# COASTAL STATES GAS PRODUCING COMPANY WEST TEXAS - NEW MEXICO DISTRICT

600 Wilco Building Midland, Texas 79701 January 5, 1978



Oil Conservation Commission State of New Mexico P.O. Box 2088 Santa Fe, New Mexico 87501

Re: Order PMX No. 70
Flying "M" (SA) Unit

Tract 14, Well No. 4

Gentlemen:

The above Administrative Order was issued on November 22, 1977, granting Coastal States Gas Producing Company permission to inject water in the subject well. Under the terms of this Order, the maximum wellhead pressure for this well was limited to 890 pounds per square inch. It is requested that administrative approval be granted to operate the subject well with a surface injection pressure not to exceed 1950 pounds per square inch.

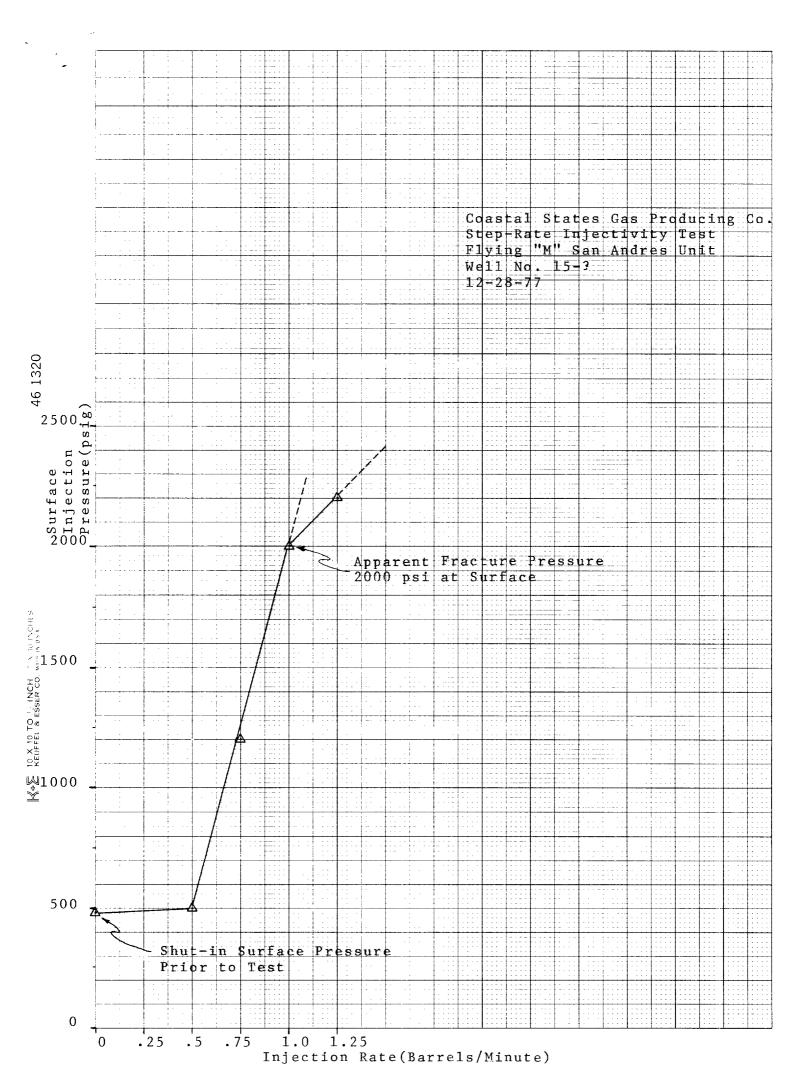
Attached is a plot of data recently obtained during a step-rate injectivity test on the Flying "M" (SA) Unit Tract 15, Well No. 3. As is shown on the plot, the apparent fracture pressure for the San Andres formation in this field is reached at a surface injection pressure of 2000 pounds per square inch. Maximum current injection pressure in this Unit is 1875 pounds per square inch.

Injection into the proposed well is anticipated to average 400 barrels of water per day at a surface pressure of 1400 pounds per square inch. As fill-up of the reservoir surrounding the well increases, the pressure required to inject the desired volume of water is expected to increase to near the current maximum injection pressure. Also, the type of work necessary to convert the subject well to water injection involves a large expenditure and some risk of failure. It is because of these factors, that approval of the higher injection pressure is requested before any work is commenced.

Yours very truly,

H.E. Elacka

H.E. Clarke
Dist. Production Supt.



# OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

November 22, 1977

Coastal States Gas Producing Co. West Texas - New Mexico District 600 Wilco Building Midland, Texas 79701

Re: Administrative Order PMX No. 70

Gentlemen:

Enclosed herewith please find Administrative Order No. PMX-70 for the following described well:

Flying M Unit Tract 14, Well No. 4 located in Unit I OF Section 20, Township 9 South, Range 33 East, NMPM, Lea County, New Mexico.

Very truly yours,

JOE D. RAMEY Secretary-Director

JDR/CU/og

cc: Oil Conservation Commission Box 1980 Hobbs, New Mexico

# CIL CONSERVATION COMMISSION PLO BOX 2088

SANTA FE, NEW TEXICO 87501

November ??, 1977

Coastal States Gas Producing Co. West Texas - New Nexico District 600 Wilso Building Midland, Texas 79701

Re: Alministrative Order NW 10. 70

Gentlanen

lactored honevich please find Administrative Order No. PAX-70 for the following described well:

Plying Maint Tract 14, Well Wo. A Located in Unit I Of Section 20, Townshin 9 South, Pange 33 Tast, TMPM, Lea County, New Moxico.

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DOF D. RAMEY Recreatry-Director

JOR/CU/or

cc: Oil Conservation Commission Pox 1930

Pobles, New Moxton

#### COASTAL STATES GAS PRODUCING COMPANY

WEST TEXAS - NEW MEXICO DISTRICT

600 Wilco Building Midland, Texas 79701 November 4, 1977

Mailing Address
P.O. Box 235
(915) 682-7925

Oil Conservation Commission State of New Mexico P.O. Box 2088 Santa Fe, New Mexico 87501

> Re: Coastal States Gas Producing Company Application for Water Injection Flying "M" San Andres Field Flying "M"(SA) Unit Tract 14-4 Lea County, New Mexico

#### Gentlemen:

The subject operator has made application to inject water in the Flying "M"(SA) Unit Tract 14 Well No. 4, in the Flying "M"(San Andres) Field, Lea County, New Mexico. A copy of the application has been furnished and reviewed in this office.

We hereby waive objection to the granting of a permit to inject water into the San Andres formation in the above mentioned well.

Very truly yours,

By: Vallant J Goto

Company: Atlantic Richfield Co

Date: 11-16-72

# COASTAL STATES GAS PRODUCING COMPANY WEST TEXAS - NEW MEXICO DISTRICT

600 Wilco Building Midland, Texas 79701 November 4, 1977

> FMX - 70 Dir - 11/22/

P.O. Box 235 (915) 682-7925

Oil Conservation Commission State of New Mexico P.O. Box 2088 Santa Fe, New Mexico 87501

Re: Flying "M" (SA) Unit

Tract 14-4

#### Gentlemen:

Please find attached Form C-108 for the Flying "M"(SA) Unit Tract 14 Well No. 4 requesting permission to convert the subject well to water injection under the provisions of Order Number R-3229. The proposed conversion will provide an injection well to replace the Tract 13 Well No. 3 that was recently plugged and abandoned. This conversion will result in continued maintenance of reservoir pressure thereby increasing the oil recovery and preventing waste.

Attached also is a plat of the project area showing all wells and offset leases and schematic drawing of the subject well showing essential data.

A copy of the application is being sent to the offset operator as of the date of this letter.

Yours very truly,

H.E. Belarbe

H. E. Clarke

Dist. Production Supt.

