lch)
Tubing size	3/8" lined with		IPC			_ set in a
Baker 🗮	 	backer at	(mat 47	erial) 10	feet	•
(brand & mode)	1) ather casing-tubing	- 				
(or describe any o	ocher casing-cubing	g sear).		,	•	
<u>Other Data</u>		•		•		
L. Name of the in	njection formation	SAN	ANDRES	DOLOMITE	- <u></u>	• •
. Name of Field	or Pool (If applic	cable)	LOVIN	IGTON (SAN A	NDRES) WEST	· · ·
3. Is this a new If no, for what	well drilled for i at purpose was the	Injection? well origi	NO Lnally	drilled? PR	ODUCTION	
4. Has the well of intervals and used.	ever be perforated give plugging deta	in any oth ail (sacks	ner zon of cem	e(s)? List ent or bridg	all such po e plug(s)	erforated
5. Give the denti	h to and name of a	overlvi	17 And/	or underlyin	g of 1 or m	48 ZODAS
(pools) in thi	is area.		-0/		0 v. B	

GRAYBURG - OVERLYING - UNEVALUATED

GREENHILL PETR	OLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR		LEASE
45	660 FNL & 1980	0 FEL 8 17S 36E
WELL NO.	FOOTAGE LUCA	ATION SEC. TOWNSHIP RANGE
LEA COUNTY, NE	N MEXICU	
		<u>Tubular Data</u>
		Surface Casing
		Size: 10 3/4 " Cemented withS
ered hale		TOC: SURFACE feet determined by CALC
Completed - 1/10/45	103/4	Hole size: 13 3/4
nverted to injection 2/18/63		Intermediate Casing
	1 - 75%	Size: 7 5/8 "Cemented with 650 S
		TOC: <u>CMT CIRC</u> feet determined by <u>CALC</u>
		Hole Size:9 7/8
	51/2	Long String
	5099 TD 5100	Size: <u>5 1/2</u> "Cemented with <u>400</u> S
		TOC: CMT_CIRC feet determined by <u>CALC</u>
		Hole Size: <u>6 3/4</u>
	· ·	Total Depth: <u>5100</u>
		Injection Interval
		4730 feet to 5060 feet (perforated or open-hole, indicate which)
Tubing size2	3/8" lined with	IPC set in a
		(material) packer at <u>4681'</u> feet.
(brand & mode) (or describe any (l) other casing-tubing	g seal).
Other Data		
1. 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 what	well drilled for i at purpose was the	injection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
4. Has the well of intervals and used.	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 depth (pools) in th	n to and name of an Ls area.	ny overlying and/or underlying oil or gas zones

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INJECTION WELL DATA SHEET

	INJECTION WELL DATA SHEET	· .
GREENHIL	L PETROLEUM CORPORATION WEST LOVINGTON-UNIT	
OPER	ATOR	
WELL	46660 FNL & 660 FEL817S36ENO.FOOTAGE LOCATIONSEC.TOWNSHIPRANGE	NMPM
WEST LOV	INGTON FIFLD, LEA COUNTY, NEW MEXICO	
WEST LOV	INGTON FIELD, LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 10.3/4 Cemented with $10^{-3/4}$ ToC: CIRC feet determined in Hole size: 13.3/4 175% Intermediate Casing Size: 7.5/8 Cemented with TOC: CIRC feet determined Hole Size: 9.7/8 Long String Size: 5.1/2 Cemented with TOC: 1709 feet determined Hole Size: 6.3/4 PERF Total Depth: 5100 Injection Interval 4730 feet to5095 (perforated)or open-hole, indicate wh	200SX byCALC 650SX byCALC 400SX byCALC S: 4730-60 5050 4780-4810 5085 4870-80 4910-15 4980-5040 feet 1ch)
Tubing si	ze 2 3/8" lined with IPC	set:in a
	(material) BAŘER , Backer et 4710 feet	
(brand	& model)	•
(or descri	be any other casing-tubing seal).	
UPELL NO. DOTAGE LOCATION SEC. TOWNSHIP NAME NAME WEST LOVINGTON FIELD, LEA COUNTY, NEW MEXICO Tubular_Data Surface Casing Size: 10 3/4 Cemented with 200 5X JO ^A /J TOG: CIRC feat determined by CALE Hole size: 13 3/4		
1. Name o	f the injection formation SAN ANDRES DOLOMITE	·
2. Name o	f Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST	· · · · · · · · · · · · · · · · · · ·
3. Is thi If no,	s a new well drilled for injection? <u>NO</u> for what purpose was the well originally drilled? <u>PRODUCER</u>	,
4. Has th Interv used.	e well ever be perforated in any other zone(s)? List all such p als and give plugging detail (sacks of cement or bridge plug(s) NO	erforated
5. Give t (pools	he depth to and name of any overlying and/or underlying oil or g) in this area.	as zones

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GRAYBURG - OVERLYING - UNEVALUATED

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GR	EENHILL PETROLEUM	CORPORATION		WEST LOVI	NGTON UNIT		
	OPERATOR			LEASE	4 		•
	50	660 FWL & 198	BO FNL	7	17S	<u>36E</u>	
	WELL NO.	FOUTAGE LUCA	TION	SEC. 7	LUWNSHLP	RANGE	
GREENHILL PETROLEUM CORPORATION VEST LOVINCTON UNIT OPERATOR LASSE 50 660 FWL & 1980 FHL 7 175 36E WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE WEST LOVINGTON FIELD, LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13.3 /8 ~ Comented with 250 TOC: CIRC feet determined by 13.36 None of the injection formation Size: 8.5/8 ~ Comented with 450 2747 Hole aize: 11/4	••						
· · ·	5121	<u>133%</u> <u>133%</u> <u>248</u> , <u>85%</u> <u>1951</u> <u>51/2</u> <u>4738</u> ,	Surface C Size: 13 TOC: CIR Hole size Intermedi Size: 8 TOC: 400 Hole Size Long Stri Size: 5 TOC: 173 Hole Size Total Dep Injection 473 (perforat	Tubul asing 3 /8 ~ () 3 /8 ~ () 3 /8 ~ () 3 /8 ~ () 3 /8 ~ () 3 /8 ~ () 3 /8 ~ () 3 /8 ~ () 3 /8 ~ () 3 /8 ~ () ate Casing 5/8 ~ () '0 75%FILI '0 75%FILI ate Casing 1/2 ~ () '0 75% 1/2 ~ () '0 75% ate 512 ath: 512 ath: 512 ath: 512 ath: 512 ath: 512	Lar Data , Cemented with feet def 1/4 g Cemented with feet def feet def 3/8 1 feet to n-hole, in	ith2 termined by ith ith ith termined by CIB 5121 dicate whice	50 SX CALC 50 SX 50 SX 5
Tub	ing size $2-3/8$	lined with _		IPC (materi	<u>, , , , , , , , , , , , , , , , , , , </u>	۰ 	set in a
	Baker	I	packer at _	4718	····	feet.	, ,
(or	(brand & model) describe any othe	r casing-tubing	g seal).	•		•	
<u>Othe</u>	<u>r Data</u>						
1. 1	Name of the injec	tion formation	SAN	ANDRES DO	DLOMITE	, 	
2. 1	Name of Field or	Pool (If applie	cable)	LOVINGT	ON (SAN AN	IDRES) WEST	
3.	50 DOU FWL & 1960 FNL /2 1/5 365 WELL NO. FORTAGE LOGATION SEC. TOWNSHIP RANGE EST LOVINGION FIELD, LEA COUNTY, NEW MEXICO Tubular Data Tubular Data Surface Casing Size: 13 3 /8 " Commented with Size: 13 3 /8 " Commented with Job Colspan="2">Casing Size: 13 3 /8 " Commented with Constant Colspan="2">Constant Colspan="2" Constant C						
4.	Has the well even intervals and giv used. NO	be perforated e plugging deta	in any oth ail (sacks	ner zone(s of cement)? List a or bridge	ll such per plug(s)	rforated
5. (Give the depth to (pools) in this a	and name of an area.	ny overlyin	ng and/or	underlying	oil or ga	s zones

GRAYBURG - OVERLYING - UNEVALUATED

GREENHILL PETR OPERATOR	OLEUM CORPORATION		WES LEAS	<u>e</u>	IGTON UN	IIT		<u> </u>
51	1980 FNL & 1896	5 FWL	7		175	36F		
WELL NO.	FOOTAGE LOCAT	CION	SEC.	TOT	NSHIP	RANGE	•	
GREENHILL PETROLEUM CORPORATION ULASE S1 1980 FNL & 1996 FNL 7 175 16E ULASE ULASE SUFFACE 100 NOLSTICE ULASE ULEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with200								
				Tubula	<u>r Data</u>			
		<u>Surfac</u>	<u>ce Casing</u>					
		Size:	13 3/8	_″ Cer	mented w	with	200	_sx
	13 3/9	TOC:	SURFACE		feet de	etermined	by <u>CALC</u>	
		Hole s	size:	17 1/4	1	·······		
open hole converted to injection		Intern	<u>nediate C</u>	asing				
OFFERATOR LEASE 51 1980 FML & 1896 FML 7 175 265 WELL NO. FOOTAGE LOCATION SEC. TOKNSHIF RANGE LEA COUNTY. NEW MEXICO Tubular_Data Surface Casing Size: 13 3/8 " Commented withOOS cover hele Intermediate Casing cover hele Size: 17 1/4	_sx							
completed \$/11/48	:	тос:	519		feet de	etermined	by <u>CALC</u>	50%
		Hole S	Size:			·····		
	- 55	Long S	String					SX S
	4746	Size:_	5 1/2	_″ Cei	mented w	with	450	_sx
Тс		тос:	1520	<u></u>	feet de	etermined	by <u>CALC</u>	80%
		Hole S	Size:	7 3/8	3		•	
	OFERATOR 1980 FNL & 1896 FWL 7 175 36E JELA DO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE LEA COUNTY. NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented withOO Intermediate Casing Size: 17 1/4 Intermediate Casing Colspan="2">Commented withOO Colspan="2">Commented withOO Construction A figure Casing Size: 17 1/4 Intermediate Casing Colspan="2">Commented with							
		Inject	<u>tion Inte</u>	rval				
			4810	f	eet to	5094	fee	t
	3,	(perfo	orated or	open-l	hole) i	ndicate wl	nich)	
Tubing size 2	LEASE 1980 FNL & 1896 FWL 7 175 36F FOOTAGE LOCATION SEC. TOWNSHIP RANGE NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with 200 SX Size: 13 3/8 " Cemented with 200 SX 13 %; TOC: SURFACE feet determined by CALC Hole size: 17 1/4 Intermediate Casing gs/g Size: 8 5/8 " Cemented with 450 SX TOC: 519 feet determined by CALC 50% Hole Size: 11 Long String gs/g Size: 5 1/2 " Cemented with 450 SX TOC: 1520 feet determined by CALC 80% Hole Size: 7 3/8 Total Depth: 5094 Injection Interval $\frac{4810}{(perforated or @pon-hole)}$ indicate which) 2 $3/8$ " lined with IPC gs/g SA ANDRES DOLOMITE Injection formation SAN ANDRES DOLOMITE Injection formation SAN ANDRES DOLOMITE 1 dor Fool (If applicable) LOVINGTON (SAN ANDRES) WEST ew well drilled for injection? NO what purpose was the well originally drilled? PRODUCTION 1 ever be perforated in any other zone(s)? List all such perforated nd give plugging detail (sacks of cement or bridge plug(s) patho and name of any overlying and/or underlying oil or gas zones this area.							
(brand & model	pa	acker a	at <u>46</u> :	31'		fee	t.	
(or describe any o	ther casing-tubing	seal)	•					
<u>Other_Data</u>	·							
1. Name of the in	jection formation _		SAN ANDR	ES DOLO	MITE			
2. Name of Field	or Pool (If applica	able)		LOVING	GTON (SA	AN ANDRES)	WEST	
3. Is this a new If no, for wha	well drilled for in t purpose was the w	njectio well or	on? <u>NO</u> riginally	drill	ed? PR	RODUCTION		,
4. Has the well e intervals and used. NO	ver be perforated b give plugging detai	in any il (sa	other zo cks of ce	one(s)? ement o	List a r bridge	all such per plug(s)	perforate	ed.
5. Give the depth (pools) in thi	to and name of any s area.	y over:	lying and	l/or un	derlyin	g oil or ;	gas zones	j .

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GREENHILL PETROLI	EUM CORPORATION		WEST LO	VINGTON_UNI	T		·
ED	1000 ENL \$ 100		7				
	FOOTAGE LOCAT		SEC -	17S TOWNSHIP	36F RANGE		
			010.	10000000111	IUMIOD		
LEA COUNTY, NEW M	IEXICO	<u> </u>					
			<u>Tub</u>	ular Data			
		<u>Surface (</u>	Casing				
<u></u>	30 SX cmt Surf 100'	Size: 13	3/8 "	Cemented w	ith	250	S>
	Cont (etainer	TOC: SU	RFCAE	feet de	termined	by <u>CIRC</u>	, ,
	-13 3/8 48"2 249	Hole size	: <u>17</u>	1/2 .			
	250 SX	Intermedi	<u>ate Casi</u>	ng			
	- 8 5%" @1946 450 5	Size: <u>8</u>	5/8 ″	Cemented w	ith	450	S}
	•	TOC: SUF	RFACE	feet de	termined	by <u>CIRC</u>	
c A - 6/20/13	5½ Csg Cut 2695 pulled, 65 sx	Hole Size	:11				
	ind may be (but	Long Stri	ng				
٩		Size: 5	1/2″	Cemented w	ith	450	S2
30	sx cmt plug 1946-2048	TOC: SUF	RFACE	feet de	termined	Ъу <u>Р&А</u>	
······································	s.	Hole Size	: 7	7/8		•	
	3783-4004	Total Dep	oth: _51	10	:		
	51/2" 4737 450 sx	Injection	<u>Interva</u>	1			
				feet to		fee	t
		(perforat	ed or op	en-hole, in	dicate wl	nich)	
Tubing size2"	lined with		IPC	• 1\	· ····	set in	a
	pa	acker at	(mater) 4265	ial)	fee	τ.	
(brand & model) (or describe any oth	er casing-tubing	- seal).	<u></u>		******		
<u>Other Data</u>							
1 Name of the init	oction formation						
I, Name of the fift	celon lormation _						
2. Name of Field or	Pool (If applica	able)					
Is this a new we If no, for what	ll drilled for in purpose was the w	njection? vell origi	nally dr	illed?			
4. Has the well eve intervals and gi used.	er be perforated i ve plugging detai	in any oth 11 (sacks	ner zone(of cemen	s)? List a t or bridge	ll such plug(s)	perforate	d
	······································						

(pools) in this area.

GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT LEASE OPERATOR 17S 36E 660 FEL & 1980 FNL 53 7 WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: <u>13 3/8</u> " Cemented with _____ 250 SX TOC: SURFACE _____ feet determined by _____CALC___ - 13 3/8 Hole size: 17 1/4 Intermediate Casing completed - 4/23/48 converted to injection Size: 8 5/8 " Cemented with _____450 SX 8 5/0 5/26/69 TOC: 505 feet determined by CALC 50% Hole Size: <u>11</u> Long String 5% Size: <u>5 1/2</u> "Cemented with <u>450</u> SX 4717 TOC: 2265 _____ feet determined by CALC 80% TO SILO Hole Size: <u>7 7/8</u> Total Depth: <u>5110</u> Injection Interval 4750 feet to 5110 (perforated or open-hole, indicate which) feet 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). 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? 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

GREENHILL PETRO	LEUM CORPORATION		WEST_L	OVINGTON UN	IT		
OPERATOR			LEASE	<u></u>			
54	660 FWL & 1980	FNL	8	17S	36E		
WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE		
LEA COUNTY, NEW	I MEXICO						
			Tul	<u>oular Data</u>			
	1.1.1	Sumfron Co	ataa				
		<u>Surrace or</u>	asing				
		Size: <u>13</u>	<u>3/8 "</u>	Cemented w	vith	250	_sx
	133/0	TOC: <u>SUR</u>	FACE	feet de	etermined	by <u>CALC</u>	<u>; </u>
en hole	- 15 18	Hole size:	:1	7 1/4	·		•
pleted - 2/19/48		Intermedia	ate Casi	lng			
		Size: 8	5/8 ″	Cemented v	vith	400	sx
	L 85/8	TOC: 679		feetide	termined	by CALC	- , EU
		100. <u>_070</u>		2000 00			, 30
		Hole Size:	:	L			
		<u>Long Strin</u>	ng				
	- 11	Size: <u>5</u>	1/2″	Cemented v	vith	450	_sx
	- 5/2 4730	TOC: <u>227</u>	8	feet de	etermined	by <u>CALC</u>	80%
		Hole Size:	:	7_7/8		•	
·	0 2100	Total Dept	th: <u>5</u>	100			
		Injection	Interv	<u>al</u>			
		476	0	feet to	5100	fee	t
		(perforate	ed or S	en-hole, in	ndicate w	hich)	
Iubing size <u>NONE</u>	lined with		(moto)	rto1)		set in	a
NONE	<u> </u>	acker at			fee	t.	
(brand & model) or describe any o) ther casing-tubing	seal).					
than Data							
cher Daca							
. Name of the in	jection formation	SAN J	ANDRES	DOLOMITE			<u> </u>
. Name of Field	or Pool (If applic	able)	L0'	VINGTON (SA	N ANDRES)	WEST	
. Is this a new If no, for wha	well drilled for i t purpose was the	njection? well origin	NO nally dr	cilled? PR	DUCTION		
. Has the well e intervals and used. NO	ver be perforated give plugging deta	in any othe il (sacks d	er zone of cemen	(s)? List a nt or bridge	all such e plug(s)	perforate	d
. Give the depth (pools) in thi	to and name of an s area.	y overlying	g and/or	r underlying	g oil or	gas zones	

GREENHILL PET	ROLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR		LEASE
<u> </u>	1650 FNL & 98 FOOTAGE LOC/	9 FEL 8 17S 36E
LEA COUNTY, N	IEW MEXICO	
	<u> </u>	<u>Tubular Data</u>
		Surface Casing
		Size: 7 5/8 "Cemented withSX
		TOC: CMT CIRC feet determined by CALC
sed hole	L 7 5/8 360	Hole size: <u>11</u>
mpleted - 12/21/66		<u>Intermediate Casing</u>
		Size: Cemented withSX
		TOC: feet determined by
		Hole Size:
		Long String
		Size: <u>4 1/2</u> "Cemented with <u>650</u> SX
		TOC: <u>676</u> feet determined by <u>CALC 80%</u>
		Hole Size: <u>6 3/4</u>
	41/2 5120	Total Depth: 5120
		Injection_Interval
		4682 feet to 5028 feet (perforated)or open-hole, indicate which)
Tubing size	IONE lined with	set in a
		(material)
(brand & mod	lel)	
(of describe any	Uther casing-cubing	g sear).
<u>Other Data</u>		
1. Name of the	injection formation	SAN ANDRES DOLOMITE
2. Name of Fiel	d or Pool (If applic	cable) LOVINGTON (SAN ANDRES) WEST
3. Is this a ne If no, for w	w well drilled for in the well by the well drilled for its the state of the state o	injection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
4. Has the well intervals ar used. NO	. ever be perforated Id give plugging deta	in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)
5. Give the dem	oth to and name of a	ny overlying and/or underlying oil or gas zones
(pools) in t	his area.	, ., , , ,
GRAY	BURG - OVERLYING	

	GREENHILL	PETROLEUM CORPORATION	1	West Lov	vington Unit		
	OPERATOR	<u>, </u>		LEASE			
	58	1980 FSL & 1980	FEL	· 7	17S	36E	
• <u> </u>	WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE	
			····	Tut	bular Data		
	5		Surfac	ce_Casing			
			Size:	10 3/4" "	Cemented w	1th22	<u>5 </u> SX
	ζź) ³ 14	TOC:	surface	feet de	termined by	<u>circulati</u> or
	33		Hole s	size: <u>15</u>			
		0051	Intern	nediate Cas	Ing		
		15/5 th	Size:	7 5/8 ″	Cemented w	ith	<u>1600 </u>
	i i i i i i i i i i i i i i i i i i i		TOC:	570	feet de	termined by	60% calc.
	 ↓	47351	Hole S	Size:	9 7/8"		
	5	51,2	Long S	String			
	3		Size:	<u>5 1/2</u> ″	Cemented w	ith1	<u>75\$X</u>
			TOC:	surface	feet de	termined by	<u>60% calc</u> .
		Liner 4"	20 sa / Hole S	cks Size:	6 3/4 "		
		4 3/4	Total	Depth:	5110'	_	
		TOC 4554'	Inject	tion Interva	<u>al</u>		
			•••••••••••	4750	feet to	5108	feet
			(perfo	orated or op	pen-hole, in	dicate whic	eh)
Tu	bing size	2_3/8" lined with		[mates]	IPC		set in a
	shorty t	ension r	acker a		4657	feet,	
lor	(brand & mo	del)					
(01	describe an	ly other casing-cubing	5 sear)	•			
<u>0th</u>	<u>er Data</u>						
1.	Name of the	injection formation	Sa	n Andres			
2.	Name of Fie	ld or Pool (If applic	able)	Upper	Lovington S	San Andres V	lest
3.	Is this a m If no, for	new well drilled for i what purpose was the	Injectio well or	on? No iginally dr	cilled?	produ	ction
4.	Has the wel intervals a used.	l ever be perforated Ind give plugging deta No	in any Ail (sac	other zone(ks of cemer	(s)? List a ht or bridge	<pre>11 such per plug(s)</pre>	forated
5.	Give the de (pools) in	pth to and name of ar this area.	ny overl	ying and/or	underlying	oil or gas	zones

Grayburg overlying

GREENHILL PETROLI	UM CORPORAT	ION	WEST_L	<u>OVINGTON UN</u>	IT	·····	
60	660 FWI &	1080 FSI	8	175	265		
WELL NO.	FOOTAGE	LOCATION	SEC.	TOWNSHIP	RANGE		
LEA COUNTY, NEW M	1EXICO		<u></u>			<u></u>	
			Tu	bular Data			
	11	<u>Surf</u>	ace Casing				
		Size	: <u>10 3/4</u> "	Cemented w	rith	250	SX
	[][D_3/.	TOC:	SURFACE	feet de	etermined	by <u>CAI</u>	<u>.C</u>
		Hole	size:	15			
ompleted - 6/1/48		Inte	<u>rmediate Cas</u>	ing			
2/18/63		Size	: <u>75/8</u> ″	Cemented w	vith	960	sx
	75/8	TOC:	CMT CIRC	feet de	etermined	by <u>CAL</u>	. <u>C</u>
		Hole	Size:	9 7/8	<u></u>		
		Long	String				
		Size	: <u>5 1/2</u> ″	Cemented v	vith	1000	sx
		TOC:	CMT CIRC	feet de	etermined	by <u>CAL</u>	.C
	-	Hole	Size:	6 3/4			
	L 51/2 473	2. Tota	1 Depth: {	5099		•	
	4" liner 4704-5090	Inje	ction Interv	ral			
	TO 5090		5048	feet to	5098	fe	et
	~ 19	(per	forated or o	pen-hole, in	ndicate w	hich)	
Tubing size	2" lined wi	1th	<u> ipc</u>			set i	n a
		packer	at	4660	fee	t.	
(brand & model) (or describe any oth	er casing-tu	ubing seal).				
<u>Other Data</u>							
1. Name of the inje	ction format	tion	SAN ANDRES	DOLOMITE			
2. Name of Field or	Pool (If a	pplicable)	L	OVINGTON (SA	N_ANDRES)	WEST	
3. Is this a new we	11 drilled i	Eor inject	ion? <u>NO</u>				
If no, for what	purpose was	the well	originally d	irilled? <u>PR</u>	ODUCTION		
4. Has the well even intervals and gi used. NO	r be perfora ve plugging	ated in an detail (s	y other zone acks of ceme	e(s)? List a ent or bridge	all such e plug(s)	perforat	:ed
5. Give the depth t	o and name o	of any ove	rlying and/c	or underlying	g oil or	gas zone	s

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	INJECTION WELL DATA SHEET
GREENHILL PETROLEU	M CORPORATION WEST LOVINGTON UNIT
OPERATOR	LEASE
61	2310 FSL & 1980 FWL 8 17S 36E NMPM
WELL NO.	FOOTAGE LOCATION SEC. TOWNSHIP RANGE
WEST LOVINGTON FIE	LD, LEA COUNTY, NEW MEXICO
	<u>Tubular Data</u>
	Surface Casing
	Size: 10 3/4 " Cemented with 300 SX
	TOC: CIRC feet determined by CALC
	$10\frac{3}{4}$ Hole size: 15
	301 Intermediate Casing
	Size: / 5/8 Cemented with 500 SX
	TOC: <u>CIRC</u> feet determined by <u>CALC</u>
	<u>/ ///</u> Hole Size: 97/8
	Long String
5020	5 Size: <u>5 1/2</u> " Cemented with <u>1050</u> SX
= 5070	TOC: CIRC feet determined by CALC
	$\frac{5/2}{52}$
	5050 more 51285/4
•	Total Depth: <u>5080</u> CIBP @ 4954
•	Injection Interval Perfs: 5020-70
	<u>5020</u> test to <u>5070</u> feet (perforated)or open-hole, indicate which)
whime _1 2_3/	8" Idead with a second se
ubing size/	(material) set in a
Bake	r packer at 4060 feet.
(brand & model) r describe any oth	ner casing-tubing seal).
	······································
<u>her Data</u>	
Name of the inje	ection formation SAN ANDRES DOLOMITE
Name of Field or	Pool (If applicable) LOVINGTON (SAN ANDRES) WEST
Is this a new we If no, for what	all drilled for injection? <u>NO</u> purpose was the well originally drilled? <u>PRODUCTION</u>
Has the well eve intervals and gi used. NO	er be perforated in any other zone(s)? List all such perforated ve plugging detail (sacks of cement or bridge plug(s)
Give the depth t (pools) in this	o and name of any overlying and/or underlying oil or gas zones area.

GRAYBURG - OVERLYING - UNEVALUATED

GREENHILL PETR	OLEUM CORPORATION	WEST LOVINGTON UNIT				
62	2070 ENI 8 221	0 [[] 0	176	265		
WELL NO.	FOOTAGE LOCA	TION SEC.	TOWNSHIP	RANGE		
LEA COUNTY, NE	W MEXICO					
LEA COUNTY, NE mpleted 1/9/49 nuerted to injection D/26/63	W MEXICO - 1378 - 1378 - 7578 - 5578 - 552 4747 - 5080	Surface Casing Size: 13 3/8 TOC: SURFACE Hole size: Intermediate (Size: 8 5/8 TOC: 1500 Hole Size: Long String Size: 5 1/2 TOC: 3585 Hole Size: Total Depth: Injection Inter	Tubular Data Cemented w feet de 17 Casing feet de 11 Cemented w feet de 11 Cemented w feet de 7 3/4 5080 erval	ith termined b ith termined b termined b	250 y <u>CALC</u> 150 y <u>CALC</u> 200 y <u>CALC</u>	
Tubing size	?%" lined with	4770 (perforated on 	feet to copen-hole in	5080 dicate whi	fee ch) _set in	t
	F	acker at	1640	feet.		
(brand & mode (or describe any o <u>Other Data</u>	l) other casing-tubing	; seal).				
1. Name of the in	njection formation	SAN_ANDR	ES DOLOMITE		127	<u>-</u>
2. Name of Field	or Pool (If applie	able)	LOVINGTON (SAM	ANDRES)_J	WEST	
3. Is this a new If no, for wh	well drilled for i at purpose was the	njection? <u>NO</u> well originally	y drilled? PR(
4. Has the well intervals and used. NO	ever be perforated give plugging deta	in any other zo ail (sacks of co	one(s)? List a ement or bridge	ll such pe plug(s)	rforate	d
5. Give the dept (pools) in th	h to and name of ar is area.	ny overlying and	1/or underlying	; oil or ga	.s zones	

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GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE q 1980 FWL & 1980 FNL 5 17S <u>36</u>E WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: <u>13 3/8</u> "Cemented with <u>180</u> SX TOC: <u>SURFACE</u> feet determined by <u>CALC</u> Hole size: <u>14 1/2</u> 13 3/8 Intermediate Casing Size: 8 5/8 " Cemented with _____ 300 SX open hole TOC: 1071 _____ feet determined by CALC 50% completed 5/1/47 85/8 Hole Size: <u>11</u> Long String Size: <u>5 1/2</u> " Cemented with _____ 400____ SX TOC: 2582 feet determined by <u>CALC 80%</u> Hole Size: <u>7 7/8</u> Total Depth: 5140 514n Injection Interval 4800 feet to ____5140 feet (perforated or open-hole) indicate which) NONE lined with Tubing size 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. 3. Is this a new well drilled for injection? <u>NO</u> 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

INJECTION WELL DATA SHEET **GREENHILL PETROLEUM CORPORATION** WEST LOVINGTON UNIT OPERATOR LEASE 36E 17S 660 FEL & 1980 FNL 5 · 11 SEC. TOWNSHIP WELL NO. FOOTAGE LOCATION RANCE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with _____ 200 SX TOC: SURFACE _____ feet determined by CALC 13 3/8" Hole size: <u>14 1/2</u> Intermediate Casing Size: 8 5/8 "Cemented with 200 SX 8% TOC: 1400 feet determined by CALC 0 50% Hole Size: <u>10 3/4</u> Long String " Cemented with ______SSO___SX Size: 5 1/2 5½ feet determined by <u>CALC @ 80%</u> TOC: 2643 4740 Hole Size: <u>7 5/8</u> Total Depth: 5150 Injection Interval TO 5150 4740 feet to <u>5105 (PBTD)</u> feet (perforated or open-hole) indicate which) 2-3/8" Tubing size _ IPC lined with set in a (material) - Baker 🚕 4720 packer at 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

GREENHILL PETROLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR	LEASE
12660 FWL &WELL NO.FOOTAGE LOG	1980 FNL417S36FCATIONSEC.TOWNSHIPRANGE
LEA COUNTY, NEW MEXICO	WEST LOVINGTON FIFLD
	Tubular Data
1 1 1	Surface Casing
	Size: 10 3/4 ~ Cemented with 210 SX
103/4	TOC: SFC @ 75%EFF feet determined by CALC
	* Nole size: <u>12 1/4</u>
	Intermediate Casing
75/8	Size: 7 5/8 " Cemented with600SX
	TOC: <u>350'0 50%EFF</u> feet determined by <u>CALC</u>
	* Nole Size: 97/8
51/2	Long String
	Size: <u>5 1/2</u> " Cemented with <u>400</u> SX
	TOC: 2300'0 50% feet determined by <u>CALC</u>
	* Hole Size: <u>6 3/4</u>
10 0015	Total Dopth: 5100 FT
. · ·	Injection Interval
· · · · · · ·	<u>4750</u> feet to feet
	(perforated or open-hole, indicate which)
Tubing size <u>2-3/8</u> lined with	IPC set in a (material)
Baker	packer atfeet.
(or describe any other casing-tubin	ng seal).
<u>Other Data</u>	
1. Name of the injection formation	n SAN ANDRES
2. Name of Field or Pool (If appl.	icable) LOVINGTON (SAN ANDRES) WEST
 Is this a new well drilled for If no, for what purpose was the 	injection? <u>NO</u> e well originally drilled? <u>PRODUCTION</u>
 Has the well ever be perforate intervals and give plugging de used. NO 	d in any other zone(s)? List all such perforated tail (sacks of cement or bridge plug(s)
5. Give the depth to and name of ((pools) in this area.	any overlying and/or underlying oil or gas zones

