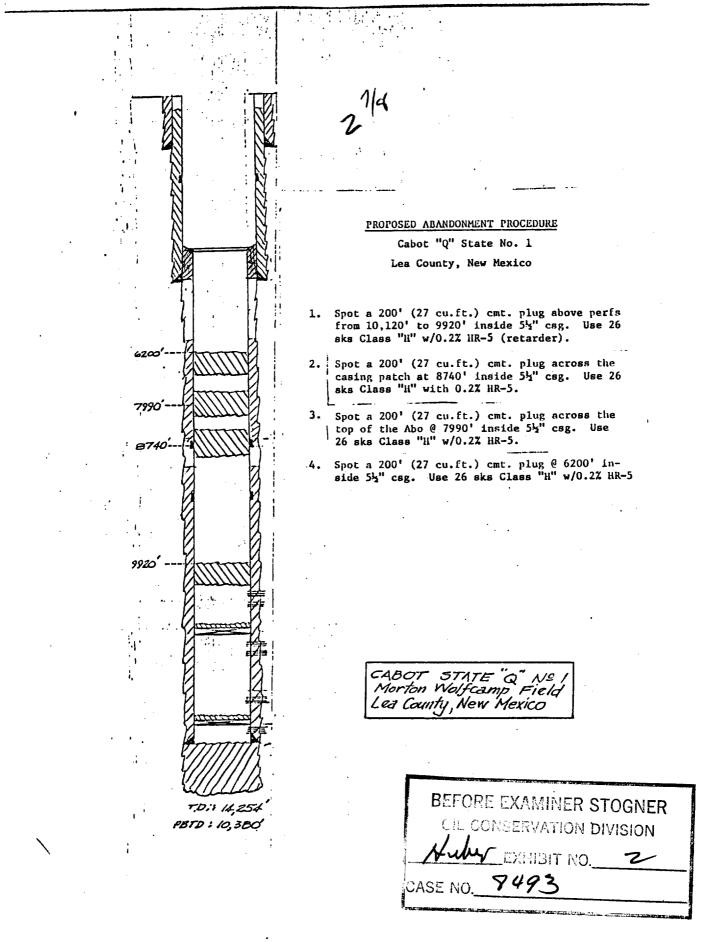
C/7.567451. TD10696 D/A4-20-74	CiAServ.St 1010596 (D/A 10-16-71	I StoltzE	JM	*Union-St."	Tenneco I-E SI-Shell E14030 TDI0.937	40 4: Jr 4 Superior 3 - 1 - 85		HNG 11 - 1 - 89 V - 1263 262 59	Featherstone Anderson ø ¹		
10	*Cit.Serv	(Stoltz E (Storc) Ster (DAII)		FIBO Sto	TDI0.937 D/AI0-31-62	LG-2679 8045	State	evens		odorson, Jr. etal	Paul Ray F. Somedon
· •		Service BP	Delta Drig. 17.1.88 V.366	Elk Oil (J. M.) Anderson-St.	Kelly,Est.) 879		4 - 1 5515 329 KGS	66	6 · 1 LG·	ottle Inc.,etai 95 2029 I <u>c</u>	4 .1. 2007
4 2 1			41875	Pioo	oje	Ecothers Tenneco	tone A	nder Feather on Fed story or son(S) Amerpan	Featherstone Alabil-St. Penn Disc. F264 Plg. 3-7-73		XN, A
4	Delta Orig	35 Getty HBP		Elh Oil -0- Cullen TDIOFO	Delto Drlg. 10 13 86 3 10 86 8-17 86	J.M Huber 927	2 DA	1 M Edsel) 4 9 81.	WI-4 LG 2029		HNG 11-14-8 10-26-8 8-4-1
	7.1.86 V.366 4182	nor		LUCY E. CU	Barross Ilon, etal, MI	6.21.85 M 40614 4 J.M. Huber 6 th Energy from, 1/10	arwell [E	Brown Tenneco-	YOU LICOLOG	1 9 9 4 E 12 9 E) 2 9 6 - 2 9 E) 2 9 6 - 2 9 E)	
te	State	Troy C. I		Glean Cl	eveland	de file. Als	in Clav	eland 34		ale Jaikk Julik 1	Win Upak a 2
alla gradia	as able al	. /	assie 1	1) ele 11474 1 HNG 4 · 1 · 93 54 685	H.C.Doss 6 1.05 5.18 86 9071	Superior 3 - 1 - 115 LG-2681 - 5032 - 11		M. Acony luber TO 10167 1.1.63 1343 894 Gill 38 1343 118C	So. Roy.	Mapco	Delto Di Delto Di Delto Di 0.1.67 V 475 461 1
1	1.	+	_	R.G. Barton 11-1-801 34252	R.C. Doss 6 · 26 · 86 6 · 30 · 85 6 · 1 · 85		exos Cr an Ame 0 10, 616		×.		
MORTON	SOLIC	5-12	-	WJ.Picou 4 · 1 · 94	Horizon Expl.	LA 1833	DIA !!	LH 1810	50. Roy, 3 · 1 · 85 LG·2680 2144		
DORCHES	UNIT	PER)		57284 U.S., MI	MAPCO 11: 22:07 11: 9:07 10: 5: 85 D/R L.E. Cullen, et ol	1 1 1 1 1 M	Huber	3432 940 Tex.Crude PonAmer.St. TD 10425 DVA 11-28-64		-	
ife		State	A	Glenn	Cleveland	Lycpac.	66 Stat	TD 10.425	S	tote	
No. Nat. 603 12 - 1 87 16 4492 10517	50 Union 1.14-1.	1 Expl 10.5.	114	Grace Pet. So Union Sup. J2, 3 · 3 · 03 So Union Expl.	Gulf 015072 1283 Fea Prstone Fed Conter Lloron		Perior	ort. Westin. Drlg	Delto Drig. 1-07 5012	Delta Drig. A +1 - 87 I V-486 Sol 69	Brown elate
MT5 1.1.83 1.6.986 33.55	So.Um Grace	Pet. V2 Stol 4-82 Hub	112 E.Co er-Eiland 0 600 8-18 6 8	9.10.84	TD 10844	\$1-1-)	1 (35	010800 WA 7-3165			10 5127 D/A 1934
) Nc. Nat. Gas	10 · 2 So.Uni Grace 4 · 21	On M4 D/A On M4 II		Union (Exxon)	12 July 342 HBP		1. F487	d 2 Puis		8 Yotes Pet.,etal 1 11. 1. 86 1 LG.3859 1 36 56	Col·Mon 2·1.87 LG·4031 105 9
	5 UN 10 20 8 3-13-06 5 7.0). Keed 10.3.84	CIUIMI	TO Reedal	Huber Union	14 1 150 14 1 150 14 1 150 10 50 AC - (51) 10 50 AC - (51) 10 10 10 4	15 IA.	Superior-	TON .	1.	
State .Fort,etal(S)		Bill Graham, etc. Mary La Roddy, etc.		Headington	ddy,etal, 2 (5) Era	955 State		Glenn Cleveland		i Grt Westh Drig	
So. Union 9 · 1 · 86 LG 3724 69 72	QI.STO	B Hunt, Tr 156. Driid tate D14865 (All-21-54) So Unio etal	n,	Arreguy A TDIO472 So.U	Arreguy InionExpl.	Permo. Permo. Penn. Dia dasta A	O I c.FIGB		10.29.84	10.29 . 84 11 . 6 . 84 9 . 9 . 84	
1	50. UI 6 · I LG · 3 81 9		429	C.A.	Fort, SJ. DA 112 60	Gt. Westra E - 7984		Gt. Western • 1-82 v-488 "State"	5	zon Expl. 0.05 19.06 17	
5 Nortex I B-i- 91 LH381 100 9	612		ure) h-Lea) h 4304 A 5-25 61) B 12770 orrow Isc.	/ 5a Unio 1 · 1 · 8 LG 3371	7 1 1.603	20394r 7			Grt West'n Dr Ig 9-9-84-9-10-04 11-6-84	10 3 mg	
L		Start "S	a Mil. Tr."	Gulf HBP	Phillips Townsend	4060ж Л "Тошп"	510	Superior 2 · 1 · 85 LG-2625 te 305 ort.(S)	Glenn Cl	SEI4	
ort,etol(S)		C.A.Forhetal		Gulf	Clements Ever.	HUL ! Texac		4 - 1 - 92 - 4 - 1 - 92		1	Phill
• 86 489 33		6.1.86 L6.3587 5314		5-1-06 LG-3508 5029	8 · 1 · 92 LH·1785 900 99	HBP E+798	A 1	19022 1395 1	Superior 10 · 1 · 81 L·6630	Yates 9:1:07 1 L0:4335 1 4176	LG·S
te Fort,etal(S) 2		23		State C.A. For	rt(s)	AD BA	19			20	-
Stevens	No Nat.G LG-419	3 DI Yates Di Myco II	Drlg. 14 Drlg. 14 nd. 14	So. Union 3:4 87 7:30 86 2:5:85 Gulf	50. Union 9.3.07	4	HI506	Tenneco 4 · I · 92 LH ISO1 39029	Yates Pet,eta 0 · 1 · 86 LG · 36 81	Mitchell Ener. 7 • 1 • 89 1 • 1123 143 25	
1.62	Aryanaut (C. / Qualle Vic Disc. P58	a) · LG·31 29 P	05 04 9	11 - 22 + 136 A.C. Pettit, etal, M.I. Mary L Higgins, Tr.]	40.00 k 4	Gul 7 . 1 LG 4 252	B7 B24 Stote	31 26	late Fort,(S)	C.A.Fc
Farms (S)	Geo P Liver	C.A. Fort, etc more, inc B.F. Buildy	the local division in which the real of the local division in which the local division in the local division i		Fort,etol(S)	18 11 Je .	C A.For			es Pet.,etal	Yates Pe
/is 34 itevens · U G	6)	2-15 85		5e. Uni 5 • 3 •		Joson T	7 · 1 LG 4 252	. 87	8	1 · 86 · 3683 31 <u>76</u>	7 - 1 V-11 150
. 85	J.(TCH Rch Inc (S)	, мі		Fort,etal(S)	10812 1	Stat C.A.Fo 	rl,etal(S)	1	29	Yates Pe
A.G. Kospar 10-21-76 10-14-76	Samedon Bass, V2 9 · 6 · 82 8 · 23 · 82	26 Samedoni Samed Bass.//2 Bass E 17.12.63 3 16 18.23.82 Mershei	11 WINSPOR	Abernathy Expl. 11- 4 86 10-17-86 3 15 85	Union Inas Tolum TDII 709 TVAIO-13 67	Co	8 · 10 8 · 10 12 · 14 9 • 18	. 81	5.	d Qil 3 · 86 7 · 86 6 · 86	7 · 1 V 1 150
McDonald, et al,	R.	J. Dennis Bass L	nty 2 A	BE Holdwin, eral 3 12-85 Claude E. TCH Pch	Tatum,etal M.I.	No		well.(S)	and the second sec	e, efal M.I. Clatchy, etal	Stat

