

580 WestLake Park Blvd. Houston, TX 77079 PO Box 4294 Houston, TX 77210-4294 Phone: 281-552-1000

July 17, 2000

State of New Mexico Energy, Minerals & Natural Resources Department Oil Conservation Division 2040 South Pacheco Street Santa Fe, NM 87505

JUL 2 0

RE: Expansion of Pressure Maintenance Project North Hobbs (Grayburg/San Andres) Unit Hobbs; Grayburg – San Andres Pool Well No. 534 Letter J, Section 33, T-18-S, R-38-E Lea County, NM

Gentlemen:

Occidental Permian Limited Partnership respectfully requests administrative approval for expansion of the subject pressure maintenance project by converting North Hobbs (G/SA) Unit Well No. 534 from production to water injection. Administrative Order No. R-6199 granted November 30, 1979, authorized Shell Western E&P Inc. (Occidental Permian Limited Partnership's predecessor) to conduct the North Hobbs (G/SA) Unit pressure maintenance project within the Hobbs; Grayburg – San Andres Pool.

The following data is submitted in support of this request:

- Form C-108 with miscellaneous data attached
- Form C-102
- A map reflecting the location of the proposed injection well (No. 534). The map identifies all wells located within a two-mile radius of the proposed injector and has a one-half mile radius circle drawn around the proposed injection well which identifies the well's Area of Review.
- An injection well data sheet
- A tabulation of data on all wells of public record within the well's Area of Review



- Schematics of plugged wells of public record within the well's Area of Review
- A list of Offset Operators and Surface Owners (these parties have been notified of this application by certified mail)
- An Affidavit of Publication and copy of the legal advertisement that was published in the county in which the well is located.

Your favorable consideration of our request will be appreciated. If you have any questions of a technical nature, please call David Nelson at (505) 397-8211. Otherwise, please call me at (281) 552-1158.

Very truly yours,

Mark Stephen

Mark Stephens Business Analyst (SG)

CC: Oil Conservation Division Hobbs District Office 1625 N. French Drive Hobbs, NM 88240

> State of New Mexico Commissioner of Public Lands P.O. Box 1148 Santa Fe, NM 87504-1148

Offset Operators (see attached list)

Surface Owners (see attached list)

OIL CONSERVATION DIVISION 2040 SOUTH PACHECO SANTA FE, NEW MEXICO 87505

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE:Application qualifies for	Secondary Recovery administrative approval?	X X	_Pressure Maintenance YesN	Disposal o	Storage
II.	OPERATOR:	Occidental Permia	n Limi	ted Partnership		
	ADDRESS:	P.O. Box 4294, Ho	uston,	TX 77210-4294		
	CONTACT PARTY:	Mark Stephens, Rm	. 338-	B, WL2	PHONE: _	(281) 552-1158
III.	WELL DATA: Complete Additiona	the data required on the rev I sheets may be attached if r	verse side necessary	of this form for each well p	roposed for injection	
IV.	Is this an expansion of an If yes, give the Division of	existing project? X	Yes Project:	No)	
V.	Attach a map that identifi drawn around each propo	es all wells and leases within sed injection well. This circ	n two mi cle identif	les of any proposed injection fies the well's area of review	n well with a one-half	f mile radius circle
VI.	Attach a tabulation of dat Such data shall include a schematic of any plugged	a on all wells of public recondescription of each well's ty well illustrating all pluggin	rd within pe, const g detail.	the area of review which pe ruction, date drilled, location	netrate the proposed n, depth, record of co	injection zone. mpletion, and a
VII.	Attach data on the propos	sed operation, including:				
*VIII.	 Proposed average and Whether the system is Proposed average and Sources and an approproduced water; and, If injection is for disp chemical analysis of twells, etc.). Attach appropriate geologic 	I maximum daily rate and vo s open or closed; I maximum injection pressur priate analysis of injection fl osal purposes into a zone no the disposal zone formation ogic data on the injection zor name, and depth to bottom	olume of re; luid and o of product water (m ne includi	fluids to be injected; compatibility with the receiv live of oil or gas at or within ay be measured or inferred f ng appropriate lithologic det lerground sources of drinkin	ing formation if othe one mile of the prop rom existing literatur tail, geologic name, t	r than reinjected osed well, attach a re, studies, nearby hickness, and training waters with
	total dissolved solids con known to be immediately	icentrations of 10,000 mg/l of y underlying the injection in	or less) o terval.	verlying the proposed injecti	on zone as well as ar	iy such sources
IX.	Describe the proposed sti	mulation program, if any.				
*X.	Attach appropriate loggin	g and test data on the well.	(If well l	ogs have been filed with the	Division, they need	not be resubmitted).
*XI.	Attach a chemical analysis injection or disposal well	s of fresh water from two or showing location of wells ar	more fre nd dates s	sh water wells (if available a amples were taken.	and producing) within	n one mile of any
XII.	Applicants for disposal we data and find no evidence sources of drinking wate	vells must make an affirmati e of open faults or any other r.	ve staten hydrolog	nent that they have examined gic connection between the d	l available geologic a lisposal zone and any	nd engineering underground
XIII.	Applicants must complete	e the "Proof of Notice" section	on on the	reverse side of this form.		
XIV.	Certification: I hereby cer and belief.	rtify that the information sub	omitted w	ith this application is true and	nd correct to the best	of my knowledge
	NAME:Mark	Stephens		TITLE:	Business Ana	lyst (SG)
	SIGNATURE:	1K Stephens		I	DATE:July	17, 2000
*	If the information required Please show the date and o	d under Sections VI, VIII, X circumstances of the earlier	, and XI submittal	above has been previously s Hearing October	ubmitted, it need not 3, 1979; Case	be resubmitted. No. 6653,