GREENHILL PETRO	GREENHILL PETROLEUM CORPORTION			West Lovington Unit			
OPERATOR			LEASE			<u> </u>	
16	1980 FSL & 198	0 FEL	6	1 7 S	36E		
WELL NO.	FOOTAGE LOCA	ATION	SEC.	TOWNSHIP	RANGE		
			Tu	bular_Data			
(1)		Surfac	e Casing				
		Size:	13 3/8 ~	Cemented w	ith 250	SX	
		TOC: _	surface	feet de	termined by	irc.	
	259 133/8"	llole s	ize: <u>17</u>	1/4"	<u> </u>		
		Interm	ediate Cas	ing			
	1950'	Size:	8 5/8 "	Cemented w	ith450	SX	
	25/g"	TOC: _	745	feet de	termined by 60	% calc.	
		Hole S	ize: <u>11</u>	,,,,,,,,,			
		Long S	tring				
	47 <i>4</i> 7	Size:	5 1/2 ″	Cemented w	ith 450	SX	
<u>z</u>	51/2	TOC:	2473	feet de	termined by <u>6</u>	<u>0% calc</u>	
S.		Hole S	ize:	7 3/8"			
	5120'	Total I	Depth:	5120'			
		<u>Inject</u> :	<u>ion Interv</u>	<u>al</u>			
		(perfo	4780 rated or o	_ feet to pen-hole, in	5120 dicate which)	feet	
Tubing size 2	7/8" lined with		IPC		set	in a	
Baker AD1		acker a	(mate: 4688	rial)	feet.		
(brand & model) (or describe any of) ther casing-tubing	seal).					
Other Data		,, -					
1 Name of the int	ection formation		San	Andres			
2 Name of Field of	pr Pool (If applic	able)	Upp	er Lovington	San Andres We	st	
7 To this a part i	and the second	niestis	-2 NO				
If no, for what	t purpose was the	well or	lginally d	rilled? _pr	oduction		
4. Has the well ev intervals and g used.	ver be perforated give plugging deta	in any c il (sach	other zone cs of cemer	(s)? List a nt or bridge	11 such perfor plug(s)	ated	
5 Give the depth	to and name of an	v overly	the and/or	r underlytne	oil or and	205	
(pools) in this	s area.	., vvoltj	ang anu/ 01		OFF OF RES 20	1163	

Grayburg overlying

GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 18 1980 FSL & 660 FWL 5 17S 36E SEC. TOWNSHIP FOOTAGE LOCATION RANCE WELL NO. LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 "Cemented with 200 SX TOC: SURFACE _____ feet determined by <u>CALC</u>____ Hole size: <u>17 3/4</u> 13 3/8 Intermediate Casing open hole Size: 8 5/8 " Cemented with 300 SX J \$/s Completed 7/30/45 TOC: 1044 feet determined by CALC 50% Converted to injection - 2/18/63 Hole Size: 11 Long String Size: <u>5 1/2</u> " Cemented with <u>400</u> 51/2 4749 SX feet determined by <u>CALC_80%</u> тос: <u>1881</u> TD 5150 Total Depth: 5150 Injection Interval 4780 feet to 5150 feet (perforated or open-hole, indicate which) Tubing size 2 3/8" lined with _____ IPC set in a (material) feet. ____ packer at _____ 4627'____ (brand & model) (or describe any other casing-tubing seal). Other Data Name of the injection formation SAN ANDRES DOLOMITE 1. · LOVINGTON (SAN ANDRES) WEST Name of Field or Pool (If applicable) 2. 3. Is this a new well drilled for injection? NO If no, for what purpose was the well originally drilled? **PRODUCTION** Has the well ever be perforated in any other zone(s)? List all such perforated 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

INJECTION WELL DATA SHEET **GREENHILL PETROLEUM CORPORATION** WEST LOVINGTON UNIT OPERATOR LEASE 19 1980 FSL & 1980 FWI 5 17S NMPM <u>36E</u> WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE WEST LOVINGTON FIELD, LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with ____ 190 SX 133/8 TOC: CIRC feet determined by <u>CALC</u> 299 17" Hole size: Intermediate Casing 85/8 150 SX " Cemented with Size: 1989 TOC: · 1494'@ 80% feet determined by <u>CALC</u> 11 1/2" Hole Size: Long String 51/2 Size: 5 1/2 150 SX " Cemented with ____ 4740' TOC: 3839'@ 80%FILL feet determined by CALC 7 7/8 Hole Size: <u>5085</u> Total Depth: Injection Interval TD 5080 4740 5085 feet to feet (perforated or open-hole,) indicate which) 2-3/8" IPC Tubing size lined with set in a (material) Baker 😠 🧀 🚁 4720 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. З. Is this a new well drilled for injection? NO If no, for what purpose was the well originally drilled? PRODUCTION 4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. NO Give the depth to and name of any overlying and/or underlying oil or gas zones 5. (pools) in this area.

GRAYBURG - OVERLYING - PRODUCTIVITY NEVER DETERMINED

GREENHILL	PETROLEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR		LEASE
20	1980 FSL 8	3 1980 FEL 5 17S 36E
WELL NO.	FOOTAGE LOG	ATION SEC. IOWNSHIP RANGE
LEA COUNTY	, NEW MEXICO	
	·	<u>Tubular Data</u>
	1 1 1	Surface Casing
		$\frac{1}{2} \frac{1}{2} \frac{1}$
	12.3/2	TOC: <u>SURFACE</u> feet determined by <u>CALC</u>
		Hole size: <u>17</u>
		Intermediate Casing
		Size: <u>8 1/4</u> "Cemented with <u>200</u> 5:
nuerted to	L 8 5/8	TOC: 1364 feet determined by CALC 5
Injection NIG/17		Hole Size: 11
ompleted 3/3/45		
ipen hole	516	Long String
	4700	Size: <u>5 1/2</u> "Cemented with <u>200</u> S
		TOC: <u>3610</u> feet determined by <u>CALC 8</u>
· –		Hole Size:7_7/8
	d siou	Total Depth: 5104
	•	Injection Interval
		(perforated or open-hole, indicate which)
Tubing size	2", lined with	IPC set in a
100106 0100 -		(material)
(brand & m		packer at <u>4663</u> . teet .
(or describe a	ny other casing-tubing	g seal).
<u>Other Data</u>		
1. Name of th	e injection formation	SAN ANDRES DOLOMITE
O News of Pi	ald an Deal (If appli	
2. Name of Fi	era or Pool (ir applie	cable)LOVINGION [SAN ANDRES] WEST
3. Is this a If no, for	new well drilled for : what purpose was the	injection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
4. Has the we intervals used. NO	11 ever be perforated and give plugging deta	in any other zone(s)? List all such perforated ail (sacks of cement or bridge plug(s)
5. Give the d	lepth to and name of an	ny overlying and/or underlying oil or gas zones
(pools) in	this area.	
GR/	AYBURG - OVERLYING	

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GREENHI	LL PETROLEUM CORPORATION	WEST LOVINGTON UNIT
OPERA	TOR	LEASE
21	1980 FSL & 660	0 FEL 5 17S 36E
WELL	NO. FOOTAGE LOCA	TION SEC. TOWNSHIP RANGE
LEA COU	NTY, NEW MEXICO	
		<u>Tubular Data</u>
		<u>Surface Casing</u>
		Size: 13 3/8 " Cemented with 200 SX
		TOC:
	12.3/.	Hole size: <u>17 1/4</u>
		Intermediate Casing
completed 11/4/44		Size: <u>85/8</u> Cemented with <u>200</u> SX
Open hole	_ 8 5/8	TOC: <u>1364</u> feet determined by <u>CALC 50%</u>
		Hole Size: 11
		Long String
	-51/2 4700	Size: <u>5 1/2</u> "Cemented with <u>200</u> SX
		TOC: 3266 feet determined by CALC 80%
-	TO FLOO	Hole Size: <u>7 3/8</u>
	10 300	Total Depth: 5100
		Injection Interval
		4767 feet to 5100 feet (perforated or open-hole) indicate which)
Tubing siz	eNONE lined with	set in a
	NONE	(material) acker at feet.
(brand	& model)	see1)
(OI desciib	e any other casing-tubing	Star).
<u>Other Data</u>	•	
1. Name of	the injection formation	SAN ANDRES DOLOMITE
2. Name of	Field or Pool (If applic	able) LOVINGTON (SAN ANDRES) WEST
3. Is this If no,	a new well drilled for in for what purpose was the	njection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
4. Has the interva used.	well ever be perforated ls and give plugging deta NO	in any other zone(s)? List all such perforated il (sacks of cement or bridge plug(s)
5. Give th (pools)	e depth to and name of an in this area.	y overlying and/or underlying oil or gas zones

GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT LEASE OPERATOR 27 660 FSL & 1980 FWL 6 17S 36E WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 "Cemented with 250 SX TOC: <u>SURFACE</u> feet determined by <u>CALC</u> 1-13 open hole Hole size: _____17_1/4____ Completed. 5/30/45 Intermediate Casing nverted to injection 4/12/69 Size: 8 5/8 "Cemented with 600 SX 8 5/8 TOC: 78.67 feet determined by CALC 50% Hole Size: 11 Long String 5% 4717 Size: 5 1/2 " Cemented with _____ 400 SX TOC: 2394 feet determined by CALC 80% TD SITS Hole Size: _____7 3/4 Total Depth: 5175 Injection Interval 4770 feet to 5175 (perforated or open-hole, indicate which) feet Tubing size 2³/8" lined with IPC _____ set in a (material) _____ packer at _____ 4667' 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? 3. NO If no, for what purpose was the well originally drilled? PRODUCTION 4. Has the well ever be perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used. NO 5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

INJECTION WELL DATA SHEET

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INJECTION	WELL	DATA	SHEET

OPERATOR LEASE 29 660 FSL & 660 FEL 6 175 36E WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3 /8 " Gemented with200 S Juncted - 9/5/94; Unc: SURFACE	GREENHILL PETROLEUM CORPORATION		WEST LOVINGTON UNIT					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	OPERATOR		LEA	SE				
WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3 /8 " Gemented withSOS Size: 13 3 /8 " Gemented withSOS TOC: SURFACEfeet determined by CALC Hole size: 17 1/4 Hole size: 17 1/4 $g_{5/c}$ Size: 8 5/8 " Gemented withSOS $y_{10/kg}$ TOC: 1364feet determined by CALC 5 $g_{5/c}$ Size: 11 $f_{5/2}$ U720 Hole Size: 11 $f_{5/5}$ Size: 5 1/2 " Gemented withSOS TOC: 2874feet determined by CALC 8 Hole Size: Total Depth: 5155 Injection Interval $\frac{4735 \ (perforated or @pen-hole) indicate which)}{(material)}$ feet.	29	660 FSL & 660	<u>EL 6</u>	175	36E			
LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3 /8 " Cemented withOOS Size: 13 3 /8 " Cemented withOOS Toc: SURFACE	WELL NO.	FOOTAGE LOCA	TION SEC	. TOWNS	HIP RANGI	5		
Tubular Data sigen hole Size: $13 3 / 8$ " Cemented withS mpleted - 4/5/45- Intermediate Casing verted to injection 85/6 $7D 5/55$ Size: $5 1/2$ " Cemented withS Toc: 2874 feet determined by CALC 5 Inlessize: $7D 5/55$ Size: $5 1/2$ " Cemented with Toc: 2874 feet determined by CALC 5 Intermediate Casing Size: $8 5/8$ " Cemented with $7D 5/55$ Size: $5 1/2$ " Cemented with Injection Interval -4735 feet to	LEA COUNTY, N	EW MEXICO						
$\frac{\text{Surface Casing}}{\text{Size: } 13 3 / 8 \ \text{``Cemented with } 200 \ \text{``Surface } 13 3 / 8 \ \text{``Cemented with } 200 \ \text{``Surface } 13 3 / 8 \ \text{``Cemented with } 200 \ \text{``Surface } 17 1/4 \ \text{``Intermediate Casing}} \\ \text{Size: } 17 1/4 \ \text{``Intermediate Casing}} \\ \text{Size: } 85/s \ \text{``Size: } 85/s \ \text{``Cemented with } 200 \ \text{``Surface } 1364 \ \text{``Cemented with } 200 \ \text{``Surface } 5126 \ \text{``Cemented with } 200 \ \text{``Cemented } 5155 \ \text{``Cemented with } 200 \ \text{``Cemented } 5155 \ \text{``Cemented with } 200 \ \text{``Cemented } 5155 \ \text{``Cemented with } 200 \ \text{``Cemented } 5155 \ \text{``Cemented with } 200 \ \text{``Cemented } 5155 \ \text{``Cemented with } 200 \ \text{``Cemented } 5155 \ \text{``Cemented with } 200 \ \text{``Cemented } 5155 \ \text{``Cemented with } 200 \ \text{``Cemented } 5155 \ \text{``Cemented with } 200 \ \text{``Cemented } 5155 \ \text{``Cemented with } 200 \ \text{``Cemented } 5155 \ \text{``Cemented with } 200 \ \text{``Cemented } 5155 \ \text{``Cemented } 5155 \ \text{``Cemented } $				<u>Tubular D</u>	ata			
Size: $13 3 / 8$ " Cemented withS Size: $13 3 / 8$ " Cemented withS TOC: SURFACEfeet determined by <u>CALC</u> Nole size: $17 1/4$ Nole size: $17 1/4$ 85/s Size: $85/8$ " Cemented withS TOC: 1364 feet determined by <u>CALC 5</u> TOC: 1364 feet determined by <u>CALC 5</u> Nole Size: 11 -5'/2 4720 Nole Size: $11100g StringTD 5155 Size: 5 1/2 " Cemented withSTOC: 2874feet determined by CALC 8Nole Size: -7Total Depth: 5155Injection Interval\frac{4735}{(perforated or @pen-hole)} indicate which) feetTubing size 2 3/8" lined with IPC set in a\frac{(material)}{packer at 4610'}$		111	<u>Surface Casin</u>	£				
Spen hole mpleted - $\frac{13}{3}$ /p solution for the size is a size in a given hole mpleted - $\frac{13}{3}$ /p To: SURFACE feet determined by <u>CALC</u> intermediate Casing Size: <u>85/8</u> " Gemented with <u>200</u> S Size: <u>85/8</u> " Gemented with <u>200</u> S To: <u>1364</u> feet determined by <u>CALC</u> Nole Size: <u>11</u> Long String TD 5/55 Size: <u>51/2</u> " Gemented with <u>200</u> S ToC: <u>2874</u> feet determined by <u>CALC</u> B Hole Size: <u>7</u> Total Depth: <u>5155</u> Injection Interval <u>4735</u> feet to <u>5155</u> feet (perforated or <u>Generhole</u>) indicate which) Tubing size <u>2³/8" lined with <u>IPC</u> set in a <u>packer at 4610'</u> feet.</u>			Size: 13 3 /8	″ Cemen	ted with	200	S	
Spen hole mpleted - $4/5/45^{-}$ userted to injection 4/10/19 TD 5/55 Tubing size $2^{3/8"}$ lined with 1200 Tubing size $2^{3/8"}$ lined with 120 101e size: 17 1/4 Intermediate Casing Size: $5/8$ " Cemented with 200 S TOC: 1364 feet determined by CALC 5 Nole Size: 11 Long String TD 5/55 Size: $5/2$ " Cemented with 200 S TOC: 2874 feet determined by CALC 8 Nole Size: 7 Total Depth: 5155 Injection Interval 4735 feet to 5155 feet (perforated or Open-hole) indicate which) Tubing size $2^{3/8"}$ lined with $1PC$ material) packer at $4610'$ feet.		133/8	TOC: SURFACE	fe	et determin	ed by CAI	_C	
Spen hole Intermediate Casing mpleted - $4/5/45^{-}$ Size: 85/8 " Cemented withSIZE verted to injection Size: 1364 feet determined by CALC 5 $4/10/69$ TOC: 1364 feet determined by CALC 5 $-5/2$ 4720 Hole Size: 11 Long String TD $7D$ 5155 Size: 51/2 " Cemented with $7D$ 5155 Size: 51/2 " Cemented with ToC: 2874 feet determined by CALC 8 Hole Size: 7 feet determined by CALC 8 Hole Size: 7 Total Depth: 5155 Injection Interval 4735 feet to 5155 feet Tubing size 2 ³ /8" 1ined with IPC set in a			liole size:	17 1/4		•		
$Tb = \frac{2}{3/8}$ $I = \frac{1}{3}$ $I = \frac$	pen hole		Intermediate	Casing				
$4/10/14$ TOC: 1364 feet determined by CALC 5 $-5'_2$ 4720 Hole Size: 11 Long String Iong String TD 5/55 Size: 51/2 " Cemented with 200 S TOC: 2874 feet determined by CALC 8 Hole Size: 7 Total Depth: 5155 Injection Interval -4735 feet to 5155 feet (perforated or open-hole) indicate which) Tubing size 2 $3/8^{\mu}$ lined with IPC set in a $$ packer at 4610'	arted to injection	L 85/8	Size: <u>8 5/8</u>	″ Cemen	ted with	200	S	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4/10/69		тос: <u>1364</u>	fe	et determin	ed by <u>CAL</u>	<u>.C 5</u>	
$\frac{1}{TD} \frac{1}{5155}$ $\frac{1}{TD} \frac{1}{5155}$ Size: <u>5</u> 1/2 <u>"</u> Cemented with <u>200</u> <u>S</u> TOC: <u>2874</u> <u>feet determined by <u>CALC 8</u> Nole Size: <u>7</u> Total Depth: <u>5155</u> <u>Injection Interval</u> <u>4735</u> <u>feet to <u>5155</u> <u>feet</u> (perforated or <u>open-hole</u>) indicate which) Tubing size <u>2</u> 3/8" lined with <u>IPC</u> <u>set in a</u> <u></u> <u>packer at 4610'</u> <u>feet.</u></u></u>		-51/2 4720	Hole Size:	11				
$TD \leq 155$ Size: $5 \frac{1}{2}$ " Cemented withS TOC: 2874 feet determined by <u>CALC 8</u> Nole Size: Nole Size: Total Depth: 5155 Injection Interval $\frac{4735 \qquad \text{feet to } 5155 \qquad \text{feet}}{(\text{perforated or Open-hole}) \ \text{indicate which})} \text{ feet }$ Tubing size $2 \frac{3}{8}$ lined with packer at (material) ${2} \qquad \text{packer at } \frac{4610}{2} \qquad \text{feet.}$			Long String					
TOC: 2874 feet determined by CALC 8 Hole Size: Total Depth: 5155 Injection Interval 4735 feet to 5155 feet (perforated or open-hole) indicate which) Tubing size 23/8" lined with IPC set in a packer at 4610' feet.		TD 5155	Size: <u>5 1/2</u>	″ Cemen	ted with	200	s	
Hole Size:7Total Depth: 5155 Injection Interval 4735 feet to 5155 feet(perforated or open-hole)indicate which)Tubing size $2^{3}/8"$ lined withIPCset in a $acker at$ $4610'$ feet.			TOC: <u>2874</u>	fe	et determin	ed by <u>CAL</u>	<u>C_8</u>	
Total Depth: 5155 Injection Interval			Nole Size:	7		•		
$\frac{1 \text{ Injection Interval}}{4735 \qquad \text{feet to} \qquad 5155 \qquad \text{feet}}$ $\frac{4735 \qquad \text{feet to} \qquad 5155 \qquad \text{feet}}{(\text{perforated or open-hole}) \text{indicate which}}$ $\frac{1 \text{ Tubing size} \qquad 2^{-3}/8" \text{lined with} \qquad 1 \text{ IPC} \qquad \text{set in a}}{(\text{material})}$			Total Depth:	5155				
$\frac{4735 \qquad \text{feet to} \qquad 5155 \qquad \text{feet}}{(\text{perforated or Open-hole}) \ \text{indicate which})} \text{ feet}$ Tubing size $2^{3}/8"$ lined with \underline{IPC} set in a (material) $\frac{-}{4610'}$			<u>Injection Int</u>	<u>erval</u>				
(perforated or <u>open-hole</u> indicate which) Tubing size <u>2³/8"</u> lined with <u>IPC</u> set in a (material) <u></u>		:	4735	feet	to5155	5 fo	eet	
Tubing size 2 ³ /8" lined with IPC set in a (material)		2	(perforated o	r Open-hol	e) indicate	which)		
packer at 4610' feet.	Tubing size 2	3/8" lined with	IPC	aterial)		set :	in a	
			oacker at	4610'	f	eet.		
	<u>Other Data</u>							
<u>Other Data</u>	1. Name of the i	njection formation	SAN AND	RES DOLOMI	TE			
Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE	2. Name of Field	l or Pool (If applic	able)	LOVINGTO	N (SAN ANDRI	ES) WEST		
Other Data 1. Name of the injection formation SAN ANDRES DOLOMITE 2. Name of Field or Pool (If applicable) LOVINGTON (SAN ANDRES) WEST	3. Is this a new If no, for wh	well drilled for f at purpose was the	injection? <u>N</u> well originall	0 y drilled?	PRODUCTIO	DN		
Other Data 1. Name of the injection formation	4. Has the well	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.						

