PMX 5/26/98



May 8, 1998

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



RE: Expansion of Pressure Maintenance Project North Hobbs (Grayburg/San Andres) Unit Hobbs; Grayburg – San Andres Pool Well No. 331 Letter J, Section 32, T-18-S, R-38-E Lea County, NM

Gentlemen:

Altura Energy LTD respectfully requests administrative approval for expansion of the subject pressure maintenance project by converting North Hobbs (G/SA) Unit Well No. 331 from production to water injection. Administrative Order No. R-6199 granted November 30, 1979, authorized Shell Western E&P Inc. (Altura'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. 331). 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 that are 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 or require additional information, please call me at (281) 552-1158.

Very Truly Yours,

Mark Stephens

Mark Stephens Business Analyst (SG)

CC: Oil Conservation Division Hobbs District Office P.O. Box 1980 Hobbs, NM 88241

> 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)

	SIA	il Ji	NLH	HÊλ.	100
ENERGY	AND	MINE	RALS	DEP	ARTHENT

I.	Purpose:	Secondary Recovery X Pro	essure Maintenance	Disposal Storage
11.	Operator:	Altura Energy LTD	ve approval? [X]ye	es []no
	Address;	P.O. Box 4294, Hous	ton, Texas 77210-4	294
	Contact part	v: Mark Stephens	Phone	. (281) 552-1158
III.	Well data:	Complete the data required or proposed for injection. Addi	the reverse side of tional sheets may be	f this form for each well e attached if necessary.
IV.	Is this an e If yes, give	xpansion of an existing proje the Division order number au	ect? X yes (thorizing the project	
۷.	Attach a map injection we well. This	that identifies all wells ar ll with a one-half mile radic circle identifies the well's	nd leases within two us circle drawn arour area of review.	miles of any proposed nd each proposed injection
• VI.	Attach a tab penetrate th well's type, a schematic	ulation of data on all wells e proposed injection zone. S construction, date drilled, of any plugged well illustrat	of public record with Such data shall inclu location, depth, rec sing all plugging def	thin the area of review whic ude a description of each cord of completion, and tail.
VII.	Attach data	on the ^l proposed operation, ir	cluding:	
	1. Prop 2. Whet 3. Prop 4. Sour th 5. If i at th li	osed average and maximum dail her the system is open or clo osed average and maximum inje ces and an appropriate analys e receiving formation if othe njection is for disposal purp or within one mile of the pr e disposal zone formation wat terature, studies, nearby wel	y rate and volume of sed; ction pressure; is of injection flui r than reinjected pr oses into a zone not oposed well, attach er (may be measured ls, etc.).	f fluids to be injected; id and compatibility with roduced water; and t productive of oil or gas a chemical analysis of or inferred from existing
*VIII.	Attach appro detail, geol bottom of al total dissol injection zo injection in	priate geological data on the ogical name, thicknass, and d l underground sources of drin ved solids concentrations of ne as well as any such source terval.	injection zone inc] lepth. Give the geol king water (aquifers 10,000 mg/l or less) known to be immedia	luding appropriate lithologi logic name, and depth to s containing waters with) overlying the proposed ately underlying the
IX.	Describe the	proposed stimulation program	, if any.	
€ X.	Attach appro with the Div	priate logging and test data ision they need not be resubm	on the well. (If we mitted.)	ell logs have been filed
×I.	Attach a che available an location of	mical analysis of fresh water d producing) within one mile wells and dates samples were	from two or more fr of any injection or taken.	resh water wells (if disposal well showing
XII.	Applicants f examined ava or any other source of dr	or disposal wells must make a ilable geologic and engineeri hydrologic connection betwee inking water.	n affirmative statem ng data and find no n the disposal zone	ment that they have evidence of open faults and any underground
XIII.	Applicants m	ust complete the "Proof of No	tice" section on the	e reverse side of this form.
XIV.	Certificatio	n .	·	
	I hereby cer to the best	tify that the information sub of my knowledge and belief.	mitted with this app	olication is true and correc
	Name:	Mark Stephens	Title	Business Analyst (SG)
	Signature:	Mark Skohuns	Date:	May 8, 1998

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

111. 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 500 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.