Order No. R-6199 DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office Side 2

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and the 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, 2040 South Pacheco, Santa Fe, New Mexico 87505, 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.

Attachment To Form C-108 Miscellaneous Data

North Hobbs (Grayburg/San Andres) Unit Well No. 534 Letter J, Section 33, T-18-S, R-38-E Lea County, New Mexico

III. Well Data
B.(5) Next higher oil zone -- Grayburg @ +/- 3700' Next lower oil zone -- Glorieta @ +/- 5300'

VII. Proposed Operation

1. - "

- 1. Average Injection Rate1500 BWPDMaximum Injection Rate4000 BWPD
- 2. Closed Injection System
- 3. Average Injection Pressure500 PSIGMaximum Injection Pressure805 PSIG (approx.)(will not exceed 0.2 psi/ft. to top perforation)
- 4. Source Water San Andres Produced Water (Mitchell Analytical Laboratory analysis attached)

IX. Stimulation Program

Acid treatment of unitized perforations will be performed during conversion work

- XI. Fresh Water Sample Analysis (Laboratory Services, Inc. analysis attached – 2 ea.)
- XII. Occidental Permian Limited Partnership affirms that available geologic and engineering data has been examined resulting in the finding of no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

MITCHELL ANALYTICAL LABORATORY

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2638 Faudree Odessa, Texas 79765-8538 561-5579

Water Analysis

Company Nalco/Exxon	Energy Ch	emicals			
Well # WIS DISCHARG Lease ALTURA NHU	E PUMP		Sample Temp Date Sampled	70.0 11/05/1999	
Location			Sampled by	Mike Athey	
Lab Ref # 99-NOV-N0512	6		Analyzed by	DANIEL	
	Di	ssolved Gasses)/ - / Y		
Hydrogen Sulfide	(H2S)		MG/L 486 00	Eq. Wt.	MEq/L
Carbon Dioxide	(CO2)	Not Analyzed	100.00	10.00	50.50
Dissovled Oxygen	(02)	Not Analyzed			
		Cations			
Calcium	(Ca++)		804.00	20.10	40.00
Magnesium	(Mg++)		195.20	12.20	16.00
Sodium	(Na+)		3,459.66	23.00	150.42
Barium	(Ba++)	Not Analyzed			
Manganese	(1911++)	NOL ANALYZEU			
		Anions			
Hydroxyl	(OH-)	Not Analyzed			
Carbonate	(CO3=)		0.00	30.00	0.00
Sulfate	(RC03 -)		1 700 00	48 80	30.60
Chloride	(Cl-)		5,005.50	35.50	141.00
Total Iron Total Dissolved Sol	(Fe)			18.60	0.02
Total Hardness As (CaCO3		2,810.32		
Conductivity MICRON	HOS/CM		23,500		
рН 6.500	Sp	ecific Gravity	60/60 F.	1.009	
CaSO4 Solubility @	80 F.	46.63 MEq/L,	CaSO4 scale	is unlikely	
CaCO3 Scale Index					
70.0 0.190					
90.0 0.310					
100.0 0.530					
110.0 0.790					
120.0 0.790					
150.0 1.370					

Nalco/Exxon Energy Chemicals

Laboratory Services, Inc.