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OPERATOR <u>32</u> 6 WELL NO. LEA COUNTY, NEW MEXIC Open hole Completed - 2/13/45	<u>60 FSL & 1980</u> FOOTAGE LOCA CO	FEL 5 17S 36E TION SEC. TOWNSHIP RANGE Tubular Data Surface Casing Size: 13 3/8 Cemented with SURFACE Hole size:
Open hole completed - 2/13/45	<u>60 FSL & 1980</u> FOOTAGE LOCA CO	FEL 5 17S 36E TION SEC. TOWNSHIP RANGE Tubular Data Surface Casing Size: 13 3/8 " Cemented with00S TOC: SURFACEfeet determined by CALC Hole size:17
open hole completed - 2/13/45	CO	Tubular Data Surface Casing Size: 13 3/8 " Cemented withS TOC: SURFACEfeet determined by CALC Hole size:17
Open hole Completed - 2/13/45	13 Ve - 300'	Tubular Data Surface Casing Size: 13 3/8 " Cemented withOOS TOC: SURFACEfeet determined by CALC Hole size: 17
Open hole Completed - 2/13/45	13 Ve - 300'	Tubular Data Surface Casing Size: 13 3/8 Cemented with 200 S TOC: SURFACE feet determined by CALC Hole size: 17
Open hole Completed - 2/13/45	13 Ve - 300'	Surface Casing Size: 13 3/8 Cemented with 200S TOC: SURFACE feet determined by CALC Hole size:17
Open hole Completed - 2/13/45	13 Ve - 300'	Size: <u>13 3/8</u> "Cemented with <u>200</u> S TOC: <u>SURFACE</u> feet determined by <u>CALC</u> Hole size: <u>17</u>
open hole completed - 2/13/45	13 Ve - 300'	TOC: SURFACE feet determined by CALC Hole size: 17
open hole completed - 2/13/45	13 Ve 300'	Hole size: <u>17</u>
Open hole Completed - 2/13/45	13 Ve 300'	
Lompicica - VIIS/45		Intermediate Casing
		Size: 8 5/8 ~ Cemented withS
· · ·		TOC: 1364 feet determined by CALC 50
		Hole Size: 11
	1000	Long String
		Size: 5 1/2 " Cemented with 200 S
		TOC: 3241 feet determined by CALC 80
		Holo Size: 7 3/9
	- 4700' SY2	Total Death: 5000
		Injection Interval
	- 10 3080	4700 feet to 5080 feet (perforated or open-hole, indicate which)
Tubing size NONE	lined with _	set in a
NONE	D	(material) acker at feet .
(brand & model) (or describe any other	casing-tubing	seal)
	ousing ousing	
<u>Other Data</u>		
1. Name of the injection	on formation	SAN ANDRES DOLOMITE
2. Name of Field or Poe	ol (If applic	able)LOVINGTON (SAN ANDRES) WEST >
3. Is this a new well of If no, for what purp	drilled for in pose was the v	njection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
4. Has the well ever be intervals and give pused. NO	e perforated : plugging deta	in any other zone(s)? List all such perforated il (sacks of cement or bridge plug(s)
5. Give the depth to an		

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and the second

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GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 17S 660 FSL & 660 FEL 36E 33 FOOTAGE LOCATION SEC. TOWNSHIP RANGE WELL NO. LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 ____ Cemented with ____ 225 ___ SX TOC: SURFACE feet determined by CALC open hole - 13 78 Hole size: 17 completed - 9/15/44 Intermediate Casing Size: 8 5/8 " Cemented with 250 85/8 SX TOC: 1327 feet determined by CALC 50% Hole Size: 11 Long String רנטצ סד Size: 5 1/2 "Cemented with 200 SX TOC: 3585 feet determined by CALC 80% Hole Size: <u>7 7/8</u> Total Depth: 5077 Injection Interval 4770 feet to 5077 feet (perforated or open-hole,) indicate which) Tubing size NONE lined with ____ ____ set in a (material) NONE _____ packer at ___ 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? 3. NO If no, for what purpose was the well originally drilled? PRODUCTION Has the well ever be perforated in any other zone(s)? List all such perforated 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. **GRAYBURG** - OVERLYING

INJECTION WELL DATA SHEET

GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 40 1980 FWL & 660 FNL 7 17S 36E NMPM SEC. TOWNSHIP WELL NO. FOOTAGE LOCATION RANGE WEST LOVINGTON FIELD, LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with 150 SX TOC: 22'0 100'FILL feet determined by ____CALC__ 13 3/8 Hole size: 19" Intermediate Casing Size: 8 5/8 " Cemented with ___250_ SX TOC: 723'0 100%FILL feet determined by ____CALC__ 85/r Hole Size: <u>11"</u> 2020 Long String Size: <u>5 1/2</u> " Cemented with <u>200</u> SX TOC: 3088 @ 100%FILL feet determined by _____CALC__ 51/2 Hole Size: $7 \frac{3}{4}$ Total Depth: 5160 Injection Interval PB 5144 TD 5160 feet to _ 5144 (fill) feet 4112 (perforated or open-hole,) indicate which) ____ set in a 2 3/8". lined with IPC Tubing size (material) 4642' BAKER . _ packer at 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 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 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

GRAYBURG - OVERLYING - UNEVALUATED

GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 41 660 FNL & 1980 FEL 7 <u>175</u> 36E WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with _____ 220 ___ SX TOC: <u>SURFACE</u> feet determined by <u>CALC</u> -13³" Hole size: 16 open hole Intermediate Casing Completed - 5/26/45 Converted to injection Size: 8 5/8 " Cemented with 150 SX 2/18/63 85/8 TOC: 1505 _____ feet determined by <u>CALC 50%</u> Hole Size: 11 1/2 Long String Size: <u>5 1/2</u> " Cemented with _____200 SX feet determined by <u>CALC 80%</u> TOC: 2869 Hole Size: 7___ TD 5155 Total Depth: 5155 Injection Interval 4760 feet to 5155 feet (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? _ 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

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GREENHILL PETROLEUM CORPORATION			WEST LOVINGTON UNIT				
	OPERATOR		LEASE				
	42	660 FNL & 660	FEL	77	175	. 36E	NMPM
	WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE	
WE	ST LOVINGTON	FIELD, LEA COUNTY,	NEW MEXI	.CO			······
		$\frac{\frac{13^{3}}{8}}{204}$ $\frac{\frac{9^{5}}{8}}{\frac{5^{1}}{2008}}$ $\frac{5^{1}}{4^{17}}$ $\frac{5^{1}}{4^{17}}$ $TD 5160$	Surfac Size:_ TOC: _ Hole s Interm Size:_ TOC: _ Hole S Long S Size:_ TOC: _ Hole S Total Inject (perfo	Tuh e Casing 13 3/8 ~ CIRC 0 50% ize: 1 rediate Casing 8 5/8 ~ 1590 0 75% ize: 1 tring 5 1/2 3011'0 75% ize: Depth: ion Interve 4727	Comented w <u>EFF</u> feet de <u>6"</u> <u>ing</u> <u>Cemented w</u> <u>EFF</u> feet de <u>1 1/2</u> <u>Cemented w</u> <u>EFF</u> feet de <u>7"</u> <u>160</u> <u>al</u> <u>feet to</u> pen-hole) in	vith	<u>250</u> SX Dy <u>CALC</u> <u>150</u> SX Dy <u>CALC</u> <u>200</u> SX Dy <u>CALC</u> <u>200</u> SX Dy <u>CALC</u>
Tu	bing size	2-3/8" lined with		IPC (mate)	rial)		_ set in a
<u> </u>	Baker H	<u>, </u>	packer a	.t <u>4707</u>	<u></u>	feet	•
(or	describe any	other casing-tubing	g seal).				
<u>Oth</u>	er Data						ň
1.	Name of the	injection formation	~	SAN ANDRES	DOLOMITE	•	,
2.	Name of Fiel	d or Pool (If applic	able)	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	injectio well or	n? <u>NO</u> iginally di	rilled?	PRODUCTIO	<u>N</u>
4 .	llas the well intervals an used.	ever be perforated d give plugging deta)	in any il (sac	other zone ks of cemen	(s)? List and or bridge	all such p a plug(s)	erforated
5.	Give the dep	th to and name of ar	ny overl	ying and/or	r underlying	g oil or g	as zones

(pools) in this area.

GRAYBURG - OVERLYING - UNEVALUATED

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GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 43 660 FNL & 660 FWL 8 17S 36E WELL NO. SEC. 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 CIRC 133 219 Hole size: 16 200 SX Circ Intermediate Casing cmt ret 1965 Size: 8 5/8 " Cemented with _____ SX 8 5/1 csg unt @ 2309 50° cmt plug TOC: SURFACE feet determined by CIRC Hole Size: 11 1/2 completed Long String 12/23/44 Size: <u>5 1/2</u> "Cemented with <u>200</u> SX PiA 6/76 TOC: <u>SURFACE</u> feet determined by <u>P&A</u> Hole Size: 7 Cm1, 1et 4252 W 30' Cm1 Total Depth: 5160 51/2 11 4721 Injection Interval 200 SX TO SIS3 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. 3. Is this a new well drilled for injection? 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. 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

GREENHILL PETROLE	UM CORPORATION	· •	WEST I	LOVINGTON UN	LT	
OFERMION			LEASE	170.		
44 WELL NO.	FOOTAGE LOC	ATION	8 SEC.	TOWNSHIP	RANGE	<u>NMPM</u>
WEST LOVINGTON FIE	LD, LEA COUNTY, I	NEW MEXIC)	· · · · · · · · · · · · · · · · · · ·		
	· · ·		Tu	Bular Data	• •	
		Surface	Casing	·		
		Size:1	3 3/8 "	Cemented v	vith 34) SX
	1378			feat de	atermined by	
	197'	Hole ef	70' 16	2000 00	Joernande of	<u>.</u>
		Interme	dinte Cas			
		Incerme			. 1 . 1 . 1 .	0
		Size:	<u> </u>	Cemenced 1	11th 15	<u> </u>
	<u>8%</u>	тос: <u>1</u>	485 @ 80%	feet de	etermined by	CALC
	2018	Hole Si	lze: <u>1</u>	l 1/2		
		Long St	ring		!	
		Size:	5 1/2^	Cemented 1	with20	Jsx
	51/2	TOC: 2	539 @ 80%	EFF_ feet d	etermined by	CALC
	1730 '	Hole S	lze:	7		•
)		Total l	Depth: 5	160		
• • • • • • • • • • • • • • • • • • • •		Inject	lon Interv	val		
- TO	5160	4	730	feet to	5160	feet
		(perfor	cated or C	pen-hole in	ndicate which	1)
Tubing size	/8"lined with		<u>IPC</u>	i orfal)		set in a
Baker w		packer at	471	0	feet,	
or describe any o) ther casing-tubir	ng seal).				
<u>ther Data</u>				,	•	
. Name of the in	ection formation	n Sa	AN ANDRES	DOLOMITE		
. Name of Field	or Pool (If appli	lcable)	LOVIN	GTON (SAN:AN	IDRES) WEST `	
. Is this a new	well drilled for	injection	NO NO		•	
If no, for what	t purpose was the	well or	iginally c	Irilled? PR	ODUCTION	
. Has the well e intervals and used. NO	ver be perforated give plugging det	i in any o cail (sac)	other zone cs of ceme	(s)? List ont or bridge	all such per plug(s)	Eorated
Give the death	to and name of	any overly	ing and/	r underlyin	a dil or ere	Toned
(pools) in this	s area.	my overty	and and (- underly th	5 ATT AT RAS	201103