BEFORE EXAMINER STOGNER OIL CONSERVATION DIVISION CASE NO. 8493

•



PROPOSED PLUG-BACK

WELLS LOCATED WITHIN 1/2-MILE RADIUS OF REVIEW OF J.M. HUBER CABOT "Q" STATE #1 *

OPERATOR	LEASE & WELL NAME	LOCATION	TOTAL DEPTH	CURRENT STATUS
Union Oil Co. of Calif.	State "7" No. 1	Unit D, Sec.7,T15S,R35E	10,700'	P&A
J.M. Huber Corp.	James O'Neill St. #1	Unit E, Sec.7,T15S,R35E	10,500'	Producing
J.M. Huber Corp.	James O'Neill St. #3	Unit F, Sec.7,T15S,R35E	10,500'	Producing
J.M. Huber Corp.	Cabot "Q" State #1	Unit L, Sec.7,T15S,R35E	14,254'	SI
J.M. Huber Corp.	Superior St. #2	Unit L, Sec.7,T15S,R35E	10,500'	Producing
J.M. Huber Corp.	Superior St. #1	Unit K, Sec.7,T15S,R35E	10,500'	Producing
Great Western	Glen Cleveland #2	Unit J, Sec.7,T15S,R35E	10,618'	Producing
J.M. Huber Corp. (frmly Cabot & McAlester)	State "Q" No. 2	Unit M, Sec.7,T15S,R35E	10,445'	P&A
J.M. Huber Corp.	Superior "A" St.#1	Unit N, Sec.7,T15S,R35E	10,500'	Producing
Union Oil Co. of Calif.	Gulf Federal No. 1	Unit H, Sec.12,T15S,R34E	10,703'	SWD
J.M. Huber Corp.	Stoltz Federal #1	Unit J, Sec.12,T15S,R34E	10,400'	Producing
Union Oil Co. of Calif.	Union "A" Federal #1	Unit P, Sec.12,T15S,R34E	10,450'	Producing

* Well data sheets are attached for all wells listed.

BEFORE EXAMINER STOGNER	
CIL CONSERVATION DIVISION	1.12 Mar 10 10
Huby EXHIBIT NO. 5 CASE NO. 8 49 3	

INJECTION WELL DATA SHEET

	Co. of California	"7" State		
OPERATOR 1	660' FNL & FWL	LEASE 7	158	35E
WELL NO.	FOUTAGE LOCATION	SECTION	TOWNSHITP	RANGE
<u>.</u>				
			•	
t <u>Sche</u>	emntic		bular Data	
	5 20 SX. CMT. PLUG SURF. TO 36'	Surface Casing		
1 E	6 75 SX. CMT. PLUG	Sizo <u>11-3/4" @ 352'</u> "		
httm	233'70 368'	TOC circulated	feet determined b	у
Summer	™ 1/34" <sg@ 352'<="" td=""><td>Hole size</td><td></td><td></td></sg@>	Hole size		
ί γ		Intermediate Casing		
[]		Size <u>8-5/8" @ 4626</u> "	Cemented wi	th <u>550</u> s
[[TOC 1837	fect determined b	y calculation
ير ا	75 SX. CMT. PLUG 1383'TO 1500'	Hole size <u>11"</u>		
	-8-% CSG. CUT	Long string		
	@ 1496' ez toc@ 1837'	Size 5 ¹ 2" @ 10,700' "	Cemented wi	th 400 s
	,50 SX. CMT. PLUG	TOC8822' f		
hornort	V 4476' TO 4620'	Hole size $7-7/8''$	eer determined by	
	5-12" CSG. CUT	Total depth 10,700'	PBTD: 10,618	2 1
	m @ 4620'		<u> </u>	,
$\left\{ \left \right\rangle \right\}$	8%"csG@ 4626	Injection interval		
		feet to (perforated or open-hol	e, indicate which	feet
]		Spud: 9/8/64		· •
A. A.	- TOC@ 8822'	Complete: 11/2/64		
		Perforations: 10,383 Current Status: P &		
A B	, CIBP @ 10,300 7 W7 36 CMT ON TOP			
hand	TOP OF PUIG @ 10,26	4		
4		BEFOR	E EXAMINER ST	
9 1		2	INSERVATION DIV	
A li		I. ha	_EXHIBIT NO	
	- 5/2 csc @ 10,700		_	
		CASE NO	8493	
lubing size	1100	d with(mater		
(hrs	and and model)	packer at	•	feet
	e any other casing-tubin	ng seal).		
Other Data	· ·			
	the injection formation		н. Пология Пология	
		cable)		
•		injection? /7 Yes /		, <u></u> , <u></u>
		well originally drilled?		
	hashaan uga sha			
4. Has the	well ever been perforat	ed in any other zone(s)?	List all such pe	rforated interval
and give	e plugging detail (sacks	of cement or bridge plug	(s) used)	
		<u></u>		·····
		۵۰٬۰۰۰ میکند. ۱۹۹۰ - میکند میکند اور		
5. Give the	e depth to and name of a	ny overlying and/or under	lyimy oil or yns	zones (paols) in
this arc	La .			
<u></u>				<u></u>

INJECTION WELL DATA SHEET

		James O'Neill State		
	766' FWL & 1874' FNL		15S	35E
WELL NU.	FOUTAGE LUCATION	SECTION	TOWNSHIP	RANGE
Colum		····	•	
b .	matic	· · · ·	<u>ular Data</u>	
		Surface Casing		200
		Size <u>11-3/4" @ 440'</u> "		
	113/ "CSG, C 440'	TOC Circulated f	eet determined by	
		Hole size <u>14-3/4"</u>		
		Intermediate Casing		
		Size <u>8-5/8" @4618'</u> "	Cemented with	<u>2050</u>
		TOC Circulated f	eet determined by	
	- TOC@ 3990'	Hole size <u>11"</u>		
		Long string		
		Size <u>5¹/2" @ 10,500'</u> "	Cemented with	، 1175 g
		toc <u>3990'</u> f		
×	~	Hole size 7-7/8"		afety jt @ 4000
		Total depth <u>10,500' I</u>		
H A		Injection interval		
		feet to (perforated or open-hold	e, indicate which)	feet
		Spud: 8/22/81		
X · 1		Complete: 10/22/81 Perforations: .10,321	-4011	
		Current Status: Produ		Ecamp
4 4	•			
12 13				
	. :			
0				· .
は基				• •
	2 5/2" CSG. @ 10,500	5 ⁴	•	
			•	
ubing size	lined	with		set in a
ubing size	lincd	with(materi	al)	set in a
	nd and model)	with (materi packer at	al)	set in a
(bra		packer at	al)	set in a
(bra or describe	nd and model)	packer at	al)	set in a
(bra or describe <u>ther Data</u>	nd and model)	packer at seal).		feet
(bra or describe <u>Ither Data</u> . Nome of	nd and model) any other casing-tubing	seal).		feet
(bra or describe <u>Ither Data</u> . Nome of . Name of	nd and model) any other casing-tubing the injection formation	packer at seal). able)		feet
(bra or describe <u>ther Data</u> . Nome of . Nome of . Is this	nd and model) any other casing-tubing the injection formation Field or Pool (if applic)	packer at seal). able) njection? <u>/</u> 7 Yes <u>/</u>		feet
(bra or describe <u>Ither Data</u> . Nome of . Nome of . Is this	nd and model) any other casing-tubing the injection formation Field or Pool (if applic a new well drilled for in	packer at seal). able) njection? <u>/</u> 7 Yes <u>/</u>		feet
(bra for describe <u>Other Data</u> . Nome of . Nome of . Is this . Is this . If no, f	nd and model) any other casing-tubing the injection formation Field or Pool (if applics a new well drilled for in or what purpose was the p	packer at seal). able) njection? /_7 Yes / well originally drilled? d in any other zone(s)?	7 No List all such per	feet
(bra for describe <u>Other Data</u> . Nome of . Nome of . Is this . Is this . If no, f	nd and model) any other casing-tubing the injection formation Field or Pool (if applic a new well drilled for in or what purpose was the r	packer at seal). able) njection? /_7 Yes / well originally drilled? d in any other zone(s)?	7 No List all such per	feet
(bra for describe <u>Other Data</u> . Nome of . Nome of . Is this . Is this . If no, f	nd and model) any other casing-tubing the injection formation Field or Pool (if applics a new well drilled for in or what purpose was the p	packer at seal). able) njection? /_7 Yes / well originally drilled? d in any other zone(s)?	7 No List all such per	feet
(bra or describe <u>Other Data</u> . Nome of . Nome of . Is this If no, f	nd and model) any other casing-tubing the injection formation Field or Pool (if applic) a new well drilled for in or what purpose was the well ever been perforate plugging detail (sacks o	packer at seal). able) 	7 No List all such per s) used)	feet
(bra or describe <u>ther Data</u> . Name of . Name of . Is this If no, f	nd and model) any other casing-tubing the injection formation Field or Pool (if applics a new well drilled for in or what purpose was the p well ever been perforate plugging detail (sacks of depth to and name of an	packer at seal). able) 	7 No List all such per s) used)	feet