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4016 Fiesta Drive Hobbs, New Mexico 88240 Telephone: (505) 397-3713

Water Analysis

COMPANY	Altura Energy Ltd,		
SAMPLE SAMPLED BY	Fresh Water Well F	or Wells 33211, 3	3534 & 33631
DATE TAKEN REMARKS	5/31/00 T18S-R38E-Sec 33,	Qtr Sec. 2,3,1	
Barium as Ba Carbonate alkalir Bicarbonate alka	nity PPM linity PPM	0 52	
pH at Lab Specific Gravity (@ 60°F	7.54	
Total Hardness a Chlorides as Cl	as CaCO3	162 280 106	······································
Iron as Fe Potassium		150 0 0.1	
Hydrogen Sulfid Rw Total Dissolved S	e Solids	0 9.6 820	@ 25° C
Calcium as Ca Nitrate		118 13.2	
Results reported as I	Parts per Million unless stated		
Langelier Satura	tion Index	+ 0.11	

Analysis by:	Vickie Walker	
Date:	6/5/00	

Laboratory Services, Inc.

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4016 Fiesta Drive Hobbs, New Mexico 88240 Telephone: (505) 397-3713

Water Analysis

COMPANY	Altura Energy Lto	d,		
SAMPLE	Fresh Water Well	For Wells 33211,	33534 & 3363	1
SAMPLED BY				
DATE TAKEN	5/31/00			
REMARKS	T18S-R38E-Sec 33	, Qtr Sec. 2,3,1		
Barium as Ba		0		
Carbonate alkalin	iity PPM	64		
Bicarbonate alkal	inity PPM	212		
pH at Lab		7.43		
Specific Gravity @	2 60°F	1		
Magnesium as M	g	202		·
Total Hardness as	s CaCO3	348		
Chlorides as Cl		127		
Sulfate as SO4		155		
Iron as Fe		0		
Potassium		0.1		
Hydrogen Sulfide)	0		
Rw		9.5	@ 25°	С
Total Dissolved S	Bolids	930		
Calcium as Ca		146		
Nitrate		8.8		
Results reported as P	Parts per Million unless state	ed		

Langelier Saturation Index -0.5

Analysis by:	Vickie Walker	
Date:	6/6/00	

DISTRICT I P.O. Box 1980, Hobbs, NM 68841-1980

DISTRICT II P.O. Drawar DD. Artamia, NM 55211-0719

DISTRICT III 1000 Rio Brazos Rd., Astec, NM 87410

DISTRICT IV 2.0. BOX 2008, SANTA FK, N.M. 87004-2086

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, New Mexico 87504-2088

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Fool Name	
30-025-34373	31920	HOBBS; GRAYBURG – SAN ANDRES	
Property Code	Prope	ty Name Well Number	
19520	NORTH HOBI	SS G/SA UNIT 534	
ogred ng.	Opera	or Name Elevation	
157984	Occidental Permian	Limited Partnership 3637	

					Surface Loci	ation			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	33	18 S	38 E		2415	SOUTH	2200	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot. No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1						L			
Dedicated Acres	Joint or	Infill Co	nsolidation C	ode Ord	ler No.				
				1					
	1			1					

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

		OPERATOR CERTIFICATION
		I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
		Mark Stephens
		Printed Name Business Analyst (SG)
		July 14, 2000 Date
		SURVEYOR CERTIFICATION
	2200'	I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervisen and that the same is true and correct to the best of my being.
		JANUARY 6, 2000 Date Surveyed DC Signature & Seal of
	2415-	Professional Surveyor Bang & hickor 1/28/2000
		Certificate No., RONALD J. EIDSON 3239 GARY MIDSON 12641 MACON MCDONALD 12185



Operator Occidental Permian Limited Partnership	Lease North Hobbs	s G/SA Unit	Coi Le	unty a
Well No. Footage Location 33-534 2415' FSL & 2200' FEL	Section 33	Township Ra 18-S 3	ange 8-E	Unit Letter J
Schematic	Surface Casin Size <u>14"</u> TOC SUR	<u>Tubular D</u> Cemented C F Determined	ata vith <u>50</u> by <u>Circ.</u>	SXS.
14" @40'	Intermediate C Size 8-5/8 TOC SUF	asing 3"Cemented v F Determined	with 800 by Circ.	Sxs.
8-5/8" @1564'	Hole size	sing 2"Cemented FDetermined	with 740 by Circ.	\$X\$.
5-1/2" @4402'	Liner Size TOC Hole size	Cemented	with	\$X\$.
	<u>Total depth</u>	4402'		
	Injection interv 4100	<u>al</u>) feet to	4300	feet
Tubing size 2-7/8" lined w	Completion typ	erolass liner)	Casing	set in a
Guiberson - Uni VI (brand and model)	packer at		et	Set in a
Other Data				
1. Name of the injection formation Sa	n Andres			
2. Name of field or Pool Ho	bbs			
3. Is this a new well drilled for injection? If no, for what purpose was the will original	Yes ly drilled?	Producer	•	······
 Has the well ever been perforated in any other detail (sacks of cement or bridge plug(s) us 	zone(s)? List all such p red)	erforated intervals and gi	ve plugging	
5. Give the depth to and name of any overlying a	nd/or underlying oil and g	as zones (pools) in this a	rea.	