ENERGY	STALL OF NE AND MINERAL	N MÉXICO S DEPARTMENT	UIL UÜIVSCHVA'I UIV DIVISIO POSI OFFICE BOX 2010 STATE LAND OFFICE BUILDING GANTA FE, NEW MERICA BUSDI	N	FURM C-1678 Revised 7-1-81
•	•				
APPLICAT	ION FOR AUTH	ORIZATION TO INJECT			_
I.	Purpose: [Applicati	Secondary Recovery on qualifies for adm	X Pressure Maint inistrative approval	enance Disp ? Xyes [nsal 🗌 Storage]nø
11.	Operator:	Altura Energ	gy LTD	··· .	
	Address:	P.O. Box 42	94, Houston, Texas	77210-4294	
	Contact part	y: <u>Mark Stephe</u>	îs	Phone:(281) 552-1158
111.	Well data:	Complete the data re proposed for injecti	quired on the revers on. Additional shee	e side of ṫhis f ts may be attach	orm for each well ed if necessary.
IV.	Is this an e If yes, give	xpansion of an exist the Division order	ing project? X y number authorizing t	esno	6199 (11/30/79)
۷.	Attach a map injection we well. This	that identifies all ll with a one-half m circle identifies th	wells and leases wi ile radius circle dr e well's area of rev	thin two miles o awn around each iew.	f any proposed proposed injection
* VI.	Attach a tab penetrate th well's type, a schematic	ulation of data on a e proposed injection construction, date of any plugged well	ll wells of public r zone. Such data sh drilled, location, d illustrating all plu	ecord within the all include a de epth, record of gging detail.	area of review which scription of each completion, and
VII.	Attach data	on the proposed oper	ation, including:	. •	
	1. Prop 2. Whet 3. Prop	osed average and max her the system is op osed average and max	imum daily rate and en or closed; imum injection press	volume of fluids ure;	to be injected;
• `	4. Sour th 5. If i	ces and an appropria e receiving formatio njection is for disp	te analysis of injec n if other than rein osal purposes into a	tion fluid and co jected produced of zone not produc	ompatibility with water; and tive of oil or gas
	at th li	or within one mile e disposal zone form terature, studies, n	of the proposed well ation water (may be earby wells, etc.).	, attach a chemi measured or infe	cal analysis of rred from existing
*VIII.	Attach appro detail, geol bottom of al total dissol injection zo injection in	priate geological da ogical name, thickna l underground source ved solids concentra ne as well as any su terval.	ta on the injection ss, and depth. Give s of drinking water tions of 10,000 mg/l ch source known to b	zone including a the geologic na (aquifers contai or less) overly e immediately un	ppropriate lithologic me, and depth to ning waters with ing the proposed derlying the
IX.	Describe the	proposed stimulatio	n program, if any.		
* X.	Attach appro with the Div	priate logging and t ision they need not	est data on the well be resubmitted.)	. (If well logs	have been filed
* XI.	Attach a che available an location of	mical analysis of fr d producing) within wells and dates samp	esh water from two o one mile of any inje les were taken.	r more fresh wat ction or disposa	er wells (if l well showing
XII.	Applicants f examined ava or any other source of dr	or disposal wells mu ilable geologic and hydrologic connecti inking water.	st make an affirmati engineering data and on between the dispo	ve statement tha find no evidenc sal zonc and any	t they have e of open faults underground
XIII.	Applicants m	ust complete the "Pr	oof of Notice" secti	on on the revers	e side of this form.
XIV.	Certificatio	n	•		
	I hereby cer to the best	tify that the inform of my knowledge and	ation submitted with belief.	this applicatio	n is true and correct
	Name:	Mark Stephens	Τ	itle Business	s Analyst (SG)
	Signature: _	Mark Skphe	hs	Date: <u>Ma</u>	y 8, 1998
* If the submit of the	e information tted, it need e carlier sub	required under Sect not be duplicated a mittal. Hearing (ions VI, VIII, X, an nd resubmitted. Ple October 3, 1979; Cas	d XI above has b ase show the dat se No. 6653, Ore	cen previously e and circumstance der No. R-6199

