STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

FORM C-

	TCATION	C00	AUTHORIZATION	TΩ	THISCT
APPI	ICATIUN	HUR	AUTHURIZATION	10	INJELI

		IZATION TO INOCCI		
I.	Purpose: La Application	Secondary Recovery Ressur qualifies for administrative	Oisongal Disneyal Disneyal	Storage
II.	Operator:	PHILLIPS PETROLEUM COMPAN	IY	
	Address:	4001 Penbrook St., Odessa	TX 79762	
	Contact party:	Joy Maples	Phone: (915) 368-1667	<u> </u>
III.	₩ell data: Co pr	mplete the data required on th oposed for injection. Additio	e reverse side of this form for ea nal sheets may be attached if nece	ch well
IV.		ansion of an existing project? he Division order number autho		·

- Attach a map that identifies all wells and leases within two miles of any proposed ٧. injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- Attach a tabulation of data on all wells of public record within the area of review which VI. penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
 - Proposed average and maximum daily rate and volume of fluids to be injected;
 - Whether the system is open or closed;
 - Proposed average and maximum injection pressure;
 - Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 - If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geological data on the injection zone including appropriate 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.
- Χ. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
 - XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification

I hereby certify that the information submitted wi to the best of my knowledge and belief.	ith this application is true and corr	eci
Name:L. M. Sanders (915) 368-1488	Title Sr. Regulatory Analyst	
Signature: My Mayles	Date: 9-10-97	

* 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. Oct. 25, 1978, Case 6367, (order #R-5897 appvd. 1-16-79)

Amended 11-19-81, Case #7426 (order #R-6856, appvd. 12-16-81) amended 1-11-90

district office.

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:
 - 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 advertisement must include:

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

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

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

Sheet2

EAST VACUUM GRAYBURG SAN ANDRES UNIT

ATTACHMENT III TO FORM C-108 APPLICATION FOR AUTHORIZATION TO INJECT PROPOSED CONVERTED PRODUCERS TO INJECTION WELLS

	API					Well
Tract & Well No.	Number	Sec	Tn	Rg	Footage	Status
2202 040	30-025-30020	32	17S	35E	20055011 2540 551	CDCA Drod
			_	35⊏	2065FNL, 2540 FEL	l i
3229-012	30-025-30280	32	17S	35E	2630FSL, 569FWL	GSSA Prod.

INJECTION WELL DATA SHEET

OPERATOR	PHILLIPS PETROLEUM COMPANY	UM COMPANY	LEASE EAST VACUUM GE	EAST VACUUM GRAYBURG SAN ANDRES UNIT
WELL NO.	3229-012	2630 FSL, 569 FWL FOOTAGE LOCATION	32 SECTION	17S 35E TOWNSHIP RANGE
	Schematic	CN		Well Construction Data
			Size 13.375 TOC surface	* Cemented with 1400 sx. feet determined by circulation
			Hole Size 17.5 Intermediate Casing Size	• Cemented with sx.
			TOC Hole Size	feet determined by
			Long Siring Size 5.5" TOC surface	* Cemented with 1700 sx. feet determined by circulation
			Hole Size 11 " Total Depth 4800	
			on Interval	
		preforated	4305 feet to 4608 (perforated or open-hole; indicate which)	feet to 4608 1-hole; Indicate which)

INJECTION WELL DATA SHEET

Tubh	Tubing Size 2.875" Uned with plastic coating	set in a
ن	SET	feet
Othe	Other type of tubing / casing seal if applicable	
Othe	Other Data	
	Is this a new well drilled for injection? Yes No	
	If no, for what purpose was the well originally drilled? 0j1 Producer	
ю	Name of the injection formation <u>SAN_ANDRES</u>	
μ	Name of Field or Pool (if applicable) VACUUM	
•	Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e., sacks of cement or plug(s) used. NO	vals and
ÿ.	Give the names and depths of any over or underlying oil of gas zones (pools) in this area.	ırea.
	QUEEN 3682'	
	GLORIETA 5800'	