i

1

1

•



	luber Corporation	James O'Neill State		
OPERATO		LEASE 7	155	25 12
WCLL NO	1980' FWL & FNL D. FOUTAGE LOCATION	SECTION	TOWNSHIP	35E RANGE
<u>.</u>	·		· · · · · · · · · · · · · · · · · · ·	
	Schematic	Tat	oular_Data	
* . 		Surface Casing		
		Size 13-3/8" @ 424' "	Cemented wit	th 640 sx.
		, TOC <u>Circulated</u> f		
	13 3/8" CSG.@ 424	Hole size $17-1/2"$	ood determined by	<u> </u>
8	12	Intermediate Casing		
ß		Size <u>8-5/8" @ 4573</u> "	Composted with	
BI		TOC <u>Circulated</u> r		
H1	TOC @ 3900'	Hole size <u>11"</u>	det determinet ny	
KA I	N	Long_string 		1100
	8% CSG.@ 4573	$\sqrt{\text{Size}} \frac{5-\frac{1}{2}" (2, 10, 498')}{3900!}$		أحار فيستعين ويرزر المحماني ويستعم والمتعاد والمتعاد والمتحد
Ŗ	Ŋ	TOC <u>3900'</u> r	ect determined by	
R -	N	Hole size 7-7/8" Total depth 10,500' P	BTD: 10.400'	•
R	N. The second se			
8 -		Injection interval		
	R	feet to (perforated or open-hole	e, indicate which	feet
R	N			
N ·	N	Spud: 4/8/84 Complete: 6/15/84		
\mathbb{R}	N	Perforations: 10,258		
N	Ň	Current Status: Prod	er CIBP @ 10,400 ucing, Lower Wol	
Ŕ	N.			
RI ≣			•	
A	CIBP@ 10,400'	<i>,</i>		
	X			
m	51/2" coo @ 10,4	498'	•	
·				· · · ·
Tubing s	size lined	with(mater:	· · · · · · · · · · · · · · · · · · ·	set in a
		(mater: packer at		feet
	(brand and model)			
(or desc	cribe any other casing-tubing	scal).		
Other D:	<u>ila</u>			
1. Name	e of the injection formation			******
2. Namo	e of Field or Pool (if applic	able)		
	this a new well drilled for i			
If	no, for what purpose was the	well originally drilled?		
4. llas	the well ever been perforate	d in any other zone(s)?	List all such per	forated intervals
and	give plugging detail (sacks	of cement or bridge plug	(s) used)	
<u> </u>				
	e the depth to and name of an	y overlying and/or under	lyimy oil or gns z	cones (pools) in
thi	8 AFCA.			

INJECTION WILL DATA SHELT

į

ł

!

J.M. Huber OPERATOR	Corp.	Cabot "Q" State		· · ·
1	1980' FSL & 560' FWL	7	155	35E
WELL NU.	FOUTAGE LOCATION	SECTION	TOWNSHIP	RANGE
			· · · ·	······································
<u>Scher</u>	natic		bular Data	
	-	Surface Casing	_	
		Size <u>13-3/8" @363'</u> "		
	13 ³ /2" C5G @ 363'	TOC <u>circulated</u>	feet determined by	/
H H		Hole size	······	
A A		Intermediate Casing		
A A		Size <u>9-5/8" @4630'</u> "	Cemented wit	h 2300 st
A A		TOC <u>-5701</u> 100'	fect determined by	Temp. Survey
		Hole size 12 ¹ / ₄ "		
Y K				
	TOP OF 51/2"LINER C 4057'	Long string	• · · ·	1500
2 2		Size $5\frac{1}{2}(12, 160' - 10)$		
		TOC 5620'	fect determined by	Cmt. Bond Log
1 1	· · · · · · · · · · · · · · · · · · ·	Hole size 7-7/8"		
		Total depth <u>14,254'</u>	PBTD: 10,380'	
NT	6020	Injection interval (Pro	oposed)	
RI R		4630' feet to (perforated or open-ho)	6050	feet, perforat
N Ke-	- 51/2 BOWEN CSG. PATCH	(perforated or open-ho)	le, indicate which	<u>}</u>
	@ 8740 - 51/2"CSG. BOWL			
ST N	- 5/2 LSG. BOWC C 9057'			
				:
N ₩		NOTE:	The well will back to 6200':	
hand	-CIBRA (0.400')		top of the $5\frac{1}{2}$	
				to conversion
N		•	to SWD. (See schematic of p	
			plug back)	•
X X X X	- CIBP@ 11,900'	•		
m	WT 2 SK. CMT. ON TOP			
broken	100 ST CMT. PLUG	- · · ·		
Tubing size	2-7/8" 14,254 lined	with ICO SC-650 plas	stic coating	set in a
		(mater	ial)	
Baker Lok-	nd and model)	packer at	5800'	feet
	any other casing-tubing	scal).		
Other Data				
1. Name of	the injection formation	San Andres		
	Field or Pool (if applica			
	a new well drilled for in		X No	
	or what purpose was the v		<u> </u>	e Strawn and Wol
'camp forma		well oliginally diffied:		e ottawn and nos
		1		
4. Has the and give	well ever been perforate plugging detail (sacks)	a in any other zone(s)? of cement or bridge plug	(a) used) <u>Strawn</u>	: 11,964-987';
Wolfcar	· · ·	-419'; 420'-424'; 513'		
WUIICal				
	ng details.			
pluggin 5. Give the	ag details.	y overlying and/or under	lyimy oil or gas :	zones (pools) in
pluggin 5. Give the			lyimy oil or gas ;	zones (pools) in

INJUCTION VILL DATA SHEET

• • •

ERATOR		LEASE		
2 LL NU.	1980' FSL & 810' FWL FOULAGE LUCATION	7 SLCTION	15S TOWNSHIP	35E RANGE
Schema	tic	Ţ	abular Data	
		Surface Casing		
		Size 13-3/8" @ 406	Comented wit	h <u>460</u>
	- 1 ⁶	TOC Circulated	feet determined by	<u> </u>
a fre	13- % csc.@ 406	llole size 17½"		
		Intermediate Casing	• •	
		Size 8-5/8" @ 4600	Cemented with	1900
10		toc <u>Circulated</u>	Feet determined by	
R		Hole size11"	······································	
Acc	TOC@ 4240'	Long string	-	
		Size <u>5¹2" @ 10,500</u> "	Cemented with	1525
		toc 4240'		
		Hole size 7-7/8"		
Ŕ	· · · · · · · · · · · · · · · · · · ·	Total depth <u>10,500'</u>		
N		Injection interval		
N N		feet t	o	feet
Ŋ		(perforated or open-ho	le, indicate which)	— .
. N		Spud: 8/17/84 Complete: 9/24/84		
ß		Perforations: . 10,40		
Ŋ		Current Status: Pro	ducing, Lower Wolf	camp
Ŋ		. .	· .	
R				
N				
<u>N</u> .		·		
N N				
		· .		
	V12		•	
				•
ing size	lined	with(mate	rial)	set in a
Uppand	and model)	packer a	t	feet
	ny other casing-tubing	seal).		
er Data				
Name of th	e injection formation _			
	eld or Pool (if applica			
	new well drilled for in		/7 No	
	what purpose was the w			
11 HUJ TUR	and hathese ans rue a		· · · · · · · · · · · · · · · · · · ·	
	11 ever been perforated	Lin any other zone(a)?	list all such oar	forated interv
and give p	bli ever been perforated blugging detail (sacks o	of cement or bridge plu	g(a) used)	
<u></u>				
				· · · · · ·
Give the	leath to and name of any	<pre>/ overlying nnd/or unde</pre>	rlyimy oil or nos z	ones (pools) i
Give the d this area.	lepth to and name of any	voverlying nnd/or unde	rlyimy oil or yns z	ones (pools) i