GRAYBURG - OVERLYING - UNEVALUATED

	INJECTION	WELL DAIA SHEET
GREENHILL PETRO	LEUM CORPORATION	WEST LOVINGTON UNIT
OPERATOR		LEASE
45	660 FNL & 1980) FEL 8 17S 36E
WELL NO.	FOOTAGE LOCA	ATION SEC. TOWNSHIP RANGE
LEA COUNTY, NEW	/ MEXICO	
		<u>Tubular Data</u>
		Surface Casing
		Size: 10 3/4 "Cemented withS
		TOC: SURFACE feet determined by CALC
cased hole completed - 1/10/45	103/4	Hole size: 13 3/4
verted to injection		Intermediate Casing
		Size: 7 5/8 "Cemented with 650 S
	- 178	TOC: CMT CIRC feet determined by CALC
		Hole Size: 97/8
	5%	Long String
	5099	Since $5.1/2$ " Computed with 400 S
	10 3100	Tog. (MT CIPC fact determined by CALC
		Nole Stret 6 2/4
		Total Depth: 5100
		Injection Interval
		4730 feet to 5060 feet (perforated or open-hole, indicate which)
Tubing size2	3/8" lined with	IPC set in a
	 · r	(material) packer at 4681' feet.
(brand & model	P	
(or describe any o	cher casing-cubing	; seal).
<u>Other Data</u>		
1. Name of the in	jection formation	SAN ANDRES DOLOMITE
2. Name of Field	or Pool (If applic	able) LOVINGTON (SAN ANDRES) WEST
3. Is this a new If no, for what	well drilled for i t purpose was the	njection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
4. Has the well e intervals and used. NO	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 an s area.	y overlying and/or underlying oil or gas zones

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GRAYBURG - OVERLYING

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GI	REENHILL PETR	OLEUM CO	RPORATIO	Y	WE	ST `LC	VINGTON - UI	NIT	۱	•
	OPERATOR		•		LEA	\SE				•
	46	66	O FNL & C	60 FEL	<u>'</u>	3	<u>175</u>	<u>36E</u>	NMPM	
	WELL NO.		FOOTAGE	LOCATION	SEC	. ز	TOWNSHIP	RANGE		
WE	ST LUVINGIUN	FIELD,	LEA COUNT	IY, NEW M	EXICO		······	····		
				Surf	ace Casi	<u>Tubi</u> ng	<u>ular Data</u>	. · ·	•	•
			10 3/	Size	10_3/4_		Cemented feat d	with	<u>200</u> sx	
			754	Hole	size:	13	3/4			
			178	, <u>Inte</u>	rmediate	Casi	ng			
			1700	Size	: 7 5/8		Cemented	with	<u></u>	
				TOC:	CIRC		feet d	etermined	by <u>CALC</u>	-
				llole	Size:	9	7/8 .			• .
		•		Long	String			• •		
				Size	: <u>5 1/2</u>	″	Cemented	with	<u>400</u> sx	·`
			•	TOC:	<u>1709</u>		feet d	etermined	by <u>CALC</u>	
		i .		Hole Tota	Size:	<u> </u>	<u>3/4</u>	PER	FS: 4730-60 4780-4810	5050-55 5085-95
		<u>5</u> / 500	2 <u>-</u> 19	Inje	ection in	terva	1		4870-80 4910-15 4980-5040	0000 90
		·		ther	4730 forated)	or op	feet to en-hole, i		feet hich)	. •
Tul	ving cizo 2	3/8"	lined with	th 1	·				est in s	•
Tur		750 750	I KIICU HI		(mater 171	ial)		bot in a	
	(brand & mod	el)	nofna-tul	packer		-471	0	Tee	τ.	
	w Data	I I	astig-cu	i in the sea	-/•		• •			
	News E Mar	· ; • • • • • • • • • • •	· · ·		SAN AND					
· L .	Name of the	Injectio	in Lormat.	11				JDDFC) UFC	····	
2.	Name of Field			plicable			01 (3211 21	UKEST WES	i	·
3.	Is this a new If no, for wi	w well d hat purp	rilled fo	or inject the well	original	ly dr	illed?	PRODUCER		
4.	Has the well intervals and used.	ever be d give p)	perfora lugging	ted in ar detail (s	ny other wacks of	zone(cemen	s)? List t or bridg	all such e plug(s)	perforated	•
5.	Give the dep (pools) in th	th to an his area	d name o	E any ove	erlying a	nd/or	underlyir	ng oil or	gas zones	
	GF	RAYBURG	- OVERLYI	NG – UNE	VALUATED					•
			. •			• .			····	