HEC/pkb Attachments

Committee of the state of the formation of the state of t

**;-**-.

DIAGRAMMATIC SKETCH OF WELL

Yes

### NEW MEXICO OIL CONSERVATION COMMISSION

APPLICA	TION TO DISP	OSE OF SALT WA	TER BY INJEC	TION INTO	A POROU	S FORM	MATION - 7 1977
OPERATOR			ADDRESS				JL., **
Coastal States G	as Produc	ing Compan	y P.O. Bo	x 235	Midlan	d, Te	xas 7/9702
Flying "M"(SA) U	nit Tract		Flying	"M"(Sa	n Andre	s)	Lea
LOCATION					,		
UNIT LETTER	; w	ELL IS LOCATED 197	8.7 FEET FR	OM THE SOT	uth L	NE AND 6	63.3 FEET FROM TH
East LINE, SECTION	20 rov	NNSHIP 95		NMPM	·		
	6175	1	AND TUBING DAT				
NAME OF STRING SURFACE CASING	SIZE	SETTING DEPTH	SACKS CEMEN	NT TO	OP OF CEMEI	NT	TOP DETERMINED BY
	13-3/8"	368'	3.5.0		f		dwalabad
INTERMEDIATE	13-3/0	300	350	-   31	urface		irculated
	8-5/8"	5125'	500		3,210	B	ond log
LONG STRING							
(Proposed Liner)	4-1/2"	4400'	550		urface	C	irculate
TUBING			NAME, MODEL AND DE	EPTH OF TUBIN	G PACKER		
(Proposed)	2-1/16"	4395'	Baker Lok		4395'		
	IION		TOP OF FORM				DF FORMATION
San Andres IS INJECTION THROUGH TUBING, CASIN	G. OR ANNULUS?	PERFORATIONS	4397 S OR OPEN HOLE?   PR		/A1 (5) OF INIE	45	02'
		1	1			.,,,,,,	
I UD I II E	IF ANSWER IS	NO, FOR WHAT PURPO	SE WAS WELL ORIGINA	ALLY DRILLED?	409	HAS WELL	EVER BEEN PERFORATED IN AN
	I TION ZONE?				Yes		
LIST ALL SUCH PERFORATED INTERVAL	S AND SACKS OF CE	EMENT USED TO SEAL O	OFF OR SQUEEZE EACH	1			100
4480'-100sx.; 44	42'-50 sx	· .					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA  DEPTH OF BOTTOM OIL OR GAS ZONE			F NEXT HIGHER DEPTH OF TO		DEPTH OF TOP	P OF NEXT LOWER ZONE IN THIS AREA	
150'			None				8600'
ANTICIPATED DAILY MINIMUM INJECTION VOLUME ! (BBLS.)	I MAXIMUM	OPEN OR CLOS	ED TYPE SYSTEM	IS INJECTION PRESSURE?	TO BE BY GRAV	TTY OR	APPROX. PRESSURE (PSIO
600   300	1 800	Ope	n	Press	ure		1800-2000
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MIN- ERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE —  WATER TO BE DISPOSED OF NATURAL WATER IN DISPO- SAL ZONE  ARE WATER ANALYSES ATTACHED? SAL ZONE							
NAME AND ADDRESS OF SURFACE OWNE	R (OR LESSEE, 1F S	STATE OR FEDERAL LAN	ID)	<u> </u>			
B.M. Medlin & So	ns. West	Star Route	. Tatum. N	Jew Mex	ico 88	267	
B.M. Medlin & So	PERATORS WITHIN	ONE-HALF (1/2) MILE OF	THIS INJECTION WEL	L IICII.	100 00	201	
Atlantic Richfie	ld Compan	y P.O. B	ox 1610	Midla	nd, Tex	as 7	9702
					•		
	•						
					<del></del>		

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

ELECTRICAL LOG

SURFACE OWNER

ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)

No

Yes

EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL

No(On File)

H.E. Clarke	Dist. Production Supt.	4 Nov 77
(Signature)	(Title)	(Date)

. OF UPIES RECEIVED		Form C-103		
DISTRIBUTION		Supersedes Old		
SANTAFE	NEW MEXICO OIL CONSERVATION COMMISSION	C-102 and C-103 Effective 1-1-65		
FILE				
U.S.G.S.		5a. Indicate Type of Lease 10		
LAND OFFICE		State X		
OPERATOR		5. State Oil & Gas Lease No.		
		NM 058102		
SUNI (DO NOT USE THIS FORM FOR I USE "APPLIC	DRY NOTICES AND REPORTS ON WELLS PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. CATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)			
I. OIL X GAS WELL WELL	OTHER-	7. Unit Agreement Name Flying "M"(SA) Unit		
2. Name of Operator		8. Farm or Lease Name		
	s Producing Company	Flying "M"(SA) Unit		
3. Address of Operator	1 1 7 70700	9. Well No. Tract 14		
	land, Texas 79702	4		
4. Location of Well	1070 7	10. Field and Pool, or Wildcat		
UNIT LETTER	1978.7 FEET FROM THE South LINE AND 663.3 F	EET FROM Flying "M" SA		
_				
THE East LINE, SEC	TION 20 TOWNSHIP 9-S RANGE 33-E	NMPM.		
mmmmmm	15. Elevation (Show whether DF, RT, GR, etc.)	12. County		
	4366.2 GR	Lea		
Check	k Appropriate Box To Indicate Nature of Notice, Report			
NOTICE OF	INTENTION TO: SUBSE	EQUENT REPORT OF:		
PERFORM REMEDIAL WORK	PLUG AND ABANDON L REMEDIAL WORK	ALTERING CASING		
TEMPORARILY ABANDON	CHANGE PLANS CASING TEST AND CEMENT JQB	PLUG AND ABANDONMENT		
PULL OR ALTER CASING	<b>-</b>			
OTHER Convert to w	ater injection \( \bar{\mathbb{K}} \)			
17. Describe Proposed or Completed work) SEE RULE 1103.	Operations (Clearly state all pertinent details, and give pertinent dates,	including estimated date of starting any proposed		
•	ated to start 12-5-77			
	ollapsed casing from 2500' to 2600'.			
	forations 4451'-4469' with 100 sx cla	ass "C" cement		
	-1/2" liner. Cement with 500 sx. Hall			
	d 50 sx class "C" cement.	LIIBUICON EIGHE		
4. Perforate 8	-5/8" casing 4409'-4415' & 4426'-443	331.		
	ormation with 1000 gal acid.	, , ,		
6. Run 2-1/16" tubing and Baker Lok-Set packer. Set packer at 4395'				
and place well on injection.				
·				
Sketch of w	ell equipment attached.			
18. I hereby certify that the informat	ion above is true and complete to the best of my knowledge and belief.			
SIGNED H.E. Gold	TITLE Dist. Production St	upt. DATE 4 NOV 77		
SIGNED	IIILED TO CONTROL OF THE CONTROL OF	DATE TO THE TENT OF THE TENT O		
	TITLE	DATE		