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Attachment To Form C-108 Miscellaneous Data

North Hobbs (Grayburg/San Andres) Unit Well No. 331 Letter J, Section 32, 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. 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 Reinjected Produced Water (analysis attached)

IX. Stimulation Program

Acid treatment of unitized perforations will be performed during conversion work

XII. Altura Energy LTD 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.



P.O. BOX 2187 HOBBS, NEW MEDICO 98240

Saturation Index Calculations

Champion Technologies, Inc. (Based on the Tomson-Oddo Model)

Telephone (505) 393-7726

Site Information

-

Company	Altura	
Field	North Hobbs Unit	
Point	IPD	
Date	4/15/98	

Water Analysis (mg/L)

1,122
194
0
Û
3730
1,769
1,726
6,000

Appended Data

which mark	
Dissolved CO2	228 mg/L
Dissolved O2	N/A PPB
H2S	596 mg/L
Iron	0.0 mg/L
Specific Gravity	1.010 value
TDS	14551 mg/L
Total Hardness	3600 mg/L
Well head pH	N/A value

* - Calculated Value

Physical Properties

lonic Strength*	0.29
pH†	6.52
Temperature	86°F
Pressure	100 psia

* - Calculated Value + - Known/Specified Value

Calcite Calculation Information

Calculation Method	Value
pH	6.52
Bicarbonate Alkalinity Correction(s)	Value
None Used	^+u

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	0.48	310.4
Gypsum (Calcium Sulfate)	-0.45	N/A
Hemihydrate (Calcium Sulfate)	-0.32	N/A
Anhydrite (Calcium Sulfate)	-0.72	N/A
Barite (Barium Sulfate)	N/A	N/A
Celestite (Strontium Sulfate)	N/A	N/A



HOBBS, NEW MEDICO 88240

Ranged Data

Champion Technologies, Inc.

Telephone (505) 393-7726

Site Information

; '

Company	Altura
Field	North Hobbs Unit
Point	IPD
Date	4/15/98

SI Results

Temperature (°F)	Calcite	Gypsum	Hemihydrat	Anhydrite	
70	0.32	-0.45	-0.30	-0.83	
82	0.44	-0.45	-0.32	-0.75	
94	0.56	-0.46	-0.33	-0.67	
107	0.69	-0.46	-0.35	-0.58	
119	0.81	-0.46	-0.36	-0.50	
131	0.93	-0.46	-0.37	-0.43	
143	1.05	-0.46	-0.37	-0.35	
156	1.18	-0.46	-0.38	-0.27	
168	1.30	-0,46	-0.38	-0.19	
180	1.42	-0.46	-0.37	-0.12	



District I FO Box 1980, Hobbs, NM 88241-1980 District II

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PO Drawer DD, Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV PO Box 2088, Santa Fe, NM 87504-2088 OIL CONSERVATION DIVISION

PO Box 2088 Santa Fe, NM 87504-2088 Form C-102 Revised February 21, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

	WELL LOCATION AND ACREAGE DEDICATION PLAT									
¹ API Number 30-025-07538				* Pool C 3192	² Pool Code 31920 HOBBS; GRAYBURG - SAN ANDRES					
⁴ Property 1952(Code)	NOI	*Property Name ⁶ Well Numb NORTH HOBBS (GRAYBURG-SAN ANDRES) UNIT 331					Well Number 331		
⁷ ogrid 15798	No. 34			A	⁰ Opera	tor Name IERGY LTD.			3	^e Elevation 634.00'
					¹⁰ Surfac	e Location			<u></u>	
UL or lot no.	Section	Township	Range	Lot Idn	. Feet from th	e North/South line	Feet from the	EastWest	line	County
J	32	18S	38E		2310'	SOUTH	2310'	EAS	ST	LEA
	- • *		ⁿ Botte	om H	ole Location	If Different Fr	om Surface			
UL or lot no.	Section	Township	Range	Lot Idn	. Feet from the	e North/South line	Feet from the	East/West	line	County
¹² Dedicated Acro	a ¹³ Joint	or Infill ¹⁴ (Consolidation	Code	⁵ Order No.		I			
NO ALLO	WABLE V	WILL BE	ASSIGNEI NON-ST	D TO T ANDARI	THIS COMPLE D UNIT HAS	TION UNTIL ALI BEEN APPROVED	. INTERESTS H by the div	HAVE BE VISION	EN CO	NSOLIDATED
16 17 OPERATOR CERTIFICA 1 bereby certify that the information contained true and complete to the best of my knowledg Mark Stephens Frinted Name Business Analyst (SC) Title April 30, 1998 Date						IFICATION ontained herein is thowledge and belief. S SG)				
	 			•	Well No. 331 ALTURA	2310'	¹⁸ SURV I hereby certify was plotted from and correct to <u>JAN</u> Date of Survey Signature and	EYOR that the wei m field not ny supervision the best of m VUARY Scal of Prof	CERT Il location a es of actual n, and that ny belief. 15. fessional Su	FICATION hown on this plat surveys made by the same is true 1998 sveyor
				2310'			Certificate Nu	NY Q. VRRY 11	- Ju A. FIS 1013	R SHER