Grayburg - 3270, Glorieta - 5300

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Occidental Permian Operator Lease County Limited Partnership North Hobbs G/SA Unit Lea Well No. Footage Location Section Township Range Unit Letter 33-534 2415' FSL & 2200' FEL 33 18-S 38-E .1 Schematic Tubular Data Surface Casing 14" 50 Size Cemented with SXS SURF Circ. TOC Determined by Hole size 14" Intermediate Casing @40' 8-5/8" 800 Size Cemented with SXS. SURF Circ тос Determined by Hole size Long string Casing 8-5/8" 740 5-1/2" Size Cemented with SXS. @1564 SURF Circ. TOC Determined by Hole size 5-1/2" Liner @4402' Size Cemented with SXS. тос Determined by Hole size 4402' Total depth Injection interval feet to 4300 4100 feet Perforated Casing Completion type 2-7/8" Duoline (Fiberglass liner) Tubing size lined with set in a Guiberson - Uni VI 4000' packer at feet (brand and model) Other Data San Andres 1. Name of the injection formation Hobbs 2. Name of field or Pool 3. Is this a new well drilled for injection? Yes No If no, for what purpose was the will originally drilled? Producer 4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used)

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

Grayburg - 3270, Glorieta - 5300

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FOR WELL 33534																	
Well Name	API N	40	Sec.	⊢	۲	۲	Drill	Well	TD or	Тор	Bot.	Sqz.	Csg.	Hole		No. of	
Operator						Ltr	Date .	Type	PBTD	Perf	Рег	Perfs	Size	Size	Depth	SXS.	100
33211	30-025-	07564	33	-18S	-38E	0 0	//34	٩	4223	4076	4222	3993-4008	12.5	16	296	150	CIRC**
Altura						-		Ē	BTD				9.625	12.25	2760	150	3191**
			-										7	8.75	3930	250	2601**
												-	5.5	7.875	3884	250	3800-CBL
								-					5.5	7.875	3887-4226	82	3887**
33213	30-025-	29065	33	-18S	-38E	7 0	//85	م	4328	4027	4255	NONE	13.375	17.5	40	AN	AN
Altura								_	PBTD				8.625	12.25	1551	675	CIRC
													5.5	7.875	4370	775	CIRC
10000	300.00	07560	00	100	100	C	06//		1105	2707	1230	ene	10 E	16	737	175	CBC
1 2200	-070-00	2002.20	3	201		0 	001	-			007	000	2.2		107		
Altura			T						CIBP			3145-3146	9.625	11./5	0//7	400 77E	
						_						4043-4032	-	c/.o	4012	017	רשר
													5	6.25	4242	100	2850-CBL
33777	30-025-	26975	33	18.5	-38F	- \ <u>-</u>	0//80		4322	4054	4776	4206-4210	16	20	40	40	CIRC
	~~~~	2.227	3	8	2	•	222	-					0 275	30.01	1600	000	
Altura		-							n C			4214-4210	070.0	CZ.21	nnol	30.	
													5.5	7.875	4400	1100	CIRC
33232	30-025-	26834	33	-18S	-38E	<u>م</u>	//80	-	4395	4130	4148	4050-4054	16	20	40	40	CIRC
Altura									PBTD			4096-4101	8.625	12.25	1590	700	CIRC
													5.5	7.875	4439	750	CIRC
							_	_									
33233	30-025-	28410	33	-18S	-38E	ス -	2//83	۵.	4290	4047	4246	NONE	16	20	40	A	AN
Altura									PBTD				8.625	12.25	1582	750	CIRC
													5.5	7.875	4350	875	65
												1	1100	1		4	A LA
33234	30-025-	29275	33	-18S	-38E	ю Х	//85	- 1	43/3	4046	4224	NONE	13.3/5	c./l	40	AN	AN
Altura													9.625	12.25	1503	650	CIRC**
							-						7	8.75	4372	1125	CIRC**
													1			ľ	
33241	30-025-	07547	g	-18S	-38E	N Z	//32	٩	4252	4052	4252	259	15.5	18	223	387	CIRC
Altura						-		-	2BTD			4094-4236	9.625	12.25	2754	600	1012
											-		7	8.75	3971	350	1990
													5	6.25	4236	150	3918

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Well Name	API	No.	Sec.	-	æ	чЛ	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Operator						Ę	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
33322	30-025-	27169	33	-18S	-38E	U	1//81	_	4392	4058	4230	NONE	16	20	40	40	CIRC
Altura						1			PBTD				8.625	12.25	1600	850	CIRC