INJECTION WELL DATA SHEET

-

1. Huber Co				1
ERATOR	orporation	Superior State		
	1980' FSL & FWL	7	155	35E
IL NO.	FOUTAGE LUCATION	SECTION	TOWNSHIP	RANGE
Schem	atic	· · · · · · · · · · · · · · · · · · ·	abular Data	· · ·
. Jerren			ubular Data	
		Surface Casing		540
		Size <u>13-3/8" @420'</u>	-	
	13/"	TOC <u>circulated</u> 2 [°] Hole size <u>17</u> ¹ 2"	feet determined by	
	- 1 <i>3 /8 C</i> SG.@ 4-20	\sim Hole size $\frac{1/2}{2}$		
		Intermediate Casing		
		Size 8-5/8" @ 4576'	" Cemented with	1 <u>2100</u> sx
		TOC circulated	fect determined by	
		Hole size <u>11"</u>		
		Long string		
	.#	51 51 0 10 4091	" Cementari with	1460 sx.
	€ CSG. @ 4576	TOC <u>5960'</u>		•
$1 - \frac{1}{5}$		Hole size <u>7-7/8"</u>	reet determined by	Care Bond Log
{		Total depth 10,500'	PBTD: 10,420'	
	TOC@ 5960'	Injection interval	-	÷
		feet	to	feet
		(perforated or open-he Spud: 11/13/83	ole, indicate which)	_
		Complete: 1/4/84		
		Perforations: 10,35 10,43	39'-443' SI under	CIBP @ 10,420'
		Current Status: Pro	oducing from Lower	Wolfcamp
		•		
		:		
	CIBP@ 10,420'			
	CIBP@ 10,420'	, ,	•	
			•	act is a
bing size	<i>CIBP® 10,42</i> 0' 5½ ["] CSG @ 10,498 line	d with(mate		set in a
	line	d with(mate	erial) at	
(brai		d with (mate		
(brai r describe	lineline	d with (mate		
(bran r describe her Data	line nd and model) any other casing-tubin	d with (mate	at	
(bran r describe <u>her Data</u> Name of f	line nd and model) any other casing-tubin the injection formation	ed with (mate packer a ng seal).	at	
(bran r describe <u>her Data</u> Name of f	line nd and model) any other casing-tubin the injection formation Field or Pool (if appli	ed with (mate packer a ng seal). 	at	
(bran r describe <u>her Data</u> Name of f Nume of f Is this a	line nd and model) any other casing-tubin the injection formation Field or Pool (if appli a new well drilled for	ed with (mate pocker a ng seal). (cable) injection? /_7 Yes	at	
(bran r describe <u>her Data</u> Nome of f Nume of f Is this a	line nd and model) any other casing-tubin the injection formation Field or Pool (if appli a new well drilled for	ed with (mate packer a ng seal). 	at	
(bran r describe <u>her Data</u> Nome of f Nome of f Is this a If no, fo	line nd and model) any other casing-tubin the injection formation Field or Pool (if appli a new well drilled for or what purpose was the	(mate (mate packer a ng seal). (cable) injection? <u>/</u> 7 Yes well originally drilled (cd in any other zone(s))	/_7 No /_7 No d? ? List all such per	feet
(bran r describe <u>her Data</u> Nome of f Nome of f Is this a If no, fo	line nd and model) any other casing-tubin the injection formation Field or Pool (if appli a new well drilled for or what purpose was the	ed with (mate pocker a ng seal). (cable) injection? /_7 Yes	/_7 No /_7 No d? ? List all such per	feet
(bran r describe <u>her Data</u> Name of f Nume of f Is this a If no, fo	line nd and model) any other casing-tubin the injection formation Field or Pool (if appli a new well drilled for or what purpose was the	(mate (mate packer a ng seal). (cable) injection? <u>/</u> 7 Yes well originally drilled (cd in any other zone(s))	/_7 No /_7 No d? ? List all such per	feet
(bran r describe <u>her Data</u> Name of f Name of f Is this a If no, fo Has the f and give	line nd and model) any other casing-tubin the injection formation Field or Pool (if appli a new well drilled for or what purpose was the well ever been perforat plunging detail (macks	ed with packer a ng seal). (mate packer a ng seal). (cable) injection? /_7 Yes well originally drilled ced in any other zone(s)? of cement or bridge plu	/_7 No /_7 No d? ? List all such per ug(a) used)	feet
(bran r describe <u>her Data</u> Name of f Nume of f Is this a If no, fo Has the ond give	line nd and model) any other casing-tubin the injection formation Field or Pool (if appli a new well drilled for or what purpose was the well ever been perforat plunging detail (macks	(mate (mate packer a g seal). (ng seal). (cable) (cabl	/_7 No /_7 No d? ? List all such per ug(a) used)	feet