idistrict I PO Box 1980, Hobbs, NM 88241-1980 District II

PO Drawer DD, Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec, NM 87410

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PO Box 2088 Santa Fe, NM 87504–2088 Form C-102 Revised February 21, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

____ AMENDED REPORT

		WEI	L LO		N AND	ACR	REAGE DEDIC	CATION PI	AT		
30-0	API Numb 25-07	≖ ′538		* Pool Co 3192	de O		HOBBS; (*Pool Na SRAYBURG	ime - SA	N AN	IDRES
▲ Property 1952(Code	NOF	тн н	OBBS	(GRAYE	erty BUR	Name RG-SAN ANE	RES) UNIT	Г	6	Well Number 331
⁷ ogrid 15798	№. 34			AL	•оре TURA E	nator NE	Name RGY LTD.			3	*Elevation 634.00'
L					¹⁰ Surfa	ace	Location			L <u></u>	
UL or lot no. J	Section 32	Township 185	Range 38E	Lot Idn.	Feet from 2310	the)'	North/South line SOUTH	Feet from the 2310'	EastWest EAS	line ST	County LEA
		l	¹¹ Bott	om Ho	le Locatio	on]	If Different Fro	om Surface			
UL or lot no.	Section	Township	Range	Lot Idn.	Feet from	the	North/South line	Feet from the	East/West	line	County
¹² Dedicated Acro	es ¹³ Joint	or Infill ¹⁴ C	onsolidation	a Code ¹⁵	Order No.		L				L
NO ALLO	WABLE V	WILL BE A	SSIGNEI	D TO TI ANDARD	HIS COMPL UNIT HA	ETI S BI	ON UNTIL ALL	INTERESTS H	IAVE BE	EN CO	NSOLIDATED
	 						2310'	I bereby certification to the second complete true and complete tr	tephens 30, 199	best of my i best of my i lyst (98 CERT	SG)
	 			2310'	Vell No. 331 ALTURA			I bereby certify was plotted from and correct to JAN Date of Survey Signature and Certificate Nu	r that the wear man field not ny supervision the best of m NUARY I Seal of Prod Seal of Prod MRRY mober 1	Il location is es of actual n, and that ny belief. <u>15,</u> fessional Su <u>A. F1S</u>	thown on this plat surveys made by the same is true <u>1998</u> streeyor SHER