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e"		· ·			!	;
				· ``		
	• .	. INJECTION	WELL DATA SHEET	• •		
<u> </u>		COBBORATION	turem et o	UTNOTON UNT		•
61	OPERATOR	CORPORATION	LEASE	VINGTON UNIT	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	······
	50	660 FWL & 198	30 FNL 7	17S	36E	•
<u></u>	WELL NO.	FOOTAGE LOCA	ATION SEC.	TOWNSHIP	RANGE	
W	EST LOVINGTON FIELD	, LEA COUNTY,	NEW MEXICO	·		
			Tu	bular Data	· · ·	
			Surface Casing	•		
			Size: 13 3 /8 "	Cemented wi		SX
				foot dot	arained by C	
		133/8	100; <u>01K0</u>	100C 00C	ermined by L	
		248.	Hole size:	/_1/4		
			<u>Intermediate Cas</u>	ing		:
			Size: <u>8 5/8</u> "	Cemented wi	th450	SX
		<u> </u>	TOC: 400'@ 75%F	ILL_feet det	ermined by	
•		1957	Nole Size: <u>1</u>	1		,
	:		Long String		•	:
			Size: 5 1/2 "	Cemented wi	th ' 450	SX
		51/2	Tod. 173010 75%	foot dat	arminad by	· · ·
		1738'	100: 1739 6 75%		ermined by	·
		· · ·	Nole Size:	/ 3/8	, ,	
	. (Total Depth: <u>5</u>	121	, 	•
		'n	Injection Interv	al	CIBP @	4640
	~~~	- , ,	4738	feet to	5121	feet
	. <u>`o nzou</u>	<b></b>	(perforated or co	pen-hole, ind	icate which)	
Tul	bing size <u>2-3/8</u>	lined with	IPC ; (mate	rial)	set	in a
<u> </u>	Baker (brand & model)	I	packer at 4718	٩٤	feet.	
(or	describe any other	casing-tubing	g seal).	•	•	
<u>Othe</u>	er Data				. •	
1.	Name of the inject	ion formation:	SAN ANDRES	DOLOMITE	, 	:.
2.	Name of Field or H	ool (If applie	cable) LOVIN	GTON (SAN ANI	DRES) WEST	
3.	Is this a new well If no, for what pu	drilled for a suppose was the	Injection? <u>NO</u> well originally d	rilled?	PRODUCTION	
4.	Has the well ever intervals and give used. NO	be perforated plugging deta	in any other zone ail (sacks of ceme	(s)? List al nt or bridge	1 such perfor plug(s)	ated
5.	Give the depth to (pools) in this ar	and name of an ea.	ny overlying and/o	r underlying	oil or gas zo	nes

GRAYBURG - OVERLYING - UNEVALUATED

#### **GREENHILL PETROLEUM CORPORATION** WEST LOVINGTON HNIT OPERATOR LEASE 51 1980 FNL & 1896 FWL 7 175 36E WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with ____ 200 SX TOC: SURFACE feet determined by CALC 13 3/2 Hole size: _ 17 1/4 open hole Intermediate Casing converted to injection 5/25/69 Size: 8 5/8 " Cemented with 450 SX - 85/8 completed \$/11/48 TOC: 519 feet determined by <u>CALC 50%</u> Hole Size: <u>11</u> Long String Size: 5 1/2 " Cemented with ____450 SX TOC: 1520 _____ feet determined by CALC 80% TO 5094 Hole Size: <u>7 3/8</u> Total Depth: 5094 Injection Interval feet to 5094 feet 4810 (perforated or open-hole, indicate which) $2\frac{3}{8"}$ lined with Tubing size _ set in a IPC (material) <u>4</u>631' ____ 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. 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 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

GRAYBURG - OVERLYING

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GREENHILL PETROL	EUM CORPORATION WEST LOVINGTON UNIT
52	
WELL NO.	FOOTAGE LOCATION SEC. TOWNSHIP RANGE
LEA COUNTY, NEW	MEXICO
	Tubular Data
· ·	
<b></b>	Surface_Casing
	Surf 100' Size: 13 3/8 " Cemented with 250 SX
	Cont (clainer TOC: SURFCAE feet determined by CIRC
$\sim$	=
	250 ≾x Intermediate Casing
	\$\$%" @uguto 450 \$Size: 8 5/8 " Cemented with 450 SX
	TOC: SURFACE feet determined by CIRC
Ps'A - 6/20/13	512 Csg Cut 2695 pulled, 65 sx Hole Size: 11 Chil. 0146 2514-2739
	Long String
· · · · · · · · · · · · · · · · · · ·	Size: 5 1/2 "Cemented with 450 SX
	1946-2048 TOC: SURFACE feet determined by P&A
	Hole Size: 7 7/8
	$\frac{3783 - 4009}{1004}$ Total Depth: 5110
Find R	$8P\omega$ 40'cmt 4380' $5'/_2$ 4737 450 sx Injection Interval
	Frank ha
	(perforated or open-hole, indicate which)
Tubing size 2"	lined with IPC set in a
	(material)
(brand & model)	packet at
(or describe any ot	ner casing-tubing seal).
<u>Other_Data</u>	
1. Name of the inj	ection formation
2. Name of Field o	c Pool (If applicable)
3. Is this a new w If no, for what	ell drilled for injection?
4. Has the well ev intervals and g used.	er be perforated in any other zone(s)? List all such perforated ive plugging detail (sacks of cement or bridge plug(s)
5. Give the depth	co 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 17S 36E 660 FEL & 1980 FNL 7 53 WELL NO. FOOTAGE LOCATION SEC. TOWNSHIP RANGE LEA COUNTY, NEW MEXICO Tubular Data Surface Casing Size: 13 3/8 " Cemented with 250 SX TOC: SURFACE feet determined by CALC - 13 3/8 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: 11 Long String 53 Size: <u>5 1/2</u> " Cemented with _____ 450 ____ SX 4717 TOC: 2265 feet determined by CALC 80% TO SILD Hole Size: _____7 7/8_____ Total Depth: 5110 Injection Interval 4750 feet to 5110 (perforated or open-hole, indicate which) _ feet ____ set in a IPC (material) _____ packer at _____4300' 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? <u>NO</u> 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

GRAYBURG - OVERLYING

GREENHILL PETR	ROLEUM CORPORATION		WEST L	OVINGTON UN	IT		
OFERATOR			LENDE	170			
WELL NO.	660 FWL & 1980 FOOTAGE LOCA	FNL TION	<u>          8                          </u>	17S TOWNSHIP	36E RANGE	<u>,</u>	
LEA COUNTY, NE	W MEXICO						
<u> </u>			Tu	bular Data			
		Surface					
		Strat	12 3/8 <i>"</i>	Computed t	-1 +1,	250	C V
		TOC:	SURFACE	feet de	etermined	by CAL	3^ C
open hole	L 13 3/8	Hole s	ize: <u>1</u>	.7 1/4		•	•
completed - 2/19/48		Interm	<u>ediate Cas</u>	ing			
1		Size:	<u> </u>	Cemented v	vith	400	sx
	L 85/8	TOC:	678	feet de	etermined	by <u>CAL</u>	<u>C 50%</u>
		Hole S:	ize: 1	1		•	•
		Long St	tring				
		Size:	5 1/2 ″	Cemented w	vith	450	SX
	-51/2	TOC:	2278	feet de	etermined	by CALC	80%
		Hole S:	ize:	7 7/8		•	
	10 2100	Total 1	Depth: 5	5100			
		Inject:	ion_Interv	<u>al</u>			
		-	4760	feet to	5100	fee	et
		(perfo	rated or 6	pen-hole, ir	ndicate w	nich)	
Tubing size <u>NON</u>	E lined with	And and	(mate	rial)		set in	1 4
NON	lE p	acker a	t <u> </u>	• 	fee	<b>t.</b>	
(or describe any	other casing-tubing	, seal).					
<u>Other Data</u>	· · · · · · · · · · · · · · · · · · ·						
1. Name of the i	njection formation	S.	AN ANDRES	DOLOMITE			
2. Name of Field	or Pool (If applic	able) _	LO	VINGTON (SAM	N ANDRES)	WEST	
3. Is this a new If no, for wh	well drilled for i at purpose was the	njection well or:	n? <u>NO</u> Lginally d	rilled? PRC	DUCTION		
4. Has the well of intervals and used. NO	ever be perforated give plugging deta	in any d il (sac)	other zone ks of cemen	(s)? List a nt or bridge	all such p plug(s)	perforate	d
5. Give the dept (pools) in th	h to and name of an is area.	y overly	ying and/o	r underlying	; oil or ;	gas zones	;

GRAYBURG - OVERLYING

1650 FNL & 989	LEASE	
1650 FNL & 989		
E00#40# 1004	FEL 8 17S 36E	
FOUTAGE LUCA	IION SEC. IOWNSHIP RANGE	
MEXICO		
	<u>Tubular Data</u>	
	Surface Casing	
	Size: 7 5/8 " Cemented with	SX
15/2 24	TOC: CMT CIRC feet determined by CALC	
- 1 78 - 566	liole size: <u>11</u>	
	Intermediate Casing	
	Size: Cemented with	SX
	TOC: feet determined by	
	Hole Size:	
	Long String	
	Size: <u>4 1/2</u> "Cemented with <u>650</u>	SX
	TOC: <u>676</u> feet determined by <u>CALC</u>	80%
	Hole Size: 6 3/4	
4% 51210	Total Depth: 5120	
	Injection Interval	
	4682 feet to 5028 feet to feet to 5028 feet feet	:
E lined with	set in	a
E p	(material) acker at feet.	
) )		
ther casing-tubing	seal).	
jection formation	SAN ANDRES DOLOMITE	
or Pool (If applic	able) LOVINGTON (SAN ANDRES) WEST	
well drilled for i t purpose was the	njection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>	
ver be perforated give plugging deta	in any other zone(s)? List all such perforated il (sacks of cement or bridge plug(s)	1
to and name of an s area.	y overlying and/or underlying oil or gas zones	
	$\begin{bmatrix} 7 \frac{5}{8} & \frac{3}{60} \\ 4\frac{5}{20} \\ \frac{1}{2} & \frac{1}{2} \\ \frac{1}{2} & \frac{5}{20} \\ \frac{1}{2} & \frac{1}{2} \\ \frac{1}{2$	Tubular Data         Surface Casing         Size: 7.5/8 " Comented with

OPERATOR581980 FSL & 1980 FELWELL NO.FOOTAGE LOCATIONSurface Gr312'Size: 10 $312'$ Size: 10 $10^{21}4''$ TOC: sur $10^{21}4''$ TOC: sur $10^{10}2'4''$ TOC: $10^{10}2'4''$ TOC: $10^{10}2'4''$ TOC: $10^{10}2'4''$ TOC: $10^{10}2'4''$ TOC: $10^{10}2'4''$ Size: $10^{10}2'4''Size:10^{10}2'4''Size:10^{10}2'4''Size:10^{10}2'4''Size:10^{10}2'4''Size:10^{10}2'4''Size:10^{10}2'4''Size:10^{10}2'4''Size:10^{10}2'4''$	LEASE 7 SEC. Tut asing 3/4" face 15 tc Casi 7 570 570 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	17S TOWNSHIP Cemented w feet de feet de 9 7/8" Cemented w feet de 9 7/8"	36E RANGE	25
581980 FSL & 1980 FELWELL NO.FOOTAGE LOCATION $312'$ Size: 10 $312'$ Size: 10 $10^{21}4''$ TOC: sur $10^{21}4''$ TOC: $10^{21}4''$ Size: $10^{21}4''$ Size: $10^{21}4''$ Size: $10^{21}4''$ Long Size: $10^{21}4''$ Long Size: $10^{21}4''$ Size: $10^{21}4''$ Long String <t< th=""><th>7 SEC. Tul asing 3/4"_" rface :15 ate Casi 75/8_" 570 : 570 : 570 : 570 : 570 : 570 : 570 : 570 : 570 : 570 :</th><th>17S TOWNSHIP Dular Data Cemented w  feet de Lng Cemented w  feet de 9 7/8" Cemented w  feet de 6 3/4 "</th><th>36E RANGE</th><th>225</th></t<>	7 SEC. Tul asing 3/4"_" rface :15 ate Casi 75/8_" 570 : 570 : 570 : 570 : 570 : 570 : 570 : 570 : 570 : 570 :	17S TOWNSHIP Dular Data Cemented w feet de Lng Cemented w feet de 9 7/8" Cemented w feet de 6 3/4 "	36E RANGE	225
WELL NO.FOOTAGE LOCATION $312'$ Size: 10 $312'$ Size: 10 $10^{21}4''$ TOC: sur $10^{21}4''$ TOC: $10^{10}5''$ Intermedia $10^{2}6''$ Size: $176''$ Size: $101e$ Size: $101e$ Size: $176''$ Long String $101e$ Size: $1001e$ Size: $101e$ Si	SEC. Tul asing 3/4" " rface : ate Casi 7_5/8 " 570 : 570 : ng 1/2 " rface :	TOWNSHIP Dular Data Cemented w feet de Lng Cemented w feet de 9 7/8" Cemented w feet de 6 3/4 "	RANGE	225
Surface Ga $312'$ Size: 10 $312'$ Size: 10 $10^{2}4''$ ToC: surHole size:Intermedia $102'4''$ ToC: $102'4''$ ToC: $101e$ size:7 $102''$ Size: $102''$ Size: $102''$ Hole Size: $102''$ Size: $102'''$ Size: $102'''''$ Size: $102''''''''''''''''''''''''''''''''''''$	Tub asing _3/4"_"_ rface :15 ate Casi 7_5/8_" 570 : 570 : 570 : face 1/2" cface	Cemented w feet de Lng Cemented w feet de 9 7/8" Cemented w feet de 6 3/4 "	with with with with with atermined h	25SX by <u>circulat</u> <u>1600SX</u> by <u>60% cal</u> .175SX
Surface Ga $312'$ Size: 10 $10^{21}4''$ TOC: sur $10^{16}$ Hole size: $10^{16}$ Size: 7 $10^{16}$ Size: 7 $10^{16}$ Size: 7 $10^{16}$ Size: 7 $10^{16}$ Size: 5 $10^{16}$ Size: 10 $10^{16}$ Size: 5 $10^{16}$ Size: 10 <td>asing 3/4" " rface 15 ate Casi 7 5/8 " 570 ; ng 1/2 " rface ; </td> <td>Cemented w  feet de Lng Cemented w  feet de 9 7/8" Cemented w  feet de 6 3/4 "</td> <td>with2</td> <td>25</td>	asing 3/4" " rface 15 ate Casi 7 5/8 " 570 ; ng 1/2 " rface ; 	Cemented w feet de Lng Cemented w feet de 9 7/8" Cemented w feet de 6 3/4 "	with2	25
$312'$ Size: 10 $10^{21}4''$ TOC: sur $101e$ size:Intermedia $101e$ size:77g'' $101e$ size:77g'' $101e$ size:77g'' $101e$ size:77g'' $101e$ size:512'' $101e$ size:512'' $101e$ size:512'' $101e$ size:512'' $101e$ size:512'' $101e$ size:510'' $101e$ size:100'' $101e$ size:100''' $101e$ size:100''' $101e$ size:100'''' $101e$ size:100'''' $101e$ size:100''''' $101e$ size:100'''''''''''''''''''''''''''''''''''	3/4" " rface : 15 ate Casi 7 5/8 " 570 : ng 1/2 " cface :	Cemented w feet de Ing Cemented w feet de 9 7/8" Cemented w feet de 6 3/4 "	vith2 atermined h with atermined h atermined h	25
iC ³ /4"       TOC:sur         Hole size:       Intermedia         '2COS'       Intermedia         '7%"       Size:7         '7%"       TOC:5         '4735'       Hole Size:         '4735'       Hole Size:         '4735'       Long Strip         '5%"       Long Strip         '4735'       Long Strip         '5%"       Long Strip         '10 5%'       TOC: _sur         '10 5%'       Total Dept         ToC       4554'         '10 efforate       _///(perforate         '10 for a total       _////(perforate	rface 15 ate Casi 7 5/8 " 570 570 1/2 " rface :	feet de Lng Cemented w feet de 9 7/8" Cemented w feet de 6 3/4 "	etermined   with with with etermined	by <u>circulat</u> <u>1600</u> SX by <u>60% cal</u> <u>175</u> SX
Intermedia	:15 ate_Casi 7_5/8_" 570 : 570 : 570 : 570 : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :	Lng Cemented w feet de 7/8" Cemented w feet de 6 3/4 "	with etermined 1 with1	<u>1600</u> SX by <u>60% cal</u> .175 SX
Intermedia $178''$ Size: $178''$ Size: $178''$ Size: $101e$ Size:Size: $4735'$ Hole Size: $512''$ Long Strint $512''$ Long Strint $101e$ Silo'Size: $101e$ Silo'CC:Liner 4''Hole Size: $43/4$ Total DeptTOC 4554'Injection $101e$ Size:2 $101e$ Size:2 $101e$ Size:2 $101e$ Size:2 $101e$ Size:2 $101e$ Size:2 $101e$ Size:1 $101e$ Size: <td>ate Casi 7 5/8 " 570 : ng 1/2 " rface :</td> <td>Lng Cemented w  feet de 9 7/8" Cemented w  feet de 6 3/4 "</td> <td>with etermined 1  with1 etermined 1</td> <td><u>1600</u>SX by <u>60% cal</u> <u>175</u>SX by <u>60% cal</u></td>	ate Casi 7 5/8 " 570 : ng 1/2 " rface :	Lng Cemented w feet de 9 7/8" Cemented w feet de 6 3/4 "	with etermined 1  with1 etermined 1	<u>1600</u> SX by <u>60% cal</u> <u>175</u> SX by <u>60% cal</u>
$778"$ Size: $778"$ Size: $4735'$ Hole Size: $4735'$ Long String $5h_2"$ Long String $100$ Size:ToC: $100$ Size:Long Size: $43/4$ Total DeptToc4554'Injection $43/4$ Linet withTubing size2 3/8"	7 5/8 " 570 : ng 1/2 " rface	Cemented w feet de 9 7/8" Cemented w feet de 6 3/4 "	with etermined 1 with1 etermined 1	<u>1600</u> SX by <u>60% cal</u> <u>175</u> SX by <u>60% cal</u>
TOC: 4735' Hole Size: $5h_2''$ Long Strin Size:5 I $4^n$ ShO' Liner 4'' TOC:sur 20 sacks Hole Size: 43/4 Total Dept TOC 4554' Injection $\frac{2}{7}$ $\frac{2}{7}$ Lined with	570 : ng 1/2″ rface :	feet de 9 7/8" Cemented w feet de 6 3/4 "	etermined 1	by <u>60% cal</u> <u>175 </u> SX
$4735'$ Hole Size: $5h_2''$ Long String $5h_2''$ Long String $5h_2''$ Size: $5h_2''$ Size: $5h_2''$ TOC: $5h_2''$ Size: $5h_2'''$ Size: $5h_2''''$ Size: $5h_2''''''''''''''''''''''''''''''''''''$	:″ 1/2″ rface :	<u>9 7/8"</u> Cemented w <u>feet de</u> 6 3/4 "	with1	<u>.175 </u> SX by <u>60% cal</u>
5h2''Long String $4'''$ Sh0' $4'''$ Sh0' $10er$ TOC: surTD 500'20 sacksLiner 4''Hole Size:4 3/4Total DeptTOC4554'Injection $2 3/8''$ Tubing size2 3/8''	ng 1/2″ rface :	Cemented w feet de 6_3/4_"	with] etermined l	<u>.175</u> <b>SX</b> by <u>60% cal</u>
Size: 5 1 4" ShO' Liner TO ShO' TO ShO' Liner 4" 4 3/4 Total Dept TOC 4554' Tubing size _ 2 3/8" lined with	<u>1/2</u> ″ rface	Cemented w	vith <u>1</u> stermined 1	<u>175</u> <b>SX</b> by <u>60% cal</u>
Tubing size       23/8"       10 sino       20 sacks         Tubing size       20 sacks       10 size:       10 size:         Tubing size       23/8"       11 size:       11 size:	rface	<b>feet de</b> 6 3/4 "	stermined l	by <u>60% cal</u>
Ib 5 No       20 sacks         Liner 4"       Hole Size:         4 3/4       Total Dept         TOC 4554'       Injection	:	6 3/4 "		
4 3/4 Total Dept TOC 4554' <u>Injection</u> <u>7</u> (perforate Tubing size <u>2 3/8"</u> lined with			<del></del>	
TOC 4554' Injection	th:	5110′		
(perforate Tubing size	Interva	<u>al</u>		
Tubing size2 3/8" lined with	4750 в <b>d or o</b> р	feet to pen-hole, ir	5108 ndicate wh:	feet ich)
	I	LPC		_ set in a
	(mater	<b>4657</b>	feet	•
(brand & model) (or describe any other casing-tubing seal).				
)ther Data		x		
Name of the injection formation San And	dres			
Name of Field on Bool (If amliashie)	Unner	Lovington 9	San Andres	West
. Name of Field of Foot (If applicable)	opper	2012.1800		
I. Is this a new well drilled for injection? If no, for what purpose was the well origin	nally dr	cilled?	prod	luction
I llas the well ever be perforated in any other intervals and give plugging detail (sacks or used.	er zone( of cemer	(s)? List a nt or bridge	all such pe a plug(s)	erforated