CONDITIONS OF APPROVAL, IF ANY:

: OF UPIES RECEIVE	D					Form C-103
DISTRIBUTION						Supersedes Old C-102 and C-103
SANTA FE		NEW A	EXICO OIL CONS	ERVATION COMMISSION		Effective 1-1-65
FILE					:	-/ - 3 1977
U.S.G.S.					5α.	Indicate Type of Lease
LAND OFFICE						State X Fee
OPERATOR					T T	State Sil & Gas Lease No.
					1	NM 058102
(DO NOT USE THI	SUN S FORM FOR USE "APPLI	DRY NOTICES AND PROPOSALS TO DRILL OR CATION FOR PERMIT - "	D REPORTS ON TO DEEPEN OR PLUG B (FORM C-101) FOR SUC	WELLS ack to a different reservoir. h proposals.)		
	GAS WELL	OTHER-			F1	Unit Agreement Name Lying "M"(SA) Unit
2. Name of Operator	•			1 70 m = 100 m	8.	Farm or Lease Name Tract
Coastal Sta	tes Ga	s Producing	Company			
3. Address of Operator					9.	Well No.
P.O. Box 23	5 Mid	land, Texas	79702			<u>, 4</u>
4. Location of Well					1	Field and Pool, or Wildcat
UNIT LETTER	<u> </u>	1978.7 FEET FR	OM THE South	LINE AND 663.3 F	EET FROM F	ying "M" (SA)
THE East	LINE, SE	CTION 20	TOWNSHIP 9-SC	outh HANGE 33-East	E_ NMPM.	
amminini	777777	15. Elev	ration (Show whether	DF, RT, GR, etc.)	12.	County
			4366.2 GR			Lea
16.	Chan	k Appropriate Po		ature of Notice, Repor	e on Oakani	Data
NC		INTENTION TO:	x 10 indicate N	-	EQUENT RE	
DEDECTION DEVENIAL WORL	,	Ď.		DEMEDIAL WARK		
PERFORM REMEDIAL WORL	`   <del> </del>	PL	UG AND ABANDON	REMEDIAL WORK	H	ALTERING CASING
TEMPORARILY ABANDON PULL OR ALTER CASING	H	cu	ANGE PLANS	COMMENCE DRILLING OPNS.  CASING TEST AND CEMENT JOB	H	PLUG AND ABANDONMENT
PULL ON ALTER CASING	L_J	C n	ANGE PLANS	OTHER Recover		ibing & test
OTHER				OTHER ILCOOVER	Jeden et	is and a cost
17. Describe Proposed of work) SEE RULE !		Operations (Clearly s	tate all pertinent deta	ils, and give pertinent dates,	including esti	mated date of starting any proposed
_					_	
August 5,	1977:	pulling.		ng until worked I drag until 250 Free.		
August 8,	1977:	Pulled rem of future		ubing and shut	well in	n for evaluation
	Note:		being prepa	overt this well ared and will be		
18. I hereby certify that		ion above is true and o		of my knowledge and belief.		DATE 4 NOW 77
SIGNED				c. rrou. oupe.		DATE - 7000 :
· <del></del>						
A DDD OUTD OU			TITLE			DATE

WELL NAME_	Flying "M" SA Unit Tract 14	NO. 4
RRC NO	NM 058102	ELEV.4366.2 GR
COUNTY	Lea	LOCATION 1978.7' FSL, 663.3' FEL,
FIELD_	Flying "M" San Andres	Sec. 20, T-9-S, R-33-E

### WELL STATUS

### Proposed for Injection