WELL SERVICE APPROVAL - NON AFE PHILLIPS PETROLEUM COMPANY--PERMIAN BASIN REGION

		3981		Category Code: ONE Date July 28, 1997
		<u>3971</u> <u>3970</u>	·	Area <u>NORTH</u> Subarea <u>EVGSAU</u> Lease & Well No. <u>EVGSAU 3229-012, API # 30 025 30280.</u>
				Legal Description 2630' FSL & 569' FWL, SEC 32, T178, R35E
			17-1/2" Hole	LEA COUNTY State: <u>NEW MEXICO</u> Field <u>EAST VACUUM</u>
33 2 33 3	31 81	383		Status: PRODUCER BOPD BWPD MCFD
		3000		Tbg: of <u>2-7/8</u> " OD,#/ft, Gr
	88 82	3000 3000 3000	17-1/2" Hole	of" OD,#/ft, Gr
831 3 83 3	33 33	1 200		Packer: Packer Type: Date Drilled/Completed: 1988
		3533 3533		Hole/Casing Condition:
83 3		1950		Stimulation History: 1 & 2 original completion. 4305-4320 perfs added in 96
83 3 83 3	83 83			<u>Interval Date Type Gals # Sd. AIR Max P Avg P ISDP Down</u> 1. <u>4548'-4608' 07/88 ACID 9000 3000 2900 2570</u>
		333		2. <u>4344'-4455' 07/88 ACID 6000</u> <u>3300 2675 2450</u>
83 8	88	1000		3. <u>4305'-4320' 12/96 Frac</u> <u>200M#</u> <u>4500</u> <u>4235</u>
88 3 88 8	83 83			
	52 83 53	2000 2000 2000		Proposal: Convert well to an injector.
	8% 8%	9000 9000 9000		
	30 80	2000 2000 2000 2000 2000	333 353	
333 3 33 3	=== 	10000		
		183		
	800	1 1 200		
	8X 8X	1 1 2 2 2 2		
	88	300		
	88	383	3000 3000 3000	
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13-3/8" 48# csg. @ 1533'	
* 5	#		cmtd w/1400 sx.	
2	\$35 \$35 \$35	3000 3000 3000	TOC @ SURFACE, CIRC.	
3				
8	88			
8	33			
200	왕() 왕()	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
30	36 36			
8	8	383	11" Hole	
9	33 34	1000		
20 20 20 20 20	533 533	1 1320		
8 8 8 8				
300	86 86 86		5-1/2" 15.5# csg. a 4790'	
3	33 53		cmtd/w 200 sx.	
30	83		Tbg. 2-7/8"	
- 2	2011 888	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1bg. 2-176	
900	83	1000	Zone	
200			Perfs: 4305-4320 all 1 SPF	
50	50 50		4344-4354	Prepared by: Craig Stewart
3			4359-4366	Troy Paige
0,000			4370-4378 4383-4391	Prod Engr: Roger Becker
3			4363-4391 4413-4420	
2			4445-4455	
3			4548-4555 4570	
9	300 300		4570 4572-4580	
3			4588-4592	
333			4598-4608	
200	23. 24.			
2 500		,		
3	83	966 966 966 966	PTD @ 4738'	
2	:31 ::::::::::::::::::::::::::::::::::::		F10 W 4730.	

INJECTION WELL DATA SHEET

Tubing 5.5	Tubing Size2.875Ilned with plastic coatingset in a (type of internal coating)5.5 ELDER LOK-SETpacker at 4300'	یہ تہ
Other	casing seal if applicable	1
Other Data	<u>Data</u>	
	Is this a new well drilled for injection? Yes X No	
	If no, for what purpose was the well originally drilled? Oil Producer	
5	Name of the Injection formation SAN ANDRES	
က်	Name of Field or Pool (if applicable) VACUUM	,
4.	Has the well ever been perforated in any other zone(s)? List.all such perforated intervals and give plugging detail, i.e., sacks of cement or plug(s) used. NO	
		ı
ည်	Give the names and depths of any over or underlying oil of gas zones (pools) in this area.	
	QUEEN @ 3690'	
	GLORIETA @ 5800'	