District I PO Box 1980, Hobbs, NM 88241-1980 District II

PO Drawer DD, Artesia, NM 88211-0719 District III

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		WE	LL LO	CATIC	ON AND	ACI	REAGE DEDI	CATION PI	AT		
30-0	API Numb 25-07	. 7538		* Pool 9 319	Code 20		HOBBS; (Pool Na	ame - SA	N AN	IDRES
4 Property	Code				⁵ Pro	operty	Name			6	Well Number
19520)	NO	RTH H	OBBS	GRAY	BUF	RG-SAN ANE	DRES) UNI	Γ		331
⁷ OGRID 15798	No. 34			А	•op LTURA I	erator ENE	Name RGY LTD.			3	^e Elevation 6.34.00'
		L	<u> </u>		¹⁰ Sur	face	Location				
UL or lot no.	Section	Township	Range	Lot Id	1. Feet from	the	North/South line	Feet from the	EastWest	line	County
J	32	185	38E		231	0'	SOUTH	2310'	EAS	ST	LÉA
			¹¹ Bott	om H	lole Locati	ion	If Different Fro	om Surface			
UL or lot no.	Section	Township	Range	Lot Id	. Feet from	the	North/South line	Feet from the	East/West	line	County
HD dicted Acr	n 15 Yoint	gr Infill 1 H	Consolidation	Codel	¹⁵ Order No.		<u> </u>				
-Dentalist All	as jour		CONFORMATION		Older No.						
NO ALLO	WABLE	WILL BE	ASSIGNE	D TO	THIS COMP	LETI	ON UNTIL ALL	INTERESTS I	LAVE BE	EN CO	NSOLIDATED
		<u>OR</u> A	<u>NON-SI</u>	ANDAR	D UNIT H	AS B	EEN APPROVED	BY THE DIV	ISION		
16	1								ATOR	CERT	IFICATION
	1							I hereby certil true and com	ly that the in plete to the	formation of my l	contained herein is knowledge and belief.
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	1					l					
	·			-		[- Mar	KSK	shen	5
	1		·			 		Mark S	tephens	3	
						ĺ		Printed Nam	e		CO)
								Busine	ss Ana	Lyst (5 G)
						i		April	30, 19	98	
						ĺ		Date			
	1						2310'	¹⁸ SURV	EYOR	CERT	IFICATION
					Well No. 331		2310	I hereby certify	y that the we	ll location a	hown on this plat
					ALTURA			and correct to	ny supervisio the best of n	n, and that ay belief.	the same is true
								JAN Data of Surger	VUARY	15,	1998
		<u> </u>		┦━╾┥	<u> </u>				Seal of Pro	femional Su	urveyor
	ז 										
				10,				D	0	1-	-0
				23		İ) Nar	ry (l.	Ju.	ithe
	۱]		L/	ARRY	A. FIS	SHER
								Certificate Nu	mber 1	1013	

District I
 PO Box 1980, Hobbs, NM 88241–1980
 District II
 PO Drawer DD, Artesia, NM 88211–0719

District III

1000 Rio Brazos Rd., Aztec, NM 87410

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		WEI	T ro	CATIO	N AND	ACR	EAGE DEDIC	CATION PI	AT	_	
30-0	API Numb 25-07	- 7538		* Pool Co 3192	nde O		HOBBS; G	Pool Na SRAYBURG	ume - SA	N AN	IDRES
* Property 1952(Code)	NOF	тн н	OBBS	۶۲۰۰۶ GRAYE)	perty BUR	Name 2G-SAN ANE	RES) UNI	Г	61	Well Number 331
⁷ OGRID 15798	No. 34			AL	°ope TURA E	NE	Name RGY LTD.			30	^e Elevation 534.00'
					¹⁰ Surfa	ace	Location			•	
UL or lot no. J	Section 32	Township 18S	Range 38E	Lot Idn.	Feet from 2310	the)'	North/South line SOUTH	Feet from the 2310'	EastWest EAS	line ST	County LEA
	L		¹¹ Bott	om Ho	ole Locatio	on 1	lf Different Fro	om Surface	L		· · ·
UL or lot no.	Section	Township	Range	Lot Idn.	Feet from	the	North/South line	Feet from the	East/West	line	County
¹² Dedicated Acr	es ¹⁵ Joint	or Infill ¹⁴ C	onsolidation	a Code 15	Order No.			L	L		L
NO ALLO	WABLE V	VILL BE A OR A	SSIGNEI NON-ST	D TO T ANDARD	HIS COMPL UNIT HA	ETIC S BE	ON UNTIL ALL CEN APPROVED	INTERESTS H BY THE DIV	IAVE BE ISION	EN CO	NSOLIDATED
16								17 OPERA I bereby certific true and comp Signature Mark S Printed Name Busine Title April Date 18 CHIDAU	ATOR y that the implete to the control of the tephens ss Anal 30, 199	CERT formation of best of my b Oluch S Lyst (98	SG)
	י 			2310'	Vell No. 331 ALTURA		2310'	I bereby certify was plotted fro me or under m and correct to 	that the we m field not ay supervision the best of m <u>VUARY</u> Seal of Prof MARY mber 1	CERTINIE Il location s es of actual a, and that by belief: 15, fessional Su $-\int U_{c}$ A, FIS 1013	hown on this plat surveys made by the same is true 1998 sveyor Re SHER