Great Weste	rn (Glen Cleveland		
OPERATOR		LEASE		
2	2080' FSL & FEL	7	158	35E
WELL NU.	FOUTAGE LOCATION	SECTION	TOWNSHIP	RANGE
·			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Sche	natic		Tabular Data	
		Surface Casing		
	1	Sizo <u>13-3/8</u> 453	Cemented wit	h 475
	. 11	TOC <u>circulated</u>	feet determined by	
		Hole size <u>17</u> "	· · · · · · · · · · · · · · · · · · ·	
		Intermediate Casing	<u>n</u>	
		Size 9-5/8" @ 4630	" Cemented wit	n <u>1900</u>
\Re	· .		feet determined by	
		Hole size $12\frac{1}{4}$		
id de	~ TOC@ 4500'	Long string		
	~~~ TOC @ 4500'		Cemented wit	h 1308
7 th	~ 1/8 COD @ 4630		feet determined by	
A A		Hole size 7-7/8"		
		Total depth 10,6		,
a b		Injection interval		
8.7		-	et to	С <b>)</b>
AL	•	(perforated or open	n-hole, indicate which	feet
X A		Spud: 7/13/84		
		Perforations: 10,3 Current Status:	Producing from Lower	Wolfcamp
			•	•
日蓋				
8 1				
				· .
Amonthe .	5 1/2 "CSG @ 10,618'		•	
			•	
Tubing size	lined	with(m	aterial)	set in
		packe	r at	feet
	nd and model) any other casing-tubing	cost).		
	any other casing-cuoing	3001/0		
Other Data	the injection formation			
•	Field or Pool (if applics		/	······································
	a new well drilled for in		•	
If no, f	or what purpose was the w	werr originally gril	TRO:	<del> </del>
4. Ilas the and give	well ever been perforate plugging detail (sacks (	d in any other zone( of cement or bridge	s)? List all such per plug(s) used)	forated inter
			· · · · · · · · · · · · · · · · · · ·	
		······································		
5. Give the	depth to and nome of any	y overlying and/or u	nderlying oil or gas z	ones (pools)

:

:

i

.....

•

OPERATON	"Q" State LLASE			
2 660' FSL & 520' FWL WELL NO. FOUTAGE LOCATION	7 SECTION	15S TOWNSHITP	35E RANGE	
<u>Schematic</u>	Tabu	ular Data		
10 SX, CMT. PLUG	Surface Casing			
	Sizo <u>13-3/8" @ 364</u> "	Cemented with	375	_sx.
	TOC circulated fe	eet determined by		
13% CSG@ 364' 25 SX. CMT. PLUG	Nole size <u>16"</u>			
	Intermediate Casing			
25 SX. CMT. PLUG	Size <u>8-5/8" @ 4618'</u> " TOC fe			S x
B ⁵ / CSG. CUT	Hole size <u>10-3/4"</u>			
@ 14-78'	Long string			
	Size None "	Cemented with		SX
111111 8 5% "CSG. @ 4618'	TOC fe			
25 SX. CMT. PLUG	Hole size 7-7/8"	· -		
	Total depth 10,445'	· · · · · · · · · · · · · · · · · · ·		
25 SK CMT. PLUG 6020'-6120'	Injection interval			
	feet to (perforated or open-hale	, indicate which)	feet	
725 SX CMT. PLUG 7250'- 7350'	Spud: 9/24/66 Complete: P & A Perforations: None	· · · ·		
25 SX. CMT PLUG 7980'-8180'	Current Status: P & A	A 10/31/66		
50 SX. CMT. PLUG 10,245-445	÷	•		
		• .	-	
Tubing size lined	with(materia	al)	set in	8
(brand and model)	pocker at		feet	
(or describe any other casing-tubing	seal).			
Other Data				
1. Name of the injection formation				
2. Name of Field or Pool (if applica				
3. Is this a new well drilled for in	· · · · ·		· · · · ·	
If no, for what purpose was the v				
•		·		
4. Has the well ever been perforated and give plugging detail (sacks o	d in any other zone(s)?   af cement or bridge plug(s	List all such perf s) used)	orated inter	vnlo
5. Give the depth to and nome of any this area.	y overlying and/or underly	yimy oil or yns zo	nes (pools)	in .

# INJECTION WILL DATA SHELT

	Corporation	Superior "A" State		
OPERATOR 1	660' FSL & 1980' FWL	LEASE 7	15S	35E
WELL NU.	FOUTAGE LUCATION	SECTION	TOWNSHIP	RANGE
Sche	matic	It	ibular Data	
	r- ·	Surface Casing		
	TOC @ 600'	Size 13-3/8" @ 440'	Cemented wi	th 460 s
	13 ³ (5G.@ 440'	TOC circulated		
	13% CSG.@ 440'	Hole size $17-\frac{1}{2}$ "		·
1 14			<u> </u>	
		Intermediate Casing		2040
		Size 8-5/8" @ 4556' "		
			feet determined b Used 1" tbg. to	
11 10		Hole size	{	surface w/140 s
	TOC @ 4470'	Long string		
		Size 5 ¹ 2" @ 10,500' "	Cemented wil	th <u>1320</u>
	0% 537.0 7300	TOC4470'	fect determined by	Cmt Bond Log
		Hole size <u>7-7/8"</u>		
N N		Total depth10,500'	PBTD: 10,448	81
		Injection interval		
			<b>a</b>	6
		feet to (perforated or open-ho	le, indicate which	feet
		Spud: 9/12/84		
		Complete: 10/29/84 Perforations: 10,3		
			67'-473' SI unde	
	•	Current Status: Pro	oducing from Lowe	er worrcamp
N R				
		. ·		
1 幕		· ·		
	CIBPA 10 448			
₩ ₩	CIBP@ 10,448'			
anni e	5/2 "CSC4. @ 10,500		•	
ubing size	lined	with	ríal)	set in a
		packer a	t	feet
	nd and model) any other casing-tubing			
	any other casing-tuoing	5041).		
ther Dala				
	the injection formation			
•	Field or Pool (if applic	· · ·	•	
	a new well drilled for i			
If no, f	for what purpose was the	well originally drilled	?	
. flas the	well ever been perforate e plugging detail (sacks	d in any other zone(s)? of cement or bridge nlug	List all such pe q(s) used)	rforated intervo
ano 9196	program occart (backs	in the second	,	
<del></del>				
• <u> </u>				
. Give the this are	e depth to and nome of an en.	y overlying and/or under	riyama oil or gas	zones (pools) ir
<b></b>				

## INJECTION WILL DATA SHELT

**é** .

	Co. of California	Gulf Federal		
OPERATOR 1	1980' FNL & 660' FEL	LEASC 12	155	34E
WELL NU.	FOUTAGE LUCATION	SLITTON	TOWNSHILP	RANGE
<u> </u>	•	·	······	
Schen	intic		Tobular Data	• • •
		Surface Casing	<u></u>	
	·	Size 11-3/4" @ 376'	" Cemented with	, 300 sx.
	en 1134" CSG@ 376	toc circulated		
<u>ן</u> ור	te 11/4 -00 e 5 10	Hole size 15"		<u></u>
		Intermediate Casing		
		Size 8-5/8" @ 4621	" Composed with	500
A A		TOC 2575	-	
		Hole size 11"	_ reer decermined by	
9 8				
H H		$\frac{\text{Long string}}{\text{Closed}}$		400
4 1		Size 5 ¹ / ₂ " @ 10,703'	-	
4 Re	~ 8% "CSG. @ 4621'	TOC 7000	_ fect determined by	calculation
		Hole size $7-7/8''$	•	-
· • •		Total depth <u>10,703</u>	· ·	
) la	~5½ [#] CSG, СИТ С 5610'	Injection interval		
	0 0 0 0 0	4621' feet (perforated or open-I	to <u>5610'</u>	feet Open Hole
		5855' to 6583': pe		
more	-75 SX. CMT. PLUG	Spud: 11/12/64	, ·	•.
A A A A A A A A A A A A A A A A A A A	7186' TO 7923'	Complete: 12/31/64 Current Status: SW		
loon er	CIBP@ 10,308' wy		wer Wolfcamp P & A	in 1972
	45 SX. CMT, ON TOP TOC @ 10,270'			
Alexa	- CMT. RETAINER		<i>·</i> .	
	@ 10,396' PERFS 10,417-424'	· .		
A Her	SQUEEZED			
	@ 10,470' PERFS 10,500'-504'			
man	CIBP@ 10,580'	SQ & D.	•	
			•	
Tubing size	2-3/8" lined	with Plastic Appli	cators 501	set in a
	Unipacker VI	•	erial) at 4500	feet
	nd and model)	packer		1000
(or describe	any other casing-tubing	seal).		• •
Other Data				
	the injection formation			
•	Field or Pool (if applic			
	a new well drilled for i		<u>/X</u> 7 No	
	or what purpose was the		d? Lower Wolfcamp	
	11 was depleted and P			
4. Has the and give	well ever been perforate plugging detail (backs	d in any other zone(s) of cement or bridge pl	? List all such per ug(s) used) <u>10,338</u> '	forated intervals -349': 10,417'-
-	-504'; 10,602'-607'; S			
5. Give the	depth to and name of an	v overlving and/or und	lerlyima oil or one z	ones (pools) in
	SCHULL UN MUG HAME UT AN	have been identifie	and the second s	

## INJECTION WELL DATA SHEET

• ?

•

~		LLASC	<b>.</b>	~ •
	1980' FEL & 2130' FS FOUTAGE LUCATION	L 12 SECTION	15S TOWNSHIP	34E
ILL NU.	FOUTAGE COCATION	SECTION	TUWNSHLF	RANGE
Schema	tic	Ta	Ibular Duta	, .
≀ <u></u>		Surface Casing		•
		Size 13-3/8" @ 370' "	• Cemented w	ith 275 a
	13 % csg. @ 370'			
	13 /8 CSG. @ 510	Hole size $17\frac{1}{4}$ "		
		Intermediate Casing		· .
		Size <u>8-5/8" @ 4330'</u> "	Cemented w	ith 200 s
1 de	TOC@ 3614'	TOC <u>3614</u>		
		Hole size <u>124</u> "	Teer decermined a	ly <u>lempt burtey</u>
	- 8% ["] CSG.@ 4330"	Long string		0/0
		Size <u>4¹2'' @ 10,400'</u> "		
1 Are	-CMT. SQZ 5472 - 7 <b>4</b> 80	TOC 9750' Hole size 7-7/8"	feet determined t Holes in csg. ha	_{by} Temp Survey ave been repaired