INJECTION WELL DATA SHEET

OPERATOR PHILLIPS PETROLEUM COMPANY	LEASE EAST	EAST VACUUM GRAYBURG SAN ANDRES UNIT	ANDRES UNIT	1
WELL NO. 3202-019 2055' F NI 2540' FFI FOOTAGE LOCATION	32 SECTION	17S TOWNSHIP	35E RANGE	
Schematic		Well Construction Data		
	Surface Casing			
	Size 8.625	" Cemented with	1000	SX.
	TOC surface	feet determined by	, circulation	
	Hole Size 12.25			
	Intermediate Casing			
	Size	. Cemented with		SX.
	T0C	feet determined by		
	Hole Size			
	Long String			
	Size 5.5	Cemented with 1390	390	SX.
	TOC_surface	feet determined by circulation	circulation	
	Hole Size 7.785			
	Total Depth 4800			

feet

4352 feet to 4645 rated or open-hole; indicate which)

perforated

Injection Interval

WELL SERVICE APPROVAL - NON AFE PHILLIPS PETROLEUM COMPANY--PERMIAN BASIN REGION

CHF a	<u>3975</u> <u>3962</u>	1				Category Code: <u>None</u> Date <u>July 28, 1997</u> Area <u>NORTH</u> Subarea <u>EVGSAU</u> Lease & Well No. EVGSAU #3202-019
GL W	3902	•				Legal Description 2065' FNL & 2540' FEL, SEC.32, T17S, R35E
						LEA COUNTY State: NEW MEXICO
						Field <u>VACUUM Gb/SA</u>
						Status: Active Producer 10 BOPD 35 BWPD 51 MCFD
			12 1	/4" HOLE		Tbg: <u>4475'</u> of <u>2 7/8"</u> OD, <u>6.5</u> #/ft, Gr. <u>J-55</u>
		3333 3333				of" OD,#/ft, Gr TAC: TAC Type:NA
253 253 353 353		3633 3683				Date Spudded/Completed: NOVEMBER, 1987
		3323				Hole/Casing Condition:
						Stimulation History:
1000 1000 1000 1000						Interval Date Type Gals # Sd. AIR Max P Avg P ISDP Down
		383 383				1. <u>4380 - 4645 1 11/87 ACID 7000 2000 1300</u> 2. <u>4352 - 4645 12/90 ACID 6000 2000 1800 TBG.</u>
						3
						4
						5
		::::::::::::::::::::::::::::::::::::::				PROPOSAL: Convert well to an injector.
353 353 353 353		3333 3333 3333				
			8 5/	8" 24# SET W/	/ 1000 SX	
38				CMT. CIRC.	-	
				a1514'		
'383 384	1 1 388					
2000 1000 1000 1000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
\$388 	958 958 958					
353 353						
383 383						
		7	7/8"	HOLE		
252						
3688 3083						
383	1 133					
3333 3383						
323						
980						
3831 3000		2/	7/8"	TUBING		
				43521-541		
353 353				43581-601		
				43621-781		
	==	PE	RFS:	4380 ' - 88 '		
383	==			43941-971		
3250 33000	==			4399'-4401' 4404'-07'		
353 353	==			44041-071		
264 953	==			4417'-28'		
181	==			4480+-84+		
353 353	==			44901-961		
383 363	==			4501'-05'		Dropaged Due Chaig Stayant and
3831 8831	==			4509'-11' 4633'-36'		Prepared By: Craig Stewart and Troy Paige
253 283	==			46431-451		Prod Engr: Roger Becker
	¥83			- · ·		• • • • • • • • • • • • • • • • • • • •
		_	:	4= = W -=- ··	4700	
383 383	1000	5		15.5# SET W/	1390 SX	
5553 5553 0				CMT. CIRC. a 4800'		
2500 S	apparated 2200					

TD-4800' PBTD-4756'

AFFIDAVIT OF PUBLICATION

State of New Mexico, County of Lea.

I, KATHI BEARDEN

Publisher

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	1	
		weeks
Beginn	ing with the issu	ne dated
	August 31	1997
and end	ding with the iss	
	August 31	1997
Kal	ki Mardu	<u> </u>
	Publisher	
Swor	n and subscribed	l to before
me this	s_29th	day of
	August	1997
m	1. John s	

My Commission expires October 18, 2000 (Seal)

Notary Public.

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE August 31, 1997

Notice is hereby given of the application of Phillips Petroleum Company, 4001 Penbrook Street, Odessa, Texas 79762, Attn: L.M. Sanders, (915)368-1488, to the Oil Conservation Division, New Mexico Energy & Mineral Department, for approval of the following water and carbon dioxide injection well authorization for the purpose of produced water and carbon dioxide injection. Well Name: East Vacuum Gb/SA Unit #3202-019 & 3229-012 Field: Grayburg/ San Andres

East Vacuum Gb/SA Unit #3202-019 location: 2065 feet from the North line and 2540 feet from the East line, Section 32, T17S, R35E, Lea County, New Mexico.