													5.5	7.875	4510	915	CIRC
								1			1			1			
33323	30-025-	28951	33	-18S	-38E	ט	///85	a.	4370	4003	4182	NONE	13.375	17.5	40	AN	AN
Altura					-				PBTD				9.625	12.25	1157	650	CIRC
													7	8.75	4370	925	CIRC
33331	30-025-	07546	33		138F.	_	11//31	۵	4734	4181	4209	574	15.5	18	232	475	CRC
Altura						•						1116-1176	9.625	12.25	2757	600	1009
													7	8.75	3930	325	1972
					ļ 								5	6.25	3871-4232	50	3871
33341	30-025-	12757	33	-18S	-38E	0	12//31	٩	4247	4058	4090	4196-4206	15.5	18	215	350	CIRC
Altura												4210-4220	9.625	12.25	2755	600	1013
													7	8.75	3981	325	2016
													5	6.25	3923-4237	100	3923
33342	30-025-	28267	33	-18S	-38E	0	0//83	-	4331	4068	4256	NONE	16	20	40	40	CIRC
Altura									PBTD				8.625	12.25	1565	650	CIRC
													5.5	7.875	4380	725	CIRC
													1				
33412	30-025-	29932	33	-18S	-38П	I	7//87	٩	4436	4171	4341	NONE	9.625	12.25	1542	650	CIRC
Altura													7	8.75	4436	1250	CIRC
33422	30-025-	28268	33	-18S	-38E	) T	1//83	-	4476	4144	4313	NONE	16	20	30	40	CIRC
Altura													8.625	12.25	1664	650	CIRC
													5.5	7.875	4476	750	CIRC
	1																
33431	30-025-	07553	33	-18S	-38E	-	1//31	٩	4227	4038	4169	NONE	13.375	17	241	200	CIRC
Altura													9.625	12.25	2741	600	666
							-						~	8.75	3940	225	2579
													5.5	6.25	3908-4190	40	3908
33432	30-025-	28269	33	-18S	-38E	-	1//83	-	4390	4107	4297	NONE	16	20	40	AA	AA
						-		-			-					1 I	

** Denotes calculated TOC with 50% efficiency

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OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTOR

Well Name	APIN	0	Sec.	-  -	R L	ia ur	ii V	/ell TI	D or	l do	Bot.	Sqz.	Csg.	Hole		No. of	
Operator						-tr Da	ite Ty	/pe Pf	3TD F	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Altura													8.625	12.25	1572	750	CIRC
		+											5.5	7.875	4438	950	CIRC
33433	30-025-	30308	33-	185 -	38E	1 5//8	8	4	270 4	057 4	084	NONE	9.625	12.25	1510	650	CIRC
Altura								đ	BTD				7	8.75	4430	1150	CIRC
33521	30-025-	34643	33 -	-185	38E	C 9//9	0	4	360 4	104	260	NONE	14	18	40	50	CIRC
Altura								ă.	3TD				8.625	12.25	1565	795	CIRC**
													5.5	7.875	4400	1655	4050-CBL
33523	30-025-	34372	33 -	-185	38E	F 7//9	8	4	376 4	095 4	268	NONE	14	18	40	50	CIRC**
Altura								ä	3TD				8.625	12.25	1560	800	CIRC**
													5.5	7.875	4406	1000	CIRC**
33545	30-025-	34416	33 -	185	38E	G 8//9		4	511 4	275 4	354	NONE	14	18	40	50	CIRC**
Altura							-	ä	8TD				8.625	12.25	1550	800	CIRC**
													5.5	7.875	4558	1000	CIRC**
								-									
SHU #5	30-025-	07565	33 -	18S -	38E	P 12//	31 1	0 4	241 4	050 4	208	3183-3187	16	20	209	125	CIRC**
Altura												3254-3258	10.75	16	2752	400	3165**
												3994-4025	8.625	12.25	3946	140	5247**
											7	4025-4038	5.5	7.875	4220	300	2900**
State A-3 #27	30-025- (	07561	33 -	-18S -:	38E	P 7//	49 T	Э А	100 3	179 3	179	NONE	9.625	13.75	338	250	CIRC
Altura								0 I	ВР				5.5	7.375	3160	700	CIRC
			-														
STATE B #6	30-025-		33-	-18S	38E	c 11//	69	~	J62 6	639 6	931 E	5948-5956	13.375	17.5	350	300	CIRC
Altura													9.625	12.25	3805	1400	CIRC**
													7	8.75	3609-7062	805	CIRC**
STATE G #6	30-025-	23334	33 -	18S -:	38E	F 11//	69 F	·9 0	441 6	204 6	148	450-452	11.75	17.5	420	540	CIRC
Altura								đ	3TD		.,	3410-3412	8.625	11	1831	370	1831-TS
											4)	5930-5962	5.5	7.875	6009	400	3500-TS
													4	4.75	5815-7041	75	5815**
																	ĺ
STATE HF #1	30-025-	26368	33 -	185 -:	38E	P   9//7		2	013 6	701 6	922	NONE	13.375	17.5	385	450	CIRC