PMX 5/26/98



May 8, 1998

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



RE: Expansion of Pressure Maintenance Project North Hobbs (Grayburg/San Andres) Unit Hobbs; Grayburg – San Andres Pool Well No. 142 Letter M, Section 33, T-18-S, R-38-E Lea County, NM

Gentlemen:

Altura Energy LTD respectfully requests administrative approval for expansion of the subject pressure maintenance project by converting North Hobbs (G/SA) Unit Well No. 142 from production to water injection. Administrative Order No. R-6199 granted November 30, 1979, authorized Shell Western E&P Inc. (Altura'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. 142). 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 that are 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 or require additional information, please call me at (281) 552-1158.

Very Truly Yours,

.

Mark Stephens

Mark Stephens Business Analyst (SG)

CC: Oil Conservation Division Hobbs District Office P.O. Box 1980 Hobbs, NM 88241

> 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)



INJECTION WELL DATA SHEET

NHU 32-131	Marathon St. Sec 32 #9	Marathon St. #8 (Saga #9)	Chevron WD Grimes NCT-A #18	Chevron WD Grimes NCT-A #17	Amerada Hess (Collins & Ware) St. A #4	Shell (Altura) St. A #6	Shell (Altura) St. A #1	Well Name
30-025-07527	30-025-23309	30-025-07542	30-025-22915	30-025-22792	30-025-23076	30-025-22944	30-025-12504	API #
32 - 18S - 38E		21 - 185 - 386	32 - 18S - 38E	32 - 18S - 38E	32 - 18S - 38E	32 - 18S - 38	32 - 18S - 38	Location
		_	ייי	0	B	ייי ם	۱۱ ۵	Un Ltr
8/12/34		7/2/48	2/1/69	10/19/68	3/27/69	4/1/69	3/1/40	Drill Date
Prod.		Prod.	Prod.	Prod.	Prod.	Prod.	Prod.	Туре
4250		3192	6020	6150	5325	6200	4175	PBTD
4118		Р	5772	5780	5375	5805	3621	Perf.
4237			5928	5949	5966	5929	3685	Btm. Perf.
								Sqz. Perfs.
13 3/8 9 5/8 7 4.5 Lnr		8 5/8 5 1/2	13 3/8 8 5/8 5 1/2	13 3/8 9 5/8 7	11 3/4 8 5/8 5 1/2 Lnr	13 3/8 8 5/8 5.5 Lnr	12 1/2 9 7	Csg. Size
		7 11	17 1/2 11 7 7/8	17 1/2 12 1/4 8 3/4	15 11 7 7/8	17 1/2 12 1/4 7 7/8	12 8-3/4	Hole Size
212 2740 3986 3813-4250		300 3124	351 3799 6019	366 3399 6149	380 3810 3695-5998	357 3820 3566-6020	222 2755 3850	Depth
200 350 150 65		125 1000	335 500	370 1450 545	350 325 325	350 500	135 600 200	No. of Sxs
3140 CBL 4110 CBL		Circ 350	1718 calc 2470	Circ. Calc 2510	Circ. 1354 Calc Circ.	Circ. 1770 Calc Circ.	910 Calc 2445 Calc	Тос