East Vacuum Gb/SA Unit #3229-012 location: 2630 location: 2630 feet from the South line and 569 feet from the West line, Section 32, T17S, R35E, Lea County, New Mexico.

The water/carbon dioxide injection formation is Grayburg/San Andres at a depth of 4305 - 4645' below the surface of the ground.

Expected maximum injection rate is 2200 bbls. water and 5000 MMSCFD carbon dioxide per day and expected maximum injection pressure is 1350 pounds per square inch of water and 1850 pounds per square inch of carbon dioxide.

Interested parties must file objections or requests for hearing with the State of New Mexico, Energy, Minerals & Natural Resources Dept., Oil Genservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87504 within fifteen (15) days. #15393

01102332000

01510684

Phillips Petroleum Company 4001 Penbrook a/c 459001 ODESSA, TX 79762

WELL SERVICE APPROVAL PHILLIPS PETROLEUM COMPANY--PERMIAN BASIN REGION

RKB				Category Code: 1 Area <u>Permian Basi</u> Lease & Well No. Legal Description	East Vacuum Grayb 660' FNL, 1977'	e <u>EVGSAU</u> Durg San Andr FWL, SEC. 3	res Unit No. 32, T175,R35	1 25, 1994 3202-002 E
====		Plug 5: 3'-325' 70 sxs 13 3/4" hole 10 3/4" 40# @ 220' CMTD: w/125 sx TOC: surface Cal. 75	% fill	Field Vaccum (1) Status: P & A Plugging Proposal Plug #1 Plug #2 Plug #3 Plug #4 Plug #5		es)		Bottom 4675 4100 2800 1625 325
	8/19! = Squer csg i	WATERTABLE: 50 ezed hole in casing 5 1 a 707' w/95 sx	/2"					
====	-	50 ezed hole in casing 5 1 a 707' w/95 sx 4: 1500'-1625' 85 sxs -7/8" hole -5/8" 26.4# csg. a1551' MTD: 400 sx. OC: Surface		NMOCD District: Lease No: API No: Lease acctg. Code:	A-1320 30-025-02963			
====	Plug	3: 2700'-2800' 25 sxs						
====	plug Plug	2: 4000'-4100' 25 sxs 1: 4100'-4675' 125 sxs						
	1998 1998 1998 1998 1998 1998 1998 1998	6 3/4" hole 5 1/2" 17# a 4150' CMTD: w/250 sx TOC: 1888' (Calc. 75 4-3/4" open hole: 415 Fish a 4637-4672' Bit	0-46751		Formation Tops:	Anhydrite Top Salt Base Salt Queen San Andres	1530 ° 1740 ° 2749 ° 3804 ° 4364 °	

File name H:\WELLFILE\EVGSAU\3202002.PA

TD: 4675'

Phillips Petroleum Co.- Permian Basin Region

RKB: 3970' DF: 3969'

DF: 3969' Date: GL: 3956' Area: North Sub

12-1/4" Hole Lease

Sub-area: Buckeye Spud Date: 3/65
Name: VGEU # 17-01

Lease & Well Name: VGEU # 17-01
Legal Description: 2110 FSL & 1980 FEL

Unit: <u>J</u> Sec: <u>31</u>

Twn:<u>17s</u> Rng: <u>35E</u>

County: Lea State: NM

Field: Vacuum Glorieta

Status: <u>T&A</u>

Set @: 1545' w/ 850 sxs circ.

7-7/8" Hole

Perfs: 6007'-6015' 6009'-6017' 6011'-6019' 6013'-6021'

> 6031,33,35,37,39,41,43,45, 47,51,53,55,61,63,64

Set@: 6200 w/2575 sxs

circ.

TD: 6200

NO19KB€ 3975.7' CHF @ GL@__3966.1' 11" Hole 1 / 8-5/8" 24# K-55 set / @ 352'. Cmtd w/ 250 sx. / TOC @ surface. 8-5/8" shoe @ 352' 7-7/8" Hole :/ +/: Bad csg 946'-976' +/: Bad csg 2337'-2555' /; 5-1/2" 14# K-55 /: set @ 4800. Cmtd w/ /: 1600 sx. TOC @ surface 1: /: PBTD 4757 7; TD 4800