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Well Name	APLA	Jo.	Sec.		2	] u		Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Operator						_tr	Jate	Type I	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
Altura									PBTD	 			9.625	12.25	4260	1237	CIRC
			ļ										7	8.75	7050	500	2860-TS
WD Grimes NCT-B #7	30-025- 2	23438	33 -	185	38F	с С	0///	a	7059	5836	7008	5848-5988	13.375	17.5	368	400	CIRC
Texland						'  			PBTD				9.625	12.25	3859	2000	CIRC
								+					7	8.75	2099	485	3635
State A-33 # 12	30-025- 2	23195	33 -	18S -	38E	ھ م	//69	٩	6985	6686	6946	NONE	13.375	17.5	422	375	CIRC
Brothers Prod. Co									PBTD				9.625	12.5	3750	325	2850
													7	8.75	7018	525	3700
																-	0010
WD Grimes NCT-B #8	30-025-	24928	33-	-18S -:	38E	T I	1175	۵.	6935	6654	6850	5728-5993	13.375	17.5	398	450	CIRC
Texland								_	PBTD				9.625	12.25	3960	1750	CIRC
													7	8.75	7100	470	2510
Conoco-State #1	30-025-	23759	33 -	18S -	38E	യ യ	1/71	م	7075	5871	6975	NONE	13.375	17.5	418	410	CIRC
Saga Petroleum													9.625	12.25	3799	350	1089
													2	8.75	7075	900	3658
																-	
Conoco-State #2	30-025- 2	23856	33	18S -	38E	т -	1///1	۵.	7075	5830	6533	NONE	13.375	17	402	410	CIRC
Sava Petroleum													9.625	12.25	3797	350	998
													7	8.75	7075	600	3503
Conoco A State #1	30-025-12	24005	33	185 -	38E	0	172	٩	7040	5814	6961	NONE	13.375	17	378	350	CIRC
Saga Petrolaum					-	-		-	PBTD				9.625	12.25	3800	350	1950
													7	8.75	7080	500	3400
Truckers WTR Co. #2	30-025- (	07551	33 -	18S -:	38E	X 10	//49	٩	2935	2060	2410	NONE	9.625	12.25	345	200	CIRC
Truckers WTR Co. Inc./									PBTD				5.5	7.875	3195	1000	CIRC
Yale E. Key, Inc.									-								
					+	+		-	+								
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** Denotes calculated TOC with 50% efficiency

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	TOC	CIRC**	CIRC**	CIRC	CIRC	CIRC	CIRC		CIRC**	CIRC**	CIRC**	CIRC**	CIRC	CIRC**		CIRC	550-TS
No. of	Sxs.	200	850	250	1000	400	800		300	1200	375	1200	 250	700		225	775
	Depth	428	3124	462	3100	448	5.5		362	3199	402	3190	300	3120		289	3140
Hole	Size	11	7.875	12.25	7.875	15	7.375		17.5	7.875	15	7.875	13.375	7.875		12.25	7.875
Csg.	Size	8.625	4.5	9.625	5.5	10.75	5.5		13.375	5.5	10.75	5.5	 9.625	5.5		9.625	5.5
Sqz.	Perfs	NONE		NONE		NONE			3148-3197		NONE		NONE			350	
Bot.	Perf	3166		3178		3190			3197		3161		3226		-	3229	
Top	Perf	3158		3175		3187			3148		3090		3130			3150	
TD or	PBTD	3169		3208	PBTD	3210	PBTD		3200		3194	PBTD	 3055	CMT		2956	CIBP
Well	Type	PA		PA		Ρd		_	ΡA		ΡA		ΡA			PA	
Drill	Date	1//47		1//48		2//49			9//48		5//49		5//48			4//49	
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x		-38E		-38E		-38E			-38E		-38П		 -38E			-38E	
		18S		18S		18S			18S		18S		18S			18S	
Sec.		33 -		33 -		33 -			33 -		33		 33			33 -	
Vo.		12752		07562		07563			07549		07552		07557			07558	
APLI		30-025-		30-025-		30-025-			30-025-		30-025-		30-025-	; ;		30-025-	
Well Name	Operator	STATE B #3	Altura	STATE G #3	Altura	STATE G #4	Altura		State A-33 #8	Conoco	State A-33 #11	Conoco	Grimes B #5	Gulf		WD Grimes B #6	Gulf

Shell Unit C, NW/4 Sec 33, T-18S, R-38E

WELL PLUGGED: 3/30/51

Size: 8.625" Depth: 428' Hole size: 11" Cmt: 200 sxs TOC: Circ.- Calc. 50% efficiency



Spotted 10 sxs plug from 47 to surface.

Shot 4.5" off at 1250'

4

Hole filled with heavy mud.

Size: 4.5" Depth: 3124' Hole size: 7.875" Cmt: 850 sxs TOC:

TD: 3169'

Spot 10 sxs plug from 3135 to 3000'







WELL PLUGGED: 3/18/87

Size: 10.75" Depth: 402' Hole size: 15" Cmt: 375 sxs TOC: Circ.- Calc. 50% efficiency