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			cmt. squeezes fi
		Total depth <u>10,400'</u>	· · · · · · · · · · · · · · · · · · ·	5472' to 7480'
	•	Injection interval		
		feet t (perforated or open-ho	o le, indicate whic	feet
·	- TOC@ 9750'	Spud: 12/13/65 Complete: 3/16/66		· ·
		Perforations: 10,24 Current Status: Pro		r Wolfcamp
3 13				L
		•		
は		•		
marken	41/2 CSG.@ 10,400'		•	
				· ·
ubing size	lined	with		set in a
			riai) t	feet
	and model)			
	any other casing-tubing	scal).		
ther Data			•	
	ie injection formation			
•	ield or Pool (if applic	•		······
	new well drilled for i			
If no, fo	r what purpose was the	well originally drilled	? 	
			<u> </u>	
. Has the wa and give (	ell ever been perforate plugging detail (sacks	d in any other zone(s)? of cement or bridge plu	List all such p g(s) used)	erforated interva
<u></u>				

I

•

in a ser change and a ser c

Ì

ł

:

# INJECTION VELL DATA SHELT

	o. of California	"A" Federal		
OPERATOR		LEASE 10		
	766' FSL & FEL	12 SECTION	15S TOWNSHILP	34E RANGE
			•	
t Sche	mntic		ibular Data	
	- · ·	Surface Casing		
		Size <u>11-3/4 @ 350'</u> "		
▓▋▌▁▕▌▎┡	~ 11 % @ 350'	TOC Circulated	feet determined by	/
511 111		Hole size 15"		
		Intermediate Casing		
		Size <u>8-5/8" @ 4620'</u> "		
	•	TOC <u>4557'</u>	feet determined by	Survey
)     }		Hole size		· ,
111 114	TOC @ 4557'	Long string		
	N	Size <u>5¹2" @ 10,450'</u> "	Cemented wit	h <u>400</u>
		TOC 7680'	feet determined by	Calculation
71 +		Hole size <u>7-7/8"</u>		
		Total depth <u>10,450'</u>	PBTD: 10,419	1
(   ]	•	Injection interval		
		feet to (perforated or open-ho		feet
H N			le, indicate which	)
		Spud: 6/26/66 Complete: 8/02/66 Perforations: 10,335 Current Status: prod		lfcamp
m	_ 51/2" (SG, @ 10,450	n		
	/2 (00, 8 -0,750		•	
Tubing size	lin	ed with(mater	ial)	set in
	nd and model)		t	feet
	any other casing-tubi	ing seal).		
Other Data	- -		•	
1. Name of	the injection formatio	ın		
	Field or Pool (if appl			
3. Is this	n new well drilled for	injection? /_7 Yes /	/7 No	
If no, f	or what purpose was th	to well originally drilled?	?	
•	;			
4. llas the and give	well ever been perfor: e plugging detail (sack	ated in any other zone(a)? as of cement or bridge pluc	List all such per j(s) used)	forated inter
		any overlying and/or under	lyimg oil or goo 2	ones (pools)
this are	ະກຸ			

#### VII. DATA ON THE PROPOSED OPERATION

1. Proposed average and maximum daily rate and volume of fluids to be injected.

Average rate: 320 BWPD Maximum rate: 1000 BWPD Volume of fluids: Above rate until economic limit is reached 2. Whether the system is open or closed: Closed 3. Proposed average and maximum injection pressure: Muley EXHIBIT NO. 5 Average pressure: 100 psig Maximum pressure: 900 psig

4. Sources and appropriate analysis of injection fluid from the Lower Wolfcamp formation. See attached analysis.

Compatibility with receiving formation. Formation water from the Lower Wolfcamp is being injected into the San Andres formation in the Huber Stoltz State No. 1 (M-Sec. 6, T15S, R35E) and in the Union Gulf Federal No. 1-12 (H-Sec. 12, T15S, R35E) without any apparent compatibility problems.

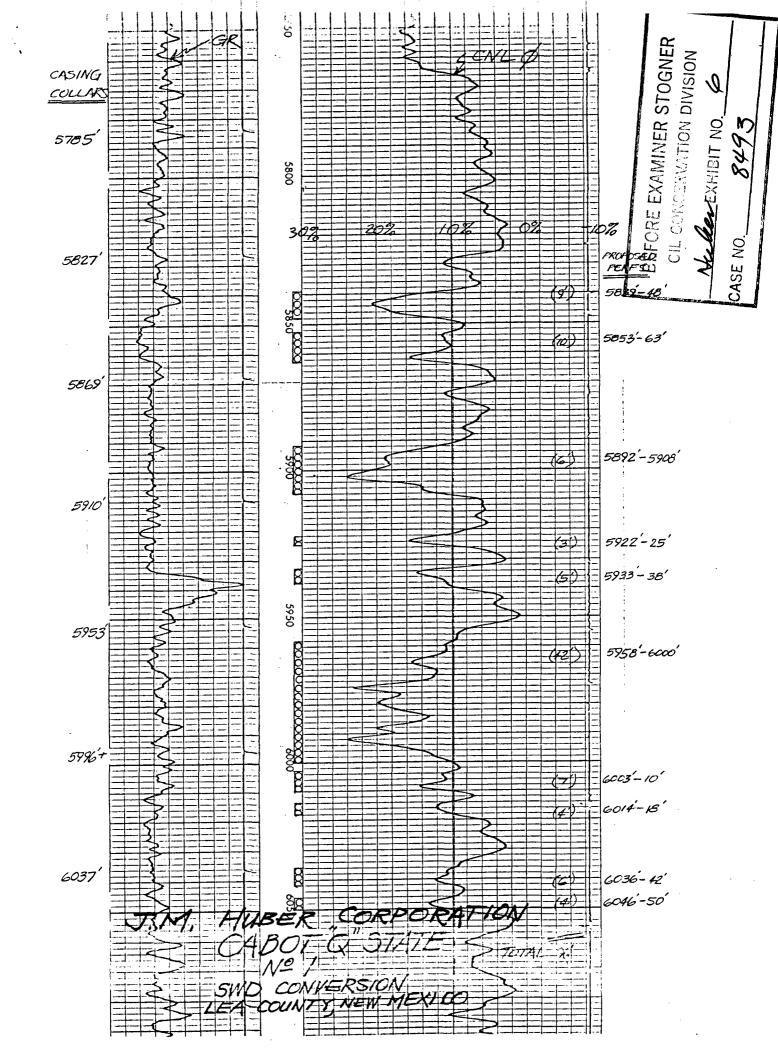
- 5. Chemical analysis of disposal zone formation water. See attached tabulation of analyses taken from various San Andres wells in Lea County, New Mexico.
- VIII. SUMMARY OF GEOLOGIC DATA: The proposed injection zones in the J.M. Huber Cabot "Q" State #1, located in 1980' FSL & 560' FWL, Sec. 7, T15S, R35E, are in the Permian San Andres Formation; the subject interval occurs from 5840' (-1787) to 6050' (-1997) in that well. (See log for specific intervals) The respective tops of the San Andres Formation and Glorieta Sand occur at 4552' (-499) and 6200' (-2147). The overall interval is 210 feet thick and consists predominantly of brown-to-tan Dolomite with interbedded dense brown-to tan limestones. The dolomites vary from fine-to coarsely cyrstaline with indicated porosities ranging from 10% to 24% in the injection zones; tight carbonates with interbedded shales bound the proposed injection interval.

Injection of salt water into the proposed interval will not effect shallow fresh-water zones of the tertiary or triassic age units.

#### IX. DESCRIPTION OF PROPOSED STIMULATION PROGRAM

Acidize perforations 5839' to 6050' with 6000 gallons 15% NeFe HCl acid in 4 equal stages each separated by 500# rock salt in 10 bbls brine water.

XII. Available geologic and engineering data has been examined and no evidence of open faults or any other hydrologic connection exists between the disposal zone and any underground source of drinking water.



P. Q. BOX 1468 Monahans, Texas 79756	Martin Water Laboratorie	es, Inc.		709 W. INDIANA Midland, texas 79701
PH. 943-3234 OR 563-1040	RESULT OF WATER A	NALYSES		PHONE 683-4521
		BORATORY NO.	185101	
Nr. Bill Horne		MPLE RECEIVED	1-9-85	
1900 Wilco Building, Midland,	Texas PE	NPLE RECEIVED	1-14-85	51 14 14 16 17 10 M
				A B
COMPANY J. M. Huber Corporatio		Superior St	tate	
FIELD OR POOL				(O) UALL 1985
SECTION BLOCK SURVEY			ATE NM	0 DECENTER
OURCE OF SAMPLE AND DATE TAKEN:	COUNTY			J. M. HUBER CORP.
		- feet	Later to	A MPLANDISE
NO. 1 Brine sample used in Su	perior State #1.1	-/-85 (NOFTE		Var Phile Ph
NO. 2 Produced (Wolfcamp) wat	<u>er - taken from Su</u>	perior State	#2. 1-/-8	35
NO. 3				
NO. 4				
REMARKS:				
	ICAL AND PHYSICAL P	ROPERTIES		1
	NO	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.2152	1.0238		
pH When Sampled	1.6156	1.0230		
pH When Received	7.58	7.98		
Bicarbonate as HCO3	151	1,318		
Supersaturation as CaCO3				
Undersaturation as CaCO3		· · · · ·		
Total Hardness as CaCO3	18.200	3,100		
Calcium as Ca	630-	800		
Magnesium as Mg	2 9 5	267		1
Sodium and/or Potassium	128,908	10,813		a a 1//////////////////////////////////
Sulfate as SO4	11.467	2,880		
Chloride as Cl	199,563	15,979	-	
Iron as Fe	0.08	0.47	15	5 5.07/1
Barium as Ba			1.41	
Turbidity, Electric				
Color as Pt			X C	
Total Solids. Calculated	343 544	32,057	S S A	
Temperature °F.				
Carbon Dioxide, Calculated				9.1
Dissolved Oxygen, Winkler	$\leq$		Y 4	y l
Hydrogen Sulfide	0/0	875	R	
Resistivity, ohms/m at 77° F.	0.042	0.240		
Suspended Oil			V	
Filtrable Solids as mg/1				
Volume Filtered, ml				
R	lesults Reported As Milligrams	Per Liter		
Additional Determinations And Remarks This	study of the above	results has	revealed	no evidence of
ny detectable incompatibility	between these two	waters. The	e only cor	icern we would
ave with the above is that if				
ing purposes, it would be dif	ficult to raise th	e pH above ar	proximate	ly 9.0 due to
the relatively high magnesium.	Though the case	does not exis	st herein,	we would he
concerned about using this bri	<u>ne in a zone where</u>	the water ha	id a high	calcium, which
<u>would_result_in_calcium_sulfat</u>	e precipitation.	Contact us fo	nr. any_add	litional_as
istance in this matter.	<u></u>		$\neg \bigcirc$	
			$\underline{\mathbf{X}}$	
orm No. 3 ANALYSIS OF	F PRONUCED By	Mer M.		2

FLUID FROM LOWER WOLFCAMP. Waylan C. Martin, M. A.

#### SAN ANDRES WATER ANALYSIS From tabulation of samples taken from various wells in Lea County.

HOBES DISTRICT (NEW MEXICO) Con't.

Page 8

	LEA COURTY Con't. CAN ALLES FORMAT FIELD NAME		Rw@ 75 ⁰ F	30@ 60 ⁰ F	<u>PH</u>	Ca	Mg	Na	<u>C1</u>	_ <u></u> SO _{J1}	<u> </u>	HCOR
	Vacuum	St.of N.M. "AE" #2	0.044	1.143	7.0	4009	330	90459	144,881	3417		-
	Hobbs East	D. F. Ferguson #1	-	1.010	6.5	1000	365	4100	6,600	1680		2257
	Vacuum	St. "O" (NCT-2) #17	.050	1.140	6.0	8634	6816	46365	140,818	318		216