Active Offset Wells within 1/2 mile radius of propsed 32-331 conversion

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		Active) Offset We	ells wi	thin 1/2 mi	le radii	us of pro	opsed (32-331 (conversion					
Well Name	API #	5	ocation	두도	Drill Date	Туре	TD or PBTD	Top Perf.	Btm. Perf.	Sqz. Perfs.	Csg. Size	Hole Size	Depth	No. of Sxs	TOC
NHU 32-132	30-025-27139	32 -	18S - 38E	-	12/3/80	Ŋ	4510	4128	4254	4092-4097	16 8 5/8		40 1550	40 875	Circ Circ
											5 1/2		4510	1275	Circ
NHU 32-142	30-025-28265	32 - 1	18S - 38E	Σ	9/5/83	Ŋ	4460	4135	4313		16		40	2 2 6	2
											8 5/8 5 1/2		1525 4460	680 850	Circ 2700 CBL
NHU 32-144	30-025-31662	32 - 1	18S - 38E	Σ	11/01/93	Prod.	4400	4163	4247		13 3/8 8 5/8	17 1/2 12 1/4	40	850	Dirr
											5 1/2	7 7/8	4400	810	Circ
NHU 32-211	30-025-07525	32 - 1	18S - 38E	0	2/3/31	Prod.	4252	4083	4206		13 3/8	17	189	200	Circ
											9/0 B	12 1/4 8 3/4	3860	300	977 2210 CBL
											5 Lnr	ω	1782-4251		
NHU 32-212	30-025-30258	32 - 1	18S - 38E	0	3/29/88	Prod.	4304	4135	4256		13 3/8	17 1/2	40	60	2
											2 7	12 1/4 8 3/4	4350	1150	Circ
NHU 32-221	30-025-07520	32 - 1	18S - 38E	П	7/1/30	Prod.	4050	3864	3956		15 1/2		206	200	
											9 5/8		2751 3040	800	DROD CRI
											4 1/2	ധ	748-4289	70	Circ.
NHU 32-222	30-025-27140	32 - 1	8S - 38E	וד	11/21/80	Ŋ		4090	4256		16		40	40	Circ
											8 5/8		1607	800	Circ
											5 1/2		4510	900	724 CBL
NHU 32-223	30-025-28944	32 - 1	8S - 38E	п	3/27/85	IJ	4325	4079	4251		13 3/8		40		
											9 5/8 7		1500	600 75	Circ
											-		4369	9/6	Circ

.

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		Activ	re Offset We	lls wit	hin 1/2 mi	le radiu	is of pro	opsed 3	32-331 conversion					
				U n	Drill		TD or	Тор	Btm. Sqz.	Csg.	Hole		No. of	
Well Name	API #	-	-ocation	Ę	Date	Туре	PBTD	Perf.	Perf. Perfs.	Size	Size	Depth	Sxs	TOC
NHU 32-231	30-025-07521	32 -	18S - 38E	ㅈ	8/28/30	Prod.	4030	3961	4000 4068-4192	15 1/2 9 5/8		207 2738	600	996 Calc
										7		3946	300	2246
										4 1/2		3701-4194	90	Circ
NHU 32-232	30-025-23035	32 -	18S - 38E	⊼	4/69	Prod.	4201	4115	4191 4234-36	13-3/8	17-1/2	383	400	Circ.
										8-5/8 5-1/2	11 7-7/8	3829 6019	500 450	2041 Calc 3680 CBL
NHU 32-241	30-025-07533	33	18S - 38E	z	12/19/48	Prod.	4250	오	3850-4072	13 3/8		328		Circ
		i								7		4094		2337
NHU 32-313	30-025-30263	32 -	18S - 38E	B	4/7/88	Prod.	4350	4120	4229	14 9 5/8	17 12 1/4	53 1510	650	Circ
										7	8 3/4	4346	1250	Circ
NHU 32-321	30-025-12506	32 -	18S - 38E	ß	3/27/85	Ŋ	4275	4056	4237	12 1/2		230	200	Circ
										9 6-5/8		2759 3950	600 225	Circ 2472 CBL
										3.5 Lnr.		3808-4274	85	Circ
NHU 32-322	30-025-07518	32 -	18S - 38E	മ	7/20/30	Prod.	4251	4110	4210 4035-4076	12 1/2		240	200	
										8 5/8		2750	200 200	
										, 5.5 Lnr		3911-4217	100	Circ
NHU 32-323	30-025-26973	32 1	18S - 38E	۵	9/5/80	Z	4400	4062	4278 4304-4332	16		40		Circ
										8 5/8		1600		Circ
										5 1/2		4400		3624
NHU 32-341	30-025-07539	32 -	18S - 38E	0	8/28/30	IN	4236	4174	4230	16		221	250	Circ.
										9 5/8		2750	556	1136
										л –		3925 4235	60 60	2564 3366 CBI
										σ		4200	g	