Give the depth to and name of any overlying				

(pools) in this area. Grayburg overlying

GREENHILL PETROL	EUM CORPORATION	WEST_LOVINGTON_UNIT
OPERATOR		LEASE
60	660 FWL & 1980	FSL 8 17S 36E
WELL NO.	FOOTAGE LOCA	ATION SEC. TOWNSHIP RANGE
LEA COUNTY, NEW	MEXICO	
		<u>Tubular Data</u>
	111	Surface Casing
		Size: 10 3/4 " Cemented with 250 SX
		TOC: SURFACE feet determined by CALC
	L 103/4	Hole size:
completed - 6/1148		Intermediate Casing
converted to injection 2/18/63		Size: 7 5/8 "Cemented with960SX
	75/8	TOC: <u>CMT_CIRC</u> feet determined by <u>CALC</u>
		Hole Size: 97/8
		Long String
		Size: <u>5 1/2</u> " Cemented with <u>1000</u> SX
		TOC: <u>CMT CIRC</u> feet determined by <u>CALC</u>
		Hole Size: <u>6 3/4</u> .
	- 512 4732	Total Depth: 5099
	4" liner 4706-5099	Injection_Interval
	TO 5099	5048 feet to 5098 feet (perforated or open-hole, indicate which)
Tubing size	>"_ lined with _	ipc
· •	C	(material) Dacker at 4660 feet.
(brand & model)	or ording tubing	
(of describe any of	ler casing-cuoing	; seal).
<u>Other Data</u>		
1. Name of the inje	ection formation	SAN ANDRES DOLOMITE
2. Name of Field or	: Pool (If applic	able)LOVINGTON (SAN ANDRES) WEST
<ol> <li>Is this a new we If no, for what</li> </ol>	11 drilled for i purpose was the	njection? <u>NO</u> well originally drilled? <u>PRODUCTION</u>
4. Has the well even intervals and giused. NO	er be perforated ve plugging deta	in any other zone(s)? List all such perforated iil (sacks of cement or bridge plug(s)
5 Give the death t	· ·	w overlying and/or underlying oil or gas gones
(pools) in this	area.	is overiging and/or underiging out or gas colles

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GRAYBURG - OVERLYING

(	GREENHILL PETR	OLEUM CORPORATION		WEST LO	<b>DVINGTON UN</b>	IT	
·····	OPERATOR			LEASE			τ.
	62 WELL NO	2970 FNL & 231	0 FEL	8 SEC	17S	36E BANGE	
				0.201			
L	LA CUUNIY, NEI	N MEXICU			······································		
				<u>Tub</u>	ular Data		
			<u>Surface</u>	Casing			
			Size: <u>13</u>	3/8″	Cemented v	vith	<u>250</u> sx
			TOC: <u>SUI</u>	RFACE	feet de	etermined	by <u>CALC</u>
open ho	le	L 1378	Hole size	e: <u>1/</u>	<u></u>	<del></del> .	
complete	d 1/9/49	· .	Intermed	<u>late Casi</u>	ng		
converted 2/26/63	to injection		Size: <u>8</u>	5/8_″	Cemented v	with	<u>150 </u> sx
		D5/	тос: <u>15</u> (	00	feet de	etermined	by <u>CALC 50%</u>
		- 178	Hole Siz	e: <u>11</u>	<u></u>		
			Long Str	ing			
			Size: <u>5</u>	1/2″	Cemented v	with	<u>200</u> SX
			тос: <u>358</u>	35	feet de	etermined	by <u>CALC 80%</u>
		-52 4747	Hole Siz	e: <u>7</u>	3/4		
• •			Total De	pth: <u>50</u>	80		
			Injection	<u>n Interva</u>	1		
			477 (perfora	10 ted or op	feet to en-hole in	5080 dicate wh	feet ich)
Tub	ing size						_ set in a
		, D	acker at	(mater 46 40	ial) )	feet	
(or	(brand & model describe any c	.) other casing-tubing	seal).				· .
Othe	r Data		·				
1.	Name of the in	jection formation	SAN	ANDRES	DOLOMITE		
2.	Name of Field	or Pool (If applic	able)	10)	LINGTON_(SA	N_ANDRES)_	WEST
3.	Is this a new If no, for wha	well drilled for in the purpose was the	njection? well orig	<u>NO</u> inally dr	illed? PR	ODUCTION	
4.	llas the well e intervals and used. NO	ever be perforated give plugging deta	in any ot il (sacks	her zone( of cemen	s)? List a at or bridge	all such p a plug(s)	erforated
5.	Give the depth (pools) in thi	to and name of an s area.	y overlyi	ng and/or	underlying	g oil or g	as zones

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GRAYBURG - OVERLYING

#### GREENHILL PETROLEUM CORPORATION WEST LOVINGTON UNIT OPERATOR LEASE 63 PA 660 FNL & 560 FWL 8 17S 36E WELL NO. SEC. TOWNSHIP FOOTAGE LOCATION RANGE LEA COUNTY, NEW MEXICO Tubular Data Cmt. plug 0-12 Surface Casing Size: <u>13 3/8</u> " Cemented with <u>450</u> SX TOC: SURFACE feet determined by CIRC 350' Hole size: ______17 1/2" Intermediate Casing Size: 8 5/8 "Cemented with 1300 SX PCA - 9/24/80 TOC: SURFACE feet determined by CIRC Cmt plug 1900'- 1994' Hole Size: 12 1/4 19501 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 PA___ Hole Size: 7 7/8" Total Depth: 5150 Injection Interval feet to feet (perforated or open-hole, indicate which) Tubing size _____ lined with _____ _ set in a (material) _____ packer at __ feet. (brand & model) (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation 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. 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 zone. (pools) in this area.

	<u>GREENHILL PE'</u> OPERATOR	TROLEUM CORPORATION		West_Lov LEASE	ington Unit		
	64	2080 FNL & 989 FWI	L	. 8	17S	36E	
	WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE	
<b></b>				Tub	ular Data		
			<u>Surfac</u>	e Casing			
			Size:_	16 "	Cemented w	ith	sx
		· · · · · · · · · · · · · · · · · · ·	TOC:	surface	feet de	termined by	circ.
	2		Nole s	ze:2	0 "		
	Ş		Intern	<u>ediate Casi</u>	ng		
			Size:_	13 3/8 "	Cemented w	ith	SX
			TOC:	surface	feet de	termined by	circ.
	4		Hole S	<b>ize:</b> 15			
		FETD SUD	Long S	tring			
		2018 1 200	Size:_	8 5/8 ~	Cemented w	205	50 <b>sx</b>
			TOC:	1300	feet de	termined by	TS
	Ħ	to sty thus	Hole S	<b>ize:</b> 12	2 1/4"		
	Z		Total	Depth: 9	500'		
	-	-0 50 0.00 3 <b>120</b> - 38 <b>3</b> 7	Inject	ion Interva	1 <u>1</u>		
	I	- <b>0</b> (20) (20)	-		feet to		feet
		<b>1⊕02</b> -119 だい	(perfo	orated or op	en-hole, in	dicate which	1)
Tub	ing size	lined with _		(mater		s	set in a
<del></del>	(brand & mod	F	acker a	it		feet.	
(or	describe any	other casing-tubing	; seal).				
<u>Othe</u>	r Data						
1.	Name of the	injection formation		<b>-</b>			
2.	Name of Fiel	d or Pool (If applic	able)	Uppe	r Lovington	San Andres	West
3.	Is this a ne If no, for w	w well drilled for i hat purpose was the	njectio well or	n? No iginally dr	illed?	producti	on
4.	llas the well intervals an used.	ever be perforated d give plugging deta No	in any 11 (sac	other zone( ks of cemen	s)? List a at or bridge	ll such perf plug(s)	Forated
5.	Give the dep (pools) in t	th to and name of ar his area.	y overl	ying and/or	underlying	oil or gas	zones

Grayburg d	overlying
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GREENHILL PETRO	LEUM CORPORATION	WEST	LOVINGTON UN	IIT	
OPERATOR		LEASE			
	135 FSL & 1300	FEL 5	17S	36E	
IFA COUNTY. NEW	MEXICO	UN SEC.	10003011	MIGE	
		Τι	ubular Data		
	unt S	urface Casing	<u>, , , , , , , , , , , , , , , , , , , </u>		
		ize: 13 3/8 '	Cemented v	vith	450 S
	Т	OC: SURFACE	feet de	etermined	by CALC
	-13 ³ /8 II	ole size:	7 1/2		·
ompleted - 2/23/40	I	<u>ntermediate Cas</u>	sing		
	S Sta	ize: <u>8 5/8</u>	Cemented v	vith	<u>380</u> s
	1 - 8 7 8 1	OC: <u>937</u>	feet de	etermined	by <u>CALC 5</u>
	H	ole Size:]	2 1/4		
	I	ong String	•		
	s	ize: <u>51/2</u>	Cemented v	vith	<u>   1275    </u> \$
	I	OC: <u>CMT CIRC</u>	feet de	etermined	by <u>CALC</u>
	5220 H	ole Size:	7 7/8		·
-	10 5230 1	otal Depth: _5	230		
	J	njection Interv	val		
		4709 perforated or o	feet to	5062 dicate w	feet hich)
Tubing size <u>NONE</u>	lined with		·····		set in a
NONE	рас	(mate ker at <u></u>	erial)	fee	t.
(brand & model) (or describe any ot	her casing-tubing s	eal).			
Other Data					
1. Name of the inj	ection formation	SAN ANURES			<u> </u>
2. Name of Field o	r Pool (If applicat	le)L	OVINGTON (SA	N_ANDRES)	WEST
3. Is this a new w If no, for what	ell drilled for inj purpose was the we	ection? <u>NO</u> 11 originally o	irilled? PR	ODUCTION_	
4. Has the well ev intervals and g usedNO	er be perforated ir ive plugging detail	any other zone (sacks of ceme	e(s)? List a ent or bridge	all such e plug(s)	perforated
5. Give the depth	to and name of any	overlying and/o	or underlying	g oil or	gas zones

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GRAYBURG - OVERLYING

GREENHILL PE	TROLEUM CORPORA	<b>FION</b>	West Lov	ington Unit		
OPERATOR			LEASE			
67	135 FNL 260	00 FWL	7	17S	36E	
WELL NO.	FOOTAGE I	OCATION	SEC.	TOWNSHIP	RANGE	
			Tul	bular Data	****	
		<u>Surfac</u>	<u>e Casing</u>			
		Size:_	8 5/8 ~	Cementedw	ith275	sx
		тос: _	surface	feet de	termined by <u>c</u>	irc.
	85/8	Hole s	ize:	12 1/4"		
L	3:21	Interm	ediate Cas	ing		
		Size:_		Cemented w	vith	SX
		TOC: _		feet de	termined by	
		Hole S	ize:			
		Long S	tring			
	5 ^{1/2}	Size:_	<u> </u>	Cemented w	1200 1200	SX
	52.40	TOC: _	surface	feet de	termined by	<u>60% cal</u> c
		Hole S	ize:	7 7/8"		
		Total	Depth:	5240		
		Inject	<u>ion Interv</u>	<u>al</u>		
		(perfo	rated or o	feet to pen-hole, in	 dicate which)	feet
Tubing size	lined wit	:h		· · · · · · · · · · · · · · · · · · ·	set	in a
		nacker a	(mate:	rial) 	feet	
(brand & model (or describe any c	.) other casing-tub	ing seal).				
<u>Other Data</u>						
1. Name of the ir	jection formati	.on		-		
2. Name of Field	or Pool (If app	licable)	Upper L	ovington San	n Andres West	
3. Is this a new If no, for wha	well drilled fo It purpose was t	r injectio he well or	n? ^{No} iginally d	rilled?	production	
4. Has the well e intervals and used.	ever be perforat give plugging d No	ed in any letail (sac	other zone ks of cemen	(s)? List a nt or bridge	ll such perfor plug(s)	ated
		·····				

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

Gravburg	overlving
0	0,01+)+8

GREENHILL	PETROLEUM CORPORATION		Wes	st Lovington	Unit	
OPERATOR	<u>, , , , , , , , , , , , , , , , , , , </u>		LEASE		<u></u>	
68	1335 FNL &	1280 FWL	7	17S	36E	
WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE	
<u></u>			Tu	bular Data		
[ ]		Surface	Casing			
		Size:	<u>8 5/8</u> ″	Cemented w	vith275	<u>5          </u> SX
		TOC:	surfac	e feet de	stermined by	circ
	<b>8</b> 5/2	Hole siz	e:	12 1/	4"	
	- 362	Intermed	<u>iate Cas</u>	ing		
		Size:		Cemented w	vith	SX
		тос:		feet de	etermined by	<del></del>
		Hole Siz	e:			
		Long Str	ing			
	(m. 1)	Size:5	1/2 "	Cemented w	vith600	SX
	- 5200'	тос:	477	feet de	termined by	60% calc.
		Hole Siz	e:	7 7/8"		
		Total De	pth:	5200 <b>'</b>		
		<u>Injectio</u>	<u>n_Interv</u>	<u>a1</u>		
		(parforn	ted or o	feet to		feet
Tubing day	lined with	(perrora			MICALE WHIC	ny aot in a
Tubing Size	IIned with		(mate	rial)	·	set ma
(brand & ma	p	acker at			feet.	
(or describe an	y other casing-tubing	seal).				
<u>Other Data</u>						
1. Name of the	injection formation				· · · · · · · · · · · · · · · · · · ·	
2. Name of Fie	ald or Pool (If applic	able)		Upper Loving	ton San Andr	es West
3. Is this a r If no, for	new well drilled for i what purpose was the	njection? well orig	inally d	rilled?	production	
4. Has the well intervals a used.	<b>.1 ever be perforated and give plugging deta</b> To	in any ot il (sacks	her zone of ceme	(s)? List and or bridge	all such per plug(s)	forated
5. Give the de (pools) in	pth to and name of an this area.	y overlyi	ng and/o	r underlying	; oil or gas	zones

Grayburg overlying

	GREENHILL P	ETROLEUM CORPORATION	West	Lovin SE	gton Unit		
	69 WELL NO.	1305 FNL & 2575 FWI FOOTAGE LOCA	TION SEC	с. 1	17S COWNSHIP	36E RANGE	<u></u>
<del></del>				Tubul	ar Data		
			<u>Surface Casin</u>	Ig			
			Size: 8 5/8	<u> </u>	Cemented w	ith275	SX
			TOC:surfa	ice	feet de	termined by	circ.
		056 #	Hole size: _	12	1/4"		
		268'	Intermediate	Casing	5		
			Size:	″ C	Cemented w	vith	SX
			TOC:		feet de	termined by	•
			Hole Size: _				
			Long String				
		<u> </u>	<b>Size:</b> 5 1/	<u>2</u> ~ c	Cemented w	<b>ith</b> 785	SX
		5240	TOC: 1680	)	feet de	termined by	60% calc.
			Hole Size:	7	7/8"		
			Total Depth:	52	40'		
			Injection Int	<u>erval</u>			
					feet to		feet
			(perforated o	r open	n-hole, in	dicate which	n)
Tul	bing size	lined with	(m	ateria	.1)		set in a
		p	acker at			feet.	
(or	describe any	other casing-tubing	seal).				
<u>Oth</u>	e <u>r Data</u>						
1.	Name of the	injection formation					
2.	Name of Fiel	d or Pool (If applic	able)	Upper	Lovington	San Andres	West
3.	Is this a ne If no, for w	w well drilled for i hat purpose was the	njection? well originall	No .y dril	led?	product	ion
4.	Has the well intervals an used.	ever be perforated d give plugging deta No	in any other z il (sacks of c	one(s) ement	? List a or bridge	ll such per: plug(s)	Eorated
5.	Give the dep (pools) in t	th to and name of an his area.	y overlying an	ıd/or u	underlying	; oil or gas	zones

Grayburg overlying

(	REENHILL PE OPERATOR	TROLEUM CORPORAT	LON	West Lovi LEASE	ngton Unit		<u></u>
	70	1300 ENT 8	6.15 EW	· /.	170	) ( F	
	WELL NO.	FOOTAGE	LOCATION	SEC.	TOWNSHIP	RANGE	<u></u>
				Tu	bular Data	<u> </u>	<del>1999 - Anno 19</del> 99 - Anno 1999 - Anno 199
	1 1		<u>Surfac</u>	e Casing			
			Size:	8 5/8 ~	Cemented w	ith 25	0 <b>sx</b>
			TOC:	surface	feet de	termined by	circ.
		P. 6. 1.	Hole s	<b>ize:</b> 12	1/4"		<u>, , , , , , , , , , , , , , , , , , , </u>
	ļl		Interm	<u>ediate Cas</u>	ing		
		2.0	Size:_		Cemented w	vith	SX
			TOC: _		feet de	termined by	
			Hole S	ize:			
			Long_S	tring			
L	- 5'5'	Size:_	5 1/2 "	Cemented w	ith 675	sx	
	1.264	TOC:	2202	feet de	termined by	60% cald	
			Hole S	ize:8	5/8"		
			Total	Depth: <u>52</u>	264 '		
			Inject	<u>ion Interv</u>	<u>al</u>		
			 (perfo	rated or o	_ feet to pen-hole, in	 dicate whic	feet h)
Tubi	ng size	lined wi	th				set in a
			packer a	(mate: t	rial) 	feet.	
(or d	brand & mode escribe any	el) other casing-tul	bing seal).				
Other	Data						
1 N	ame of the	Infection format	ion				
0 N	me of Field	for Pool (If an	n1feeble)				
2. 11			pricable,	Upper L	ovingion sar	<u>Andres wes</u>	<u> </u>
3. I: I:	s this a new E no, for wh	v well drilled for nat purpose was (	the well or	n? <u>N</u> iginally d	rilled?	production	
4. Ha in us	as the well ntervals and sed.	ever be perfora i give plugging o No	ted in any detail (sac	other zone ks of ceme	(s)? List a nt or bridge	ll such per plug(s)	forated
5 6	ive the depi	th to and name of	f any overl	ving and/o	r underlying	oil or gas	70188

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

•			•	•
,	•			
	·			•
	INJECTION	WELL DATA SHEET	· · ·	
GREENHILL PETROLE		UFCT LOUINCTON UN	ן דיד	
OPERATOR		LEASE	·	•
61	2310 FSL &	1980 FWL 8 175	36E NMPM	•
WELL NO.	FOOTAGE LOC	ATION SEC. TOWNSHIP	RANGE	
WEST LOVINGTON FI	ELD, LEA COUNTY,	NEW MEXICO		
	,	<u>Tubular Data</u>	,	•
	1	Surface Casing	•	•
		Size: 10 3/4 " Cemented	with 300 SX	
		TOC: <u>CIRC</u> feet c	letermined by <u>CALC</u>	•
	10 3/4	Nole size: <u>15</u>		
	.301	Intermediate Casing	_	
		Size: 7 5/8 " Cemented	with 500 SX	
		TOC: CIRC feet (	letermined by CALC	
	7 5/8	Nolo Sizo: 0.7/9		
				•
		Long String	4.4	•
	20'	Size: <u>5 1/2</u> " Cemented	with <u>1050</u> SX	
	51/2	TOC: <u>CIRC</u> feet c	letermined by <u>CALC</u>	•
	5050	Hole Size: <u>6 3/4</u>	· · · · · ·	•
		Total Depth: 5080	CIBP @ 4954	0
	i • ·	Injection Interval	Perts: 5020-7	у. [.] .
		5020 feet to (perforated) or open-hole, 1	feet indicate which)	•
Tubing size	3/8" lined with	IPC (material)	set in a	•
Bak	(er	packer at4060	feet.	
(brand & model) or describe any o	) ther casing-tubin	g seal).		
ther Data				·
Name of the in	ection formation	SAN ANDRES DOLOMITE		
Name of Field	or Pool (If appli		N ANDRES) WEST	•
T	or roor (ir abbit			
Is this a new of If no, for what	well drilled for t purpose was the	injection? <u>NO</u> well originally drilled? <u>P</u>	RODUCTION	
Has the well end intervals and pused. NO	ver be perforated give plugging det	in any other zone(s)? List ail (sacks of cement or bridg	all such perforated ge plug(s)	
			,	•
, Give the depth (pools) in this	to and name of a s area.	ny overlying and/or underlyin	ng oil or gas zones	

UPERATOR			LEASE			
75		5 D.D.T	-	170	A	
VELL NO	2625 FSL & 130 FOOTAGE LO	5 FEL	5 SEC	17S TOWNSHIP	36E RANGE	
	roomon h		DLU,	TOWNDELL	IGHIOD	
	9		Tu	bular Data		
		Surface	<u>Casing</u>			
1		Size:	<u> </u>	Cemented v	vith	<u> </u>
		тос:	surfac	e feet de	stermined	by
	25% °	Hole si	ze:	12 1/4"		
		Interme	ediate Cas	ing		
		Size:		Cemented w	with	s
		TOC:		feet de	etermined	by
		Hole Si	Lze:			
		Long St	ring			