	Vacuum	St. "O" (NCT-1) #2	0.049	1.146	6.0	7286	3586	62778	141,407	365		594
	West Lovington	St. "AH" #2	0.050	1.139	6.0	13712	9937	22663	1 <b>40,</b> 465	91		421
	West Lovington	St. "AH" #7	0.049	1.132	6.0	16116	11833	3476	130,428	304		282
	West Lovington	St. "AH" #12	0.048	1.141	6.0	21830	17055	22900	140,465	182		443
	Moore	Moore #4	-	1.170	5.8	2203	1217	94758	151,940	3925		427
•	Maljamar	N.M. "O" (NCT-3)	0.071	1.074	7.65	3300	1470	38075	<b>66,</b> 785	2590	- 130	302
	STRAWN FORMATION											
	Lusk	N.M. "CR" St. #1	۰ <b>0.</b> 069	1.092	6.3	10450	1860	-	78,500	200	ملہ _	122
	Lusk	N.M. "CR" St. #3	-	1.099	6.8	8534	4715	-	90,880	-	- <i>3</i> 0	-
	TUBE FORMATION											
	Tubb	Lockhart #9	-	1.127	6.4	7688	2006	54626	101,834	1967		129
	WOLFCAMP_FORMATIC	<u>DN</u>										
	Vacuum	St. "R" (NCT-3) #15	-	1.044	7.5	2371	948	18012	31,980	2361		1868
	Vacuum	St. "L" #6	-	1.099	5.8	13030	2080	30660	74,788	1478		488
	Lazy J	State "AQ" (NCT-11) #	¥1 0 <b>.0</b> 85	1.072	5.6	6713	1251	30894	61,574	1507		705

P O BOX 1468 MONAHANS, TEXAS 79756 PH, 943-3234 OR 563-1040				MIDLAND. TEXAS 7970 PHONE 683-4521
PR. 943-3238 OR 503-1040	RESULT OF WATER A			PROME 000 4321
		BORATORY NO	185104	
TO:Mr. Bill Horne	<b>۵</b> 2	MPLE RECEIVED	1-9-85	
1900 Wilco Building, Mid	land, Texas RE	SULTS REPORTE	D1-14-85	
COMPANY J. M. Huber Corpor				
FIELD OR POOL	Mort	on		All is
SECTION BLOCK SURVE	Y COUNTY	eas	TATE NM	D FINE
SOURCE OF SAMPLE AND DATE TA	KEN:			JAN 1985 JAN 1985 OF LEVE OF RECEIVE OF RECEIVE OF RECEIVE OF RECEIVE
NO. 1 Windmill water - ta	aken from Cleveland Wes	t windmill.	1-7-85	to J. M. HUNDI
NO. 2 Located approx	imately 78 of a mi	le to the	east of	NH-
NO. 3 Cabot "Q" State				1539
			<u> </u>	
NO. 4		······································		
REMARKS:				
	CHEMICAL AND PHYSICAL F			
Specific Gravity at 60° F.	<u> </u>	NO. 2	NO. 3	NO. 4
pH When Sampled	1.0021		+	
pH When Received	7.95		· · · · · · · · · · · · · · · · · · ·	
Bicarbonate as HCO3	185			
Supersaturation as CaCO3		<u> </u>		
Undersaturation as CaCO3	·····	<u></u>	<u> </u>	
Total Hardness as CaCO3	224		1	
Calcium as Ca	56			
Magnesium as Mg	. 20		1	JER 1
Sodium and/or Potassium	59		and the second s	Gin
Sulfate as SO4	109			510,510,
Chloride as Cl	61		FR	ON 11
Iron as Fe	0.16		CINCET VALUE	
Barium as Ba			Str. W	
Turbidity, Electric		REFORT	CES	
Color as Pt		CFU'	ONSE EXHIES	m
Total Solids. Calculated	490	C BU	- Frid	A
Temperature °F. Carbon Dioxide, Calculated			Ber 97	
Dissolved Oxygen, Winkler		- but	//	
Hydrogen Sulfide				
Resistivity, ohms/m at 77° F.			St.	
Suspended Oil		P(C)		
Filtrable Solids as mg/1		¥		
Volume Filtered, ml		· · · · · · · · · · · · · · · · · · ·		
			<u>-</u> -	
	Results Reported As Milligrams	Per Liter		
Additional Determinations And Remarks	The undersigned certif	ies the above	to be tru	ue and correct
to the best of his knowle				
· · · · <u></u>				
			$\bigcirc$	
		<u>, , , , , , , , , , , , , , , , , , , </u>		
OF NO. 3 ANALYSIS OF	- MATTER		Ef-	
FROM FRESH	By By			
		77 7 0	. Martin,	14 1

RESULT OF WATER			PHONE 683-4521
		185105	
	LABORATORY NO.	1-9-85	·····
d, Texas	SAMPLE RECEIVED	$-1-14-8^{\circ}$	5 5151617 12:00
IU, ICAGO	RESULTS REPORTE		A VI
ration	-		
Mc	rton		JAIN TOUD
COUNTY	Lea	STATE NM	O DECEIVED
			I J. M. HUBER CORP.
	windmill 1-7	-85	NIDLAND DIST.
$\frac{1}{2} \frac{1}{2} \frac{1}{4} \frac{1}$	a to the wi	et of	Va n
our of a min		51 0	
<u> </u>	·····		
EMICAL AND PHYSICAL	- PROPERTIES		
NO. 1	NO. 2	NO. 3	NO. 4
1.0023		- <u> </u>	
	8		
232			
·····		+	
		+	
		+	
		1	
	6		
······································			
475			
0.0			
	0		
	<u> </u>	<u> </u>	
		ļ	
		·	
		+	
Peoulte People As Milli	ame Bes I iter	I	
		<b>h</b> a li	
	TTES CUE ADONE	<u>to de tru</u>	le and correct to
ng Deller.			
······································			
<u></u>			
· · · · · · · · · · · · · · · · · · ·			
		<i>( i</i>	
		$( \cdot )$	
	Noria	t	· · · · · · · · · · · · · · · · · · ·
M FRESH	Ву	50 The second	<u></u>
	Mo COUNTY	Morton 	EMICAL AND PHYSICAL PROPERTIES  EMICAL AND PHYSICAL PROPERTIES

•

• •

# J. M. HUBER CORPORATION

OIL AND GAS DIVISION 1900 WILCO BUILDING MIDLAND, TEXAS 79701

MIDLAND DISTRICT OFFICE

January 21, 1985

TELEPHONE 915-682-3794

Union Oil Company of California Box 671 Midland, Texas 79701

> Re: Conversion of J.M. Huber Corp.'s Cabot "Q" State No. 1 to a Salt Water Disposal Well

Gentlemen:

This is notification to you, as a leasehold operator within onehalf mile of the subject well's location that J.M. Huber Corporation proposes to convert the Cabot "Q" State No. 1, Section 7, T15S, R35E, Lea County, New Mexico, to a salt water disposal well. Attached are copies of the applications for authorization to inject. Any objections or requests for hearing of administrative applications must be filed with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days from the date this application was mailed to you.

Very truly yours,

INCA

Robert R. Glenn District Production Manager

WGH/sgp

attachments

**BEFORE EXAMINER STOGNER** OIL CONSERVATION DIVISIO, LAL EXHIBIT NO._ JASE NO.

# J. M. HUBER CORPORATION

OIL AND GAS DIVISION 1900 WILCO BUILDING MIDLAND, TEXAS 79701

MIDLAND DISTRICT OFFICE

January 21, 1985

TELEPHONE 915-682-3794

Great Western Drilling Company Box 1659 Midland, Texas 79702

> Re: Conversion of J.M. Huber Corp.'s Cabot "Q" State No. 1 to a Salt Water Disposal Well

Gentlemen:

This is notification to you, as a leasehold operator within onehalf mile of the subject well's location that J.M. Huber Corporation proposes to convert the Cabot "Q" State No. 1, Section 7, T15S, R35E, Lea County, New Mexico, to a salt water disposal well. Attached are copies of the applications for authorization to inject. Any objections or requests for hearing of administrative applications must be filed with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days from the date this application was mailed to you.

Very truly yours,

PLAR MIL

Robert R. Glenn District Production Manager

WGH/sgp

attachments

# Affidavit of Publication

STATE	OF	NEW	MEXICO	)	
				)	SS.
COUNTY	0	F LEA	4	)	

Joyce Clemens being first duly sworn on oath deposes and says that he is Adv. Mgr. of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled

Legal-Notice
and numbered in the
Court of Lea
County, New Mexico, was published in a regular and
entire issue of THE LOVINGTON DAILY LEADER and
not in any supplement thereof, once each week on the
same day of the week, forone time
consecutive weeks, beginning with the issue of
January 11 19 85
and ending with the issue of

which sum has been (Paid) (Arsensedt as Court Costs Office Company Subscribed and sworn to before me this 17.th.....

day or _____laru 4 y _____, 19. 35 1/2 Kan Kince Notary Public Lea County, New Mexico

My Commission Expires Lept. 28, 19.86.

EEGAL NOTICE

To whom it may concern:

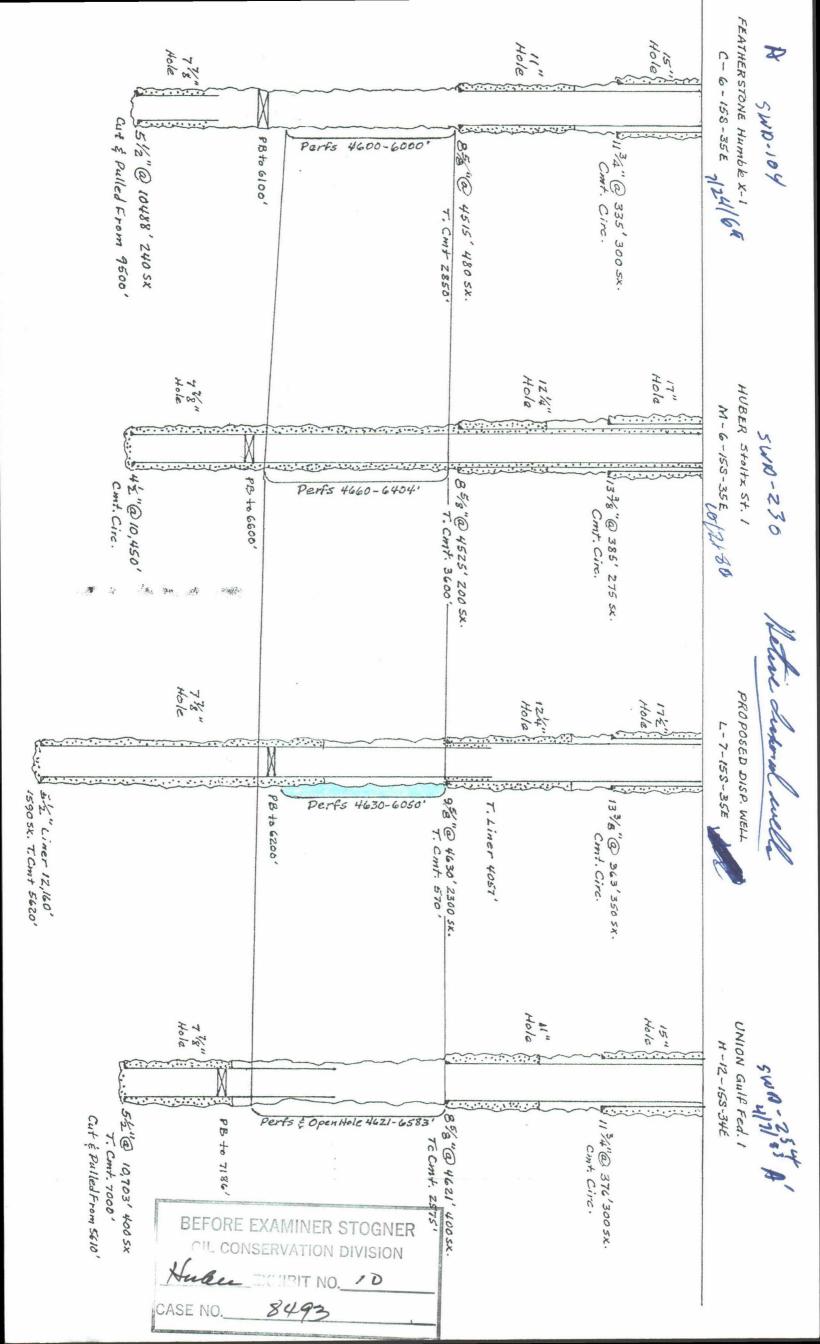
J.M. Huber Corporation proposes to convert the following well to a produced water disposal well:

Cabot "Q" State No. 1; Section 7, T15S, R35E, 1980' FSL & 560' FWL, Lea County, New Mexico

The intended purpose of the injection well is to accept lower Wolfcamp reduced water in the San Andres formation at a depth between 4630' and 6050'. The estimated maximum injection pressure and rate will be 900 psi and 1000 BPD, respectively. Interested parties must file objections or requests for hearing with the Oil Conservation Divison, P.O. Box 2088, Santa Fe, New Mexico 87501, within 15 days from the date of this publication.