Date: July 1990

Status: P & A

Proceedure : Due to various casing Leaks the

Wellbore was completely filled with

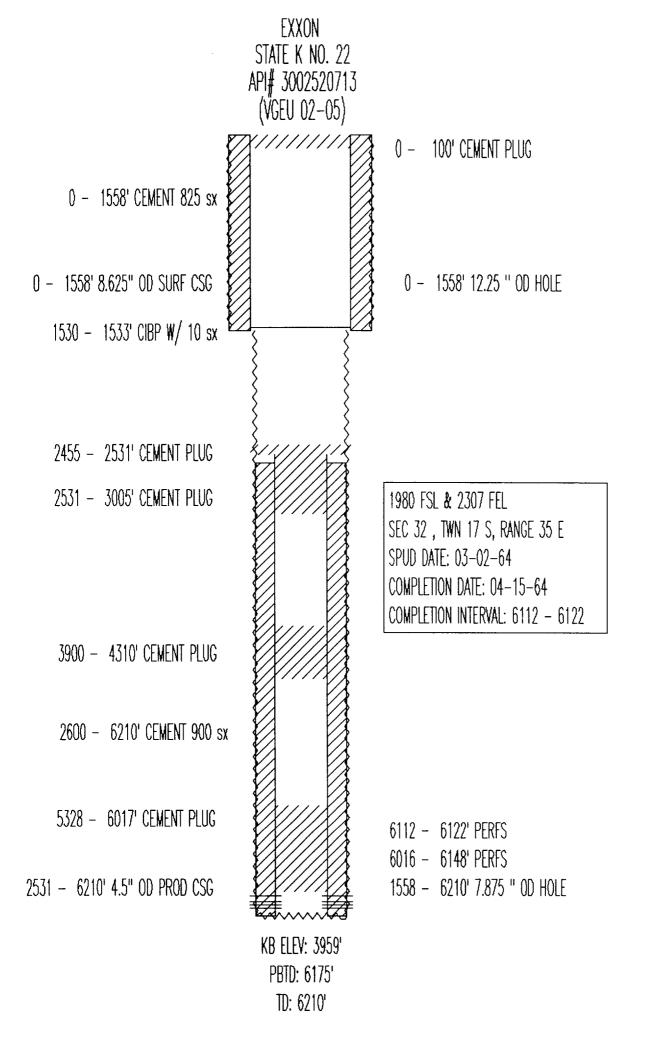
Cement.

Legal Description: 1533' FEL & 130' FSL Rng: 35E Twn: 17s Sec: 29 Unit: 0

County: Lea State: NM

Field: East Vacuum (GR-SA) Unit

Perfs: 4504'-4513' 4516'-4519' 4558'-4577' 4661'-4664' 4674'-4678'



ant Total	ns Depth	4790 R	9500 ba	3 8200 ard	9500 bei	d 8200 ard	a 8100
Current	Status	prod SADR	prod drinkad	prod	prod drinkaed	prod	prod drinkard
Record of	Completion	4327-4661	7624-8089	7649-8002	7630-8030	7625-8060	7565-7887
Date	Drilled	Oct-87	Sep-96	Mar-97	Apr-97	May-97	Oct-94
Top of	Cement	surface	4300	4300	3175	surface	surface
	Cmnt (sx) Cement	1250	1504	1150	1854	1875	1890
Prod. Csg.	Depth (ft)	4790	9500	8200	8203	8500	8100
	Size (in)	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2
	Cmnt (sx)		1380	1150	1854		1050
Int. Csg.	Cmnt (sx) Size (in) Depth (ft)		4825	4806	8203		3200
	Size (in)		8 5/8	8 5/8	8 5/8		8 5/8
	Cmnt (sx)	1145	1500	1200	850	200	1500
Surf. csg.	Depth (ft)	1518	1615	1531	1554	1550	1476
	Size (in)	8 5/8	13 3/8	13 3/8	11 3/4	8 5/8	13 3/8
	Location	EVGSAU 3236-009 30-025-30018 2510 FNL, 1850 FVNL	2231FNL, 385FEL 32-17S-35E	2290FNL, 2205FEL 32-17S-35E	2060FSL, 1760 FEL 32-17S-35E	980FNL, 360FEL 32-17S-35E	31-17S-35E
API	Number	30-025-30018	30-025-33594	30-025-33828	30-025-33843	30-025-33844	30-025-32623
	Well No.	3236-009	32-1	32-2	32-4	32-5	σ
	Operator Lease Name Well No.	EVGSAU	Hoover	Hoover	Hoover	Hoover	State A
	Operator	Phillips	Altura	Altura	Altura	Altura	Altura