Spotted 20 sxs plug from 100' to surface

Spotted 20 sxs plug from 470-290'

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### Spotted 20 sxs plug from 1620-1370'

Size: 5.5" Depth: 3190' Hole size: 7.875" Cmt: 1200 sxs TOC: Circ.- Calc. 50% efficiency

TD: 3194'

Spotted 35 sxs plug from 2850-2600'





## LIST OF OFFSET OPERATORS & SURFACE OWNERS

North Hobbs (Grayburg/San Andres) Unit Well No. 534 Letter J, Section 33, T-18-S, R-38-E Lea County, New Mexico

**Offset Operators** 

Occidental Permian Limited Partnership P.O. Box 4294 Houston, TX 77210-4294

Texland Petroleum-Hobbs, LLC 500 Throckmorton, Suite 3100 Ft. Worth, TX 76102-3818

Saga Petroleum LLC 415 W. Wall, Suite 835 Midland, TX 79701

Brothers Production Company, Inc. P.O. Box 7515 Midland, TX 79708

Yale E. Key, Inc. dba Key Energy Services, Permian Basin Division P.O. Box 2040 Hobbs, NM 88241

Surface Owner

Yucca Land Company P.O. Box 2550 Hobbs, NM 88240

on the reverse side?	SENDER: Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b. Print your name and address on the reverse of this form so that w card to you. Attach this form to the front of the mailpiece, or on the back if spa permit. Write "Return Receipt Requested" on the mailpiece below the article The Return Receipt will show to whom the article was delivered at delivered.	ve can return this ce does not cle number. nd the date	I also wish to receive the following services (for an extra fee):         1. □ Addressee's Address         2. □ Restricted Delivery         Consult postmaster for fee.	
ADDRESS completed o	3. Article Addressed to: Texland Petroleum-Hobbs, LLC 500 Throckmorton, Suite 3100 Ft. Worth, TX 76102-3818	<ul> <li>4a. Article N</li> <li>P 436</li> <li>4b. Service</li> <li>□ Registere</li> <li>□ Express</li> <li>□ Z Return Re</li> <li>7. Date of Desire</li> </ul>	umber     0     313     654     End       Type     Image: Strategy of the	
<b>S your BETURN</b>	5. Received By: (Print Name) 6. Signature: (Addressee or Agent) X	8. Addresse and fee is	e's Address (Only if requested paid)	
<u>8</u>	PS Form <b>3811</b> , December 1994 10	02595-97- <b>B-0</b> 179	Domestic Return Receipt	·

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<ul> <li>card to you.</li> <li>Attach this form to the front of the mailpiece, or on the back permit.</li> <li>Write <i>"Return Receipt Requested"</i> on the mailpiece below to</li> <li>The Return Receipt will show to whom the article was delived.</li> </ul>	k if space does not       1.
3. Article Addressed to:	4a. Article Number P 436 313 658
Saga Petroleum LLC 415 W. Wall, Suite 835 Midland, TX 79701	4b. Service Type Registered Ö Certii Express Mail I Insur Ö Return Receipt for Merchandise O COD 7. Date of Delivery
5. Received By: (Print Name) 6. Signature: (Addressee or Agent)	8. Addressee's Address (Only if requeste and fee is paid)

	side	SENDER. Complete items 1 and/or 2 for additional services. Complete items 3. 4a, and 4b.		I also wish to receive the following services (for an	
	rse	Print your name and address on the reverse of this form so that we card to you.	can return this	extra fee):	ല്
	eve	Attach this form to the front of the mailpiece, or on the back if space permit.	e does not	1. 🗖 Addressee's Address	Š
	n the r	<ul> <li>Write Return Receipt Requested on the mailpiece below the article</li> <li>The Return Receipt will show to whom the article was delivered and delivered.</li> </ul>	e number. d the date	2.  Restricted Delivery Consult postmaster for fee.	ipt Sei