For further information, contact Bob Glenn at J.M. Huber Corporation, 1900 Wilco Building, Midland, Texas 79701, or telephone. (915) 682-3794.

Published in the Lovington Daily Leader January 11, 1985.



SUBJECT: SALT WATER DISPOSAL WELL

THE APPLICATION OF OLEN F. FEATHERSTONE FOR A SALT WATER DISPOSAL.

ORDER NO. SWD-104

#### ADMINISTRATIVE ORDER OF THE OIL CONSERVATION COMMISSION

and the second secon

Under the provisions of Rule 701 (C), Olen F. Featherstone made application to the New Mexico Oil Conservation Commission on July 9, 1969, for permission to complete for salt water disposal his Humble 'X' Well No. 1 located in Unit C of Section 6, Township 15 South, Range 35 East, NMPM, Lea County, New Mexico.

The Secretary-Director finds:

1. That application has been duly filed under the provisions of Rule 701 (C) of the Commission Rules and Regulations;

2. That satisfactory information has been provided that all offset operators, surface owners, and the New Mexico State Engineer Office have been duly notified; and

3. That the applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 (C) will be met.

4. That no objections have been received within the waiting period as prescribed by said rule.

#### IT IS THEREFORE ORDERED:

That the applicant herein, Olen F. Featherstone, is hereby authorized to complete his Humble 'X' Well No. 1 located in Unit C of Section 6, Township 15 South, Range 35 East, NMPM, Lea County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the San Andres formation at approximately 4600 feet to approximately 6000 feet through 3-inch tubing with a packer set at approximately 4000 feet in the production casing in said well.

#### IT IS FURTHER ORDERED:

That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after notice and hearing, the Commission may terminate the authority hereby granted in the interest of conservation. That applicant shall submit monthly reports of the disposal operation in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

APPROVED at Santa Fe, New Mexico, on this 24th day of July, 1969.

BEFORE EX	AMINER STOGNER
OIL COME	MATION DIVICION
Huber EX	MBIT NO. 11
CASE NO	8493
	SEAL

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

A. L. PORTER, Jr. Secretary-Director

SUBJECT: SALT WATER DISPOSAL WELL

ORDER NO. SWD-230

THE APPLICATION OF J. M. HUBER CORPORATION FOR A SALT WATER DISPOSAL WELL.

#### ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701 (C), J. M. Huber Corporation made application to the New Mexico Oil Conservation Division on August 29, 1980, for permission to complete for salt water disposal its Stoltz State SWD Well No. 1 located in Unit M of Section 6, Township 15 South, Range 35 East, NMPM, Lea County, New Mexico.

The Division Director finds:

(1) That application has been duly filed under the provisions of Rule 701 (C) of the Division Rules and Regulations;

(2) That satisfactory information has been provided that all offset operators and surface owners have been duly notified; and

(3) That the applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 (C) will be met.

(4) That no objections have been received within the waiting period as prescribed by said rule.

IT IS THEREFORE ORDERED:

That the applicant herein, J. M. Huber Corporation, is hereby authorized to complete its Stoltz State SWD Well No. 1 located in Unit M of Section 6, Township 15 South, Range 35 East, in such a manner as to permit the injection of salt water for disposal purposes into the San Andres Glorieta formations at approximately 4660 feet to approximately 6404 feet through 2 3/8" inch plastic lined tubing set in a packer located at approximately 4550 feet.

PROVIDED that the Union Oil of California Gulf Federal #1 well in Unit H of Section 12, Township 15 South, Range 34 East is plugged in accordance to a division approved plugging program within one year of commencement of injection within the Stoltz State SWD #1 to prevent migration of fluid around the 5 1/2 X 8 5/8" annulus.

IT IS FURTHER ORDERED:

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

That the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

That injection pressure shall not exceed 930 pounds per square inch as measured at the surface.

That the operator shall notify the supervisor of the Division's Hobbs District Office before injection is commenced through said well; That the operator shall immediately notify the Supervisor of the Division Hobbs District Office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely or necessary to correct such failure or leakage.

<u>PROVIDED FURTHER</u>, That jurisdiction of this cause is hereby retained by the Division for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after notice and hearing, the Division may terminate the authority hereby granted in the interest of conservation. That applicant shall submit monthly reports of the disposal operations in accordance with Rule 704 and 1120 of the Division Rules and Regulations.

APPROVED at Santa Fe, New Mexico, on this 2nd day of October, 1980.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION JOE D. RAMEY Division Director

SEAL

THE APPLICATION OF UNION OIL COMPANY OF CALIFORNIA FOR A SALT WATER DISPOSAL WELL.

#### ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Union Oil Company of California made application to the New Mexico Oil Conservation Division on April 7, 1983, for permission to complete for salt water disposal its Gulf Federal Well No. (date corrected Range 34 East, NMPM, Lea County, New Mexico. 1-12 located in Unit H of Section 12, Township 15 South,

by letter 4/29/83)

March

1983

The Division Director finds:

That application has been duly filed under the (1) provisions of Rule 701(B) of the Division Rules and Regulations;

(2) That satisfactory information has been provided that all offset operators and surface owners have been duly notified; and

That the applicant has presented satisfactory (3)evidence that all requirements prescribed in Rule 701 will be met.

That no objections have been received within the (4) waiting period prescribed by said rule.

IT IS THEREFORE ORDERED:

That the applicant herein, Union Oil Company of California is hereby authorized to complete its Gulf Federal Well No. 1-12, located in Unit H of Section 12, Township 15 South, Range 34 East, NMPM, Lea County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the San Andres and Glorieta formations at approximately 4621 feet to approximately 6583 feet through 2 3/8-inch plastic lined tubing set in a packer located at approximately 4500 feet.

#### IT IS FURTHER ORDERED:

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

That the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

That the injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 924 psi.

That the Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the San Andres and Glorieta formations. That such proper showing shall constitute a valid step rate test acceptable to the Division office.

That the operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage. PROVIDED FURTHER, That jurisdiction of this cause is hereby retained by the Division for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after notice and hearing, the Division may terminate the authority hereby granted in the interest of conservation. That applicant shall submit monthly reports of the disposal operations in accordance with Rule 706 and 1120 of the Division Rules and Regulations.

Approved at Santa Fe, New Mexico, on this 11th day of April, 1983.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION mly JOE D. RAMEY, Division Director

SEAL