EAST VACUUM GRAYBURG SAN ANDRES UNIT ATTACHMENT IX TO FORM C-108 APPLICATION FOR AUTHORIZATION TO INJECT WATER AND CARBON DIOXIDE

PROPOSED STIMULATION PROGRAM FOR A TYPICAL SAN ANDRES INJECTION WELL

All injection wells will be cased hole completions selective perforated within the unitized interval. Initial stimulation will be small to medium sized matrix Hydrochloric acid treatments. Acid concentrations will typically range from 7 1/2% to 20% depending on the anticipated completion damage. As the waterflood matures additional matrix acid treatments may be preceded by an oil soluble surfactant, and the acid mixture may contain commercial mutual solvents.

EAST VACUUM GRAYBURG SAN ANDRES UNIT ATTACHMENT XII TO FORM C-108 APPLICATION FOR AUTHORIZATION TO INJECT WATER AND CARBON DIOXIDE

STATEMENT OF HYDRAULIC INTEGRITY

Phillips Petroleum Company has examined available geological data and finds no evidence of open faults nor any other hydraulic connection between the injection zone and any underground source of drinking water.

EAST VACUUM GRAYBURG SAN ANDRES UNIT ATTACHMENT VII TO FORM C-108 APPLICATION FOR AUTHORIZATION TO INJECT WATER AND CARBON DIOXIDE

DATA ON THE PROPOSED OPERATION OF INJECTION WELLS

The proposed average and maximum daily water injection rate is:

Average daily rate 1,200 BWPD, Maximum daily rate 2,200 BWPD

The proposed average and maximum daily carbon dioxide rate is:

Average daily rate 3,000 MMSCFD, Maximum daily rate 5,000 MMSCFD

Both the water and carbon dioxide systems are closed.

The proposed average and maximum surface injection pressures for water are:

Average injection pressure 1,000 PSIG, Maximum* injection pressure 1,350 PSIG

The proposed average and maximum surface injection pressures for carbon dioxide are:

Average injection pressure 1,500 PSIG, Maximum* injection pressure 1,850 PSIG

* Maximum injection pressures are based on pre-existing Unit injection pressure allowable which are based on actual San Andres fracture gradients.

There are two sources of injection water makeup, San Andres produced water from Phillips operated East Vacuum Grayburg San Andres Unit and Ogallala fresh water from the EVGSAU water supply wells. Both waters have been injected into the San Andres formation since 1979, and are compatible with each other and the San Andres formation. The two sources of carbon dioxide are from reinjected produced gas and purchased pipeline sales gas. The gas composition is approximately:

CARBON DIOXIDE	91%
HYDROGEN SULPHIDE	2%
NITROGEN	2%
HYDROCARBON	5%

Carbon dioxide has been injected into the San Andres Formation since 1985 under the authority on NMOCD Order No. R6856 dated 12/16/81.

P 621 659 135

Texaco Exp.

Post Office, State, & ZIP Code HODDS, NM

Postage

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

	Certified Fee	110	::::: !!!! !!!!!!!!!!				
15	Special Delivery Fee	7.70	0-025-				
	Restricted Delivery Fee	1 2 =		r,			
190	Return Receipt Showing to Whom & Date Delivered	1.35		5			
April	Return Receipt Showing to Whom, Date, & Addressee's Address		E	And			
S Form 3800, April 1995	TOTAL Postage & Fees	\$ 2.88		PS Form 3800 April 1995			
33	Postmark or Date	3.69		E .			
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	No Insurance Coverage Provided Do not use for International Mail						
	Sent to State of New Moules						
	COMMISSION						
	Street and No Box						
	P.O., State and ZIP Code						
	Postage	1 8750/ \$ 1.324					
	Certified Fee	110					
	Special Delivery Fee	1,,,,,					
	Restricted Delivery Fee						
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199	to Whom & Date Delivered	1.35					
L C	Return Receipt Showing to Date, and Addressee's Add						
ž	TOTAL Postage & Fees	\$ 2.88					
8	Postmark or Date	. 81					
orm 3800, March 1993	9-10	G 73,69					
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P 651 659 133