	ōp	3. Article Addressed to:	4a. Article N	umber	- ece
	lete		P 436	313 659	ц Ц
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	8	P.O. Box 7515	Registere	ed 🖸 Certified	Ĩ
	SS	Midland, TX 79708	Express I	Mail 🛛 Insured	ŝ
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	RETU	5. Received By: (Print Name)	8. Addressee and fee is	o's Address (Only If requested paid)	Thank
	s your	6. Signature: (Addressee or Agent)	:		
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	SS	Da Rey Energy Services, Permian Basin Division		Mail Insured	Bu
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# AFFIDAVIT OF PUBLICATION

State of New Mexico, County of Lea.

# I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a 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 _____

_weeks.

. 2000

Beginning with the issue dated

December 31 1999

and ending with the issue dated

December 31 ____ 1999

Publisher Sworn and subscribed to before

me this <u>3rd</u> day of

January

Notary Public.

My Commission expires October 18, 2000 (Seal)

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

LEGAL NOTICE December 31, 1999 Notice is hereby given of the application of Altura Energy LTD, Attn: Mark Stephens, P.O. Box 4294, Rm. 338-B, Houston, TX 77210-4294 (281/552-1158), to the Oil Conservation Division, New Mexico Energy, Minerals and Natural Resources Department, for approval of the following injection wells for the purpose of secondary recovery: Pool Name: Hobbs; Grayburg-San Andres Lease/Unit Name: North Hobbs G/SA Unit Well No. 231 Loc.; 2310' FSL & 2310' FWL, Unit Letter K, Sec. 19, T-18-S, R-38-E, Lea Co., NM Well No. 422 Loc.: 2310' FNL & 330' FWL, Unit Letter H, Sec. 24, T-18-S, R-37-E, Lea Co., NM Well No. 431 Loc.: 2310' FSL & 330' FEL, Unit Letter I, Sec. 25, T-18-S, R-37-E, Lea Co., NM Well No. 131 Loc.: 2310' FSL & 330' FWL, Unit Letter L, Sec. 28, T-18-S, R-38-E, Lea Co., NM Well No. 332 Loc.: 2470' FNL & 1800' FEL, Unit Letter G, Sec. 28, T-18-S, R-38-E, Lea Co., NM Well No. 231 Loc.: 2310' FSL & 1650' FWL, Unit Letter K, Sec. 29, T-18-S, R-38-E, Lea Co., NM Well No. 321 Loc.: 2310' FNL & 1650' FEL, Unit Letter G, Sec. 29, T-18-S, R-38-E, Lea Co., NM Well No. 223 Loc.: 1770' FNL & 2405' FWL, Unit Letter F, Sec. 30, T-18-S, R-38-E, Lea Co., NM Well No. 411 Loc.: 330' FNL & 3300' FEL, Unit Letter A, Sec. 30, T-18-S, R-38-E, Lea Co., NM Well No. 211 Loc.: 440' FNL & 2310' FWL, Unit Letter C, Sec. 31, T-18-S, R-38-E, Lea Co., NM Well No. 144 Loc.: 765' FSL & 1175' FWL, Unit Letter M, Sec. 32, T-18-S, R-38-E, Lea Co., NM Well No. 312 Loc.: 210' FNL & 1400' FEL, Unit Letter B, Sec. 32, T-18-S, R-38-E, Lea Co., NM Well No. 431 Loc.: 2310' FSL & 330' FEL, Unit Letter I, Sec. 32, T-18-S, R-38-E, Lea Co., NM Well No. 111 Loc.: 330' FNL & 330' FWL, Unit Letter D, Sec. 33, T-18-S, R-38-E, Lea Co., NM Well No. 211 Loc.: 330' FNL & 2310' FWL, Unit Letter C, Sec. 33, T-18-S, R-38-E, Lea Co., NM The injection formation is the Hobbs; Grayburg - San Andres Pool between the intervals of +/- 3700' and +/- 5300' below the surface of the ground. Expected maximum injection rate is

+/- 3700' and +/- 5300' below the surface of the ground. Expected maximum injection rate is 4000 BWPD and the expected maximum injection pressure is approximately 805 psi. Interested parties must file objections or requests for hearing with the Oli Conservation Division, 2040 S. Pacheco, Santa Fe, NM 87505 within fifteen (15) days. #17073

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altura P. O. Box 4294 Houston, TX 77210-4294