		Size:	<u>5 1/2</u> ″	Cemented v	with	s
		TOC:	surface	feet de	etermined	by <u>circ.</u>
	52501	Hole Si	ze:	7_7/8"		
		Total I	Depth:	5230'		
		Injecti	on Interv	<u>al</u>		
		(perfor	ated or o	_ feet to pen-hole, in	ndicate wi	feet hich)
ubing size	lined with	h				set in a
*******		packer at	(mate :	rial) 	fee	t.
(brand & mode	1)					
t describe any	other casing-cub.	ing sear/.				
<u>her Data</u>						
Name of the i	njection formatio	on				
Name of Field	or Pool (If app	licable) _	Upper L	ovington Sar	Andres W	lest
Is this a new If no, for wh	well drilled for at purpose was th	r injectior he well ori	n? d	No rilled?	productio	<u></u>
Has the well	ever be perforate	ed in any c etail (sack	ther zone of ceme	(s)? List ant or bridge	all such p a plug(s)	perforated

Grayburg overlying

	GREENHII	LL PETROLEUM CORPORA	TION	West I	ovington Uni	t	
	OPERATOR			LEASE	· · · · · · · · · · · · · · · · · · ·	<u></u>	
	76	15 FEL & 2515	FSL	5	17S	36E	
	WELL NO.	FOOTAGE LC	CATION	SEC.	TOWNSHIP	RANGE	
				Tul	bular Data		
			Surfac	e Casing	,		
			Size:_	8 5/8 "	Cemented w	ith	sx
			TOC: _	surface	feet de	termined by	circ.
			Hole s	ize:	12 1/4"		
		848"	Intern	ediate Cas	ing		
		الحفائق	Size:_	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Cemented w	ith	SX
			тос: _		feet de	termined by	
			Hole S	ize:		·	
			Long S	tring			
			Size:_	<u> </u>	Cemented w	ith <u>1075</u>	SX
		5/2"	TOC:	surface	feet de	termined by	
		52301	Hole S	ize:	7 7/8"		
			Total	Depth:	5230 <b>'</b>		
			Inject	ion Interv	<u>a1</u>		
					_ feet to		feet
			(perfo	rated or op	pen-hole, in	dicate which	)
Tub	ing size	lined with	·	(mate)	r[a])	S	et in a
. <u> </u>			packer a	t		feet.	
(or	(brand & moo describe an	del) y other casing-tubi	ng seal).				
<u>Othe</u>	<u>r Data</u>						
1.	Name of the	injection formatio	n				
2.	Name of Fiel	ld or Pool (If appl	icable)	Upper L	ovingt <mark>on San</mark>	Andres West	
3.	Is this a no If no, for a	ew well drilled for what purpose was th	injectio e well or	n? iginally di	o rilled?	production	tingi saina ayaa g
<b>4.</b> 1	Has the well intervals an used.	l ever be perforate nd give plugging de	d in any tail (sac	other zone ks of cemen	(s)? List a at or bridge	ll such perfe plug(s)	orated
-	<u></u>	NO	<u></u>				

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

GREENHILL PETROLEUM CORPORATI OPERATOR	ON West Lovington Unit LEASE
77 1165 FSL & 1305 FEL WELL NO. FOOTAGE LOG	5 17S 36E ATION SEC. TOWNSHIP RANGE
	<u>Tubular Data</u>
	Surface Casing
1 :	Size: 8 5/8 " Cemented with 300 SX
	TOC: feet determined by
	Hole size: <u>12 1/4"</u>
85/2 "	Intermediate Casing
35?'	Size: Cemented withSX
	TOC: feet determined by
	Hole Size:
	Long String
	Size: $5 \frac{1}{2}$ " Cemented with 1100 SX
5220	TOC: surface feet determined by circ.
	Hole Size: 7 7/8"
	Total Depth: 5230'
	Intertion Interval
	(perforated or open-hole, indicate which)
Tubing size lined with	set in a
	(material) packer at feet.
(brand & model)	
(of describe any other casing-tubit	g sear).
<u>Other Data</u>	
1. Name of the injection formation	
2. Name of Field or Pool (If appli	cable) Upper Lovington San Andres West
3. Is this a new well drilled for If no, for what purpose was the	injection? No well originally drilled? production
4. Has the well ever be perforated intervals and give plugging det used.	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	ny overlying and/or underlying oil or mag zonog

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

GR	EENHILL PETROLEUM (	CORPORATION	V	Vest Lovin	gton Unit			
	OPERATOR			LEASE				
	78	1305 FSL & 15	FEL	- 5	17S	36E		
WELL NO.	FOOTAGE LOCA	TION	SEC.	TOWNSHIP	RANGE			
				Tub	ular Data			
			<u>Surface</u>	Casing				
			Size:	<u>8 5/8</u> ~	Cemented w	ith	300	sx
			TOC:	surface	feet de	termined	by _circ	
			Hole siz	ze:	12 1/4	11		
			Intermed	<u>liate Casi</u>	ng			
			Size:		Cemented w	ith		sx
			TOC:		feet de	termined	by	
			Hole Siz	ze:				
			Long Sti	cing				
			Size:	5 1/2 "	Cemented w	ith	1275	sx
			TOC:	surface	feet de	termined	by circ	·
			Hole Siz	ze:	7 7/8"			
			Total De	epth:	5230			
			Injectio	on Interva	1			
					feet to		fe	et
			(perfora	ated or op	en-hole, in	dicate w	hich)	
Tu	bing size	lined with		(mater	 1		set i	n a
<b>6</b>		p	acker at			fee	t.	
(or	(brand & model) describe any othe	r casing-tubing	seal).					
<u>0th</u>	<u>er_Data</u>							
1.	Name of the injec	tion formation					····	
2.	Name of Field or	Pool (If applic	able) _	Upper Lov	ington San	Andres We	est	
3.	Is this a new wel If no, for what p	l drilled for i urpose was the	njection? well orig	No sinally dr	111ed?	produc	tion	
4.	Has the well ever intervals and giv used. No	be perforated e plugging deta	in any ot 11 (sacks	ther zone( s of cemen	s)? List a t or bridge	11 such ; plug(s)	perforat	ed
5.	Give the depth to (pools) in this a	and name of an rea.	y overlyi	ing and/or	underlying	; oil or	gas zone:	s

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Grayburg overlying

OPERATOR	LEASE
5 2080	
WELL NO. F	OOTAGE LOCATION SEC. TOWNSHIP RANGE
	<u>Tubular Data</u>
	o' <u>Surface Casing</u>
	Size: <u>11-3/4</u> " Cemented with <u>375</u>
1125-2-2	3/4 TOC: Surface feet determined by Calc.
25X	Hole size: 15
<u>2222345</u> 9	5 5x Intermediate Casing
2800-5740 - Cu	J 2750' Size: Cemented with
	TOC: feet determined by
35 cx 85	Hole Size:
\$250-51-0	14 Long String
completed	Size: 8-5/8 " Cemented with 450
16/68 6170	TOC: 3527' feet determined by
16/68 PcA	$\times (1858-7770)$ Hole Size: [1]
	"Total Dopth: 8700'
	) 8700 Intertion Interval
	(perforated or open-hole, indicate which)
Tubing size 1	ined with set in
	(material) packer atfeet.
(brand & model) or describe any other ca	sing-tubing seal).
ther Data	
. Name of the injection	formation
. Name of Field or Pool	(If applicable)
. Is this a new well dr If no. for what purpo	illed for injection?
. Has the well ever be intervals and give pl used.	perforated in any other zone(s)? List all such perforated ugging detail (sacks of cement or bridge plug(s)

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## INJECTION WELL DATA SHEET

OPERATOR	Relining company	I FASE	state R		
OTERRIOR			·		
#1	600 FNL & 660	FEL 9	T175	R36E	
WELL NO.	FOOTAGE LOCAT	ION SEC.	TOWNSHIP	RANGE	
		Tul	bular Data		
	] 25 sk	Surface_Casing	• .		
		Size: 10 ³ /4 "	Cemented w	ith210	sx
505X		TOC: <u>Surface</u>	feet de	termined by <u>c</u>	alc
300' to 150	- 29.3' 10 3/4	Hole size:	13 3/4		
		Intermediate Cas	ing		
57/19/45		Size: 7 ⁵ /8″	Cemented w	ith600	sx
	51	TOC: <u>circulate</u>	ed feet de	termined by <u>c</u>	alc
2000-1800	_ 7 78 1966.10	Hole Size:	9 ⁷ /8		••
<u>}</u>	•	Long String	• •		
	• •	Size: $5^{1/2}$	Cemented w	ith400	SX
25 6		TOC: <u>eireulate</u>	ed feet de	termined by <u>c</u>	alc So
4785-449		Hole Size:	6 ³ /4	•	
-	_ 51/2 	Total Depth:	5115		
TD 5115	•	Injection Interv	<u>al</u>	•	
			_ feet to	f	eet
•		(perforated or o	pen-hole, in	dicate which)	
Tubing size	lined with	(mate	<u>rtal</u>	set	in a
	pa	cker at		feet.	•
(brand & model) (or describe any ot	her casing-tubing	seal).		·	
Other Data			· .		
1. Name of the inj	ection formation _				
2. Name of Field c	- pr Pool (If applica	ble)	•		
3. Is this a new w If no, for what	vell drilled for in purpose was the w	jection? ell originally d	rilled?		
4. Has the well ev intervals and g used.	ver be perforated i ver plugging detai	n any other zone 1 (sacks of ceme	(s)? List a nt or bridge	ll such perfore plug(s)	ited

1. The proposed average and maximum daily rate and volume to be injected are 2000 PSI and 1500 BWPD.

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- 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".

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#### 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

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#### CYPRESS PETROLEUM CONSULTANTS

 WELL NAME
 - TETACO INC. (UNIT 10)

 LOCATION
 - 640 FML 660 FEL
 5-175-36E
 WLU

 UG5
 - 07 3913, TD 5150. 5-1/2 4746

 LOG5
 - 000TH 66N (L1-15-62)

 LOG5
 - 000TH 66N (L1-15-62)

_____



#### 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  $1/2^{\prime\prime}$  pkr on tbg. and TIH. Set pkr. at ±4650'. Open pkr. bypass and spot 2-5 tons of CO2 to 100 ft. above the pkr. Close bypass and displace CO2 into formation under pressure with fresh water. Do not overdisplace. Shut-in overnight.
- 4. Open well and flowback to recover load. POOH w/tbg. & pkr.
- 5. Pick up BJ Titan PFT tool and TIH to 5150'±.
- 6. Pump in 2000 gallons of clean water (fresh or brine) through PFT in circulation mode while moving across interval 5150' to 4780'.

Treat the following intervals:

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

NOTE: EXCLUDE 4715-4780

- 7. Pump 3200 gal of 15% NEFE HCL treated with Iron and Sulfur control agents (to prevent reprecipitation of FeS) through the PFT in injection mode utilizing approximately 20 gal/ft in each interval specified above.
- 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'±.

- 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.



# X

Martin Water Laboratories, Inc.

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

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

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STATE_

NM

#### RESULT OF WATER ANALYSES

	LABORATORY NO. 9891/8
To. Mr. Dan Westover	SAMPLE RECEIVED 9-13-89
12777 Jones Road, Suite 375, Houston, TX	RESULTS REPORTED 9-20-89
12/1/ Jones Road; Durice 5/5; Housdon; 12	RESULTS REPORTED

COMPANY Greenhill Petroleum Corporation LEASE West Lovington Unit

FIELD OR POOL Lovington

SECTION _____ BLOCK _____ SURVEY _____ COUNTY_ SOURCE 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	ŀ					
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 Ci	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. XIIXXX - Chemets	6.0	2.5	0.20						
Hydrogen Sulfide	0.0	0.0	600						
Resistivity, ohms/m at 77 ⁴ 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						
				·					
	<u> </u>								
Results F	Reported As Milligrams	Per Liter							
Additional Determinations And Remarks Letter of	f recommendati	lon attached.							
			·····						
		·							
	·								
· · · · · · · · · · · · · · · · · · ·									
	<u> </u>	<u></u>							
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Form No. 3

Waylan C. Martin, M.A.

K-58T175R36E

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## WATER ANALYSIS REPORT

Company Address Lease Well Sample	Pt.	: : : :	GREENHILL PETR HOBBS,NM WEST LOVINGTON SOUTHWEST WIND WINDMILL	OLEUM		Date Date Analy	Sampled vsis No.	::	7 <b>-</b> 17-90 7-17-90 2		
	ANALYS	IS	5			n	ng/L			*	meq/L
-	••••====		-			-					
<u>т.</u>	рн			7.7							
2.	nzo Guarie		- Canada -	NEG.							
3.	Specii	10	Gravily	1.002							
*• 5	Sugnan	Да	replique	•		C	590.5				
5.	Discol	140 170	d Ovygen								
7	Diccol	176	d CO2								
2 ×	OII Th	. V <del>.</del> . T	ator								
а. а.	Dhenol	n r	thaloin Alkali	nity (C	-						
10.	Methvl	يمي ۲	)rango Alkalini	the contraction of the second se	12037						
11.	Bicarb	- COT	nate		HCO3		2.0	F	1003		0.0
12.	Chlori	đe			C1	3	21.0	ŕ	1005		9.1
13.	Sulfat	e	- -		504	1	25.0	ŝ	504		2.6
14.	Calciu	m			Ca	ī	80.0	ō	Ca		9.0
15.	Magnes	า่ง	1M ·		Mq		0.1	I	Ig		0.0
16.	Sodium		(calculated)		Na		62.0	1	Ia		2.7
17.	Iron				Fe		0.3				
18.	Barium				Ba		0.0				
19.	Stront	ίı	m		Sr		0.0				
20.	Total	Ha	rdness (CaCO3)			4	50.0				

# PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt	X meq/L =	mg/L	
9 *Ca < *HCO3 /> 0 *Mg> *SO4 <br 3 *Na> *C1	0 3 	Ca (HCO3) 2 CaSO4 CaC12 Mg (HCO3) 2 MgSO4	81.0 68.1 55.5 73.2 60.2	0.0 2.6 6.3	3 177 352
++ + Saturation Values Dist. Wate CaCO3 13 mg CaSO4 * 2H2O 2090 mg	r 20 C /L	MgCl2 NaHCO3 Na2SO4 NaCl	47.6 94.0 71.0 58.4	0.0	0 158
BaSO4 2.4 mg	/L				

**REMARKS**:

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Petrolite Oilfield Chemicals Group

Respectfully submitted, R. MATTHEWS

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E- 54 T175R36E

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## WATER ANALYSIS REPORT

''A' ''

Company Address Lease Well Sample	Y s Pt.	: GREENHI : HOBBS, N : WEST LG : NORTH V : WINDMIN	LL PETF M DVINGTON VINDMILI LL	ROLEUM UNIT	,	Date Date Analy	Sampled sis No.	:	7-17-90 7-17-90 1		
	ANALYS:	IS				n	ng/L			* m	eq/L
• ·	-17					-					
<u>با</u>	pn			7.6							
4.	nzo Cronde	4 - <b>-</b>		NEG.							
5.	Specir.	IC Gravit	zy Ratlåda	1.001		_					
4. 5	Fugner	digeotved	i Solias	i		7	24.6				
5	Discolu	red Dorig	18						·		
7.	Dissol	ved Uxyye ved Coj	311								
8.	Oil Tn	Water									
9.	Phenol	ohthaleir	Alkali	nity (C	= CO3 )						
10.	Methvl	Orange A	lkalini	ty (CaC	031						
11.	Bicarbo	onate			нсоз		2.0	F	1003	0	0
12.	Chlorid	le			Cl	з	50.0	Ċ	21	ğ	. 9
13.	Sulfate	<b>e</b>			S04	ī	35.0	s	04	2	. 8
14.	Calcium	n .			Ca	1	90.0	Č	la	9	5
15.	Magnes	ium			Mq		30.5	М	la	2	5
16.	Sodium	(calcula	ited)		Na		16.7	N	la	0	7
17.	Iron				Fe		0.4				
18.	Barium				Ba	•	0.0				
19.	Stronti	Lum			Sr		0.0				
20.	Total H	lardness	(CaCO3)			6	00.0				

## PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter		Compound	Equiv wt 3	( meg/L	= mg/L
9 *Ca < *HCO3 /> 3 *Mg> *SO4  1 *Na> *C1	0 3 10	Ca(HCO3)2 CaSO4 CaCl2 Mg(HCO3)2 MgSO4 MgCl2	81.0 68.1 55.5 73.2 60.2	0.0 2.8 6.6	3 191 368
Saturation Values Dist. Water CaCO3 13 mg/I CaSO4 * 2H2O 2090 mg/I BaSO4 2.4 mg/I	20 C	NaHCO3 Na2SO4 NaCl	84.0 71.0 58.4	0.7	43

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#### **REMARKS:**

Petrolite Oilfield Chemicals Group

Respectfully submitted, R. MATTHEWS



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## **GREENHILL PETROLEUM CORPORATION**

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Incorporated in Delaware, U.S.A.

January 30, 1992

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

Attention:

Mr. David Catanach

Re:

West Lovington Conversion Well Numbers 10, 17, 28, 30, 31, 55, 56, 59 and 82 Lea County, New Mexico

Dear Mr. Catanach:

Enclosed find the proof of publication covering Well Numbers 10, 17, 28, 30, 31, 55, 56, 59 and 82. Greenhill Petroleum Corporation submitted an application to convert these wells from producers to water injection wells pursuant to our letter dated January 27, 1992 and application dated January 7, 1992.

Very truly yours,

Michael J. Newport Land Manager-Permian Basin

MJN:sjs 92.080

Enclosure

## AFFIDAVIT OF PUBLICATION

State of New Mexico, County of Lea.

Kathi Bearden T.

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>One</u>____weeks. Beginning with the issue dated

, **19**_ 92 Jan. 8 and ending with the issue dated

Jan. 8 , 19 92 HANKIN General Manager

Sworn and subscribed to before

me this_ day of 1 Notary Public.

My Commission expires

<u>_A1:3.5</u>, 19<u>95</u> (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

January 8, 1992 Greenhill Petroleum Corporation, 11490 Westheimer, Suite 200, Houston, Texas 77077-Phone (713) 589-8484 Con-tact: Mike Newport. Greenhill Petroleum Corporation plans to convert the following producing wells to injection wells within the West Lovington Field Area. The purpose of the produced injection wells is to increase the reservoir pressure in order to improve the recovery of hydrocarbons. The location of the proposed injection wells are the following Well Weils are the following well Numbers within Sections 5, 6, 7 and 8, T175-R36E, Lea County, New Mexico Well Numbers 10, 17, 28, 30, 31, 55, 56, 59 and 82. The injec-tion intervals are approxtion intervals are approx-imately between the depths

of 4650' and 5160' in the San Andres formation. The maximum injection rates and pressures are 2000 PSI 1500 BWPD. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico, 87501 within 15 days.

Michael J. Newport Land Manager-Permian Basin