	US Postal Service					
	Receipt for Certified Mail					
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	Do not use for Internation	anal Mail (Can are a				
	Arco Permina					
	Street & Nomber	7.				
	1374	1610				
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	11/10/1400,	1X 19 70 D				
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•	Date, & Addressee's Address					
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ı		3.69				
i	9-10-9	7				
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P 621 659 134

F N OCT	Receipt for Certified Mail No Insurance Coverage Provided. Do not use for International Mail (See reverse) Sent to Cov P Street & Nomber 4698					
Į	Post Office, State, & ZIP Cod	1/2/0 /0/0				
١	Postage	\$ 1.24-43				
	Certified Fee	1,10				
	Special Delivery Fee					
	Restricted Delivery Fee					
1995	Return Receipt Showing to Whom & Date Delivered	135				
April	Return Receipt Showing to Whom Date, & Addressee's Address					
8	TOTAL Postage & Fees	\$ 278				
oc Form 3800, April 1995	Postmark or Date	97 wp				

ATTACHMENT NO. XIV

Notification

I hereby certify that a complete copy of this application was sent by certified mail to the below listed persons on September 9, 1997.

Signed:

Name: M. L.M. Sanders

Title: U

Sr. Regulations Analyst

Date:

SURFACE OWNER:

State of New Mexico Commissioner of Public Lands P. O. Box 1148 Santa Fe, NM 87501-1148

OFFSET OPERATORS:

Altura Energy, Ltd. P. O. Box 12550 Odessa, TX 79768

Arco Permian Box 1610 Midland, TX 79702

Exxon Corp. Box 4698 Houston, TX 77210-4698

Texaco Exploration & Production, Inc. P. O. Box 730 Hobbs, NM 88240

Phillips Petroleum Company 4001 Penbrook Odessa, TX 79762

CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator:			# 12 419
Contact: LARRY SANDER Tit	le: <u>Regovan</u>	or Consuly.	(f Phone: <u>9/5-34-1247</u>
DATE IN <u>9.12.97</u> RELI	EASE DATE 🥠	<u> 29.97</u> DA	TE OUT <u>112.67</u>
			Expansion Initial
Original Order: R- <u>6856</u>	<u> </u>	ary Recovery	🔀 Pressure Maintenance
SENSITIVE AREAS	SALT W	ATER DISPOSA	L Commercial Well
WIRP Capitan Reef			
Data is complete for proposed well(s)?	S Additional Da	ata Req'd	
AREA of REVIEW WELLS			
/ <u>O</u> Total # of AOR		# of Plug	gged Wells
બ <u>ઇડ</u> Tabulation Com	plete	Schemat	ics of P & A's
५ <u>८</u> Cement Tops A	dequate	۸/۵ AOR Rep	air Required
INJECTION FORMATION			
Injection Formation(s)	Jusus		Compatible Analysis 40
Source of Water or Injectate	WATER +	<u>Cor</u>	
PROOF of NOTICE			
্ৰি <u>্</u> ৰে Copy of Legal Notice		<u>465</u> Înformati	on Printed Correctly
পু <u>ধ্</u> য Correct Operators		Copies o	f Certified Mail Receipts
<u>∕∕</u> Objection Received		Set to He	earing Date
NOTES:			
		 	
APPLICATION QUALI	FIES FOR ADMI	NISTRATIVE AP	PROVAL? 465
COMMUNICATION WITH CONTACT PERSON:			
	tter Date		
	tter Date		

LARGE FORMAT EXHIBIT HAS BEEN REMOVED AND IS LOCATED IN THE NEXT FILE

LARGE FORMAT EXHIBIT HAS BEEN REMOVED AND IS LOCATED IN THE NEXT FILE

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

GOVERNOR

POST OFFICE BOX 1980 HOBBS, NEW MEXICO B8241-1980 (505) 393-6161

011	CONSERVATION DIVISION				
P. 0). BOX 2088				
SANT	TA FE, NEW MEXICO 87501				
RE:	Proposed:				
	MC				
	DHC NSL				
	NSP	•			
	SWD WFX				
	PMX X				
Gent	lemen:				
I ha	ive examined the applic	ation for the:			
(A)	aillips Pet Co	CV	COLON	#12 - ブー	32.17-35
Oper	values ret co	Lease & Well N	lo. linit	S-T-R	32-17-35
and 1	my recommendations are				
	Ecommend app	wal			
	77				
 -					
Your	rs very truly,				
	11-10:				
	Mrs Williams				
Chèi	s Williams				

Supervisor, District 1