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NHU	NHU	NHC	NHU (Shell	NHC	NHU	NHU	Well
32-441	32-432	32-431	32-424 St. A #7)	32-421	32-343	32-342	Name
30-025-07536	30-025-26974	30-025-07537	30-025-23130	30-025-12507	30-025-29906	30-025-28266	API #
32 -	32 -	32 -	32 1	32 -	32 -	32 -	Activ
18S -	18S -	18S -	- S8	18S -	18S -	18S -	e Offs ocati
38E	38E	38E	38E	38E	38E	38E	on We
ס		_	I	г	0	0	un Un
8/14/30	10/9/80	6/26/30	6/14/69	8/24/30	05/30/87	9/25/83	hin 1/2 mi Drill Date
Prod.	N	Prod.	Prod.	Prod.	Prod.	Ŋ	le radii Type
4244	4400	4175	5210	4219	4370	4430	us of pro
4060	4062	4066	4128	4092	4141	4091	Top Perf.
어	4250	4220	4244	4202 404	4206 403	4283	32-331 cor Btm. Perf.
				t6-56	30-4235		iversion Sqz. Perfs.
12 1/2 8 5/8 7 5	16 8 5/8 5 1/2	12 1/2 9 5/8 7 5	13 3/8 8 5/8 5 1/2	12-1/2 9-5/8 7 5-1/2 Lnr	14 9 <i>5/</i> 8 7	16 8 5/8 5 1/2	Csg. Size
			17 1/2 12 1/4				Hole Size
186 2750 3871 4234	40 1600 4400	205 2750 3968 4244	350 3790 3850-7015	245 2755 3950 3916-4219	40 1498 4370	30 1522 4430	Depth
125 400 60	40 850 950	225 475 350 65	350 1300	200 600 225 125	600 1150	40 700	No. of Sxs
Circ 1282 Calc 2459 3500 CBL	Circ Circ	Circ 1007 Calc 1851 Calc 2580 TS	Circ. Circ.	2385 CBL Circ.	Circ Circ	Circ 1000 CBL	ТОС

		Plugged Offset V	vells w	ithin 1/2 n	nile radi	us of pr	opose	d 32-331	convesion					
			S	Drill		TD or	Top	Btm.	Sqz.	Csg.	Hole		No. of	
Well Name	API #	Location	Ę	Date	Туре	PBTD	Perf.	Perf.	Perfs.	Size	Size	Depth	Sxs	TOC
St Sec 32 #1										7	8.75	3850	275	1917 calc
										Сл		3244	500	Circ.
NHU 32-311	03-025-07515	32 - 18S - 38E	Β	8/30	Prod.	4165	9 H			12-1/2	16	207	200	Circ. Calc
Amerada										9-5/8	11-3/4	2739	425	1179 Calc
St A #1										7	8-3/4	3938	350	2740 CBL
Chevron WD Grimes														
NCT-B No. 6	30-025-07558	32 - 18S - 38E	-	3/24/49	Prod.	3229	오			9-5/8	12-1/4	300	225	Circ.
										5-1/2	7-7/8	3150	775	550 Calc.

		ggnlc	ed Off	set W	ells w Un	ithin 1/2 m Drill	nile radi	TD or	opose Top	d 32-331 Btm.	convesion Sqz.	Csg.	Hole	-	No. of	100
		3	180			0/21//8	Pmd	318/				8 5/8	±	402		Circ. (calc
Shell (Altura) St. A #5	30-025-08409	32 -	- 18S -	38E	т	9/21/48	Prod.	3184	오			8 5/8 5	11 7 3/4	402 3133	800	Circ.(calc Circ.(calc
Amerada Hess St. A #3	30-025-07517	32 -	- 18S -	38E	œ	1/17/47	Prod.	3162	3149	3150		10 3/4 7 5/8 5 1/2	13 3/4 9 7/8 6 3/4	221 1570 3164	200 600	95 Calc Circ.
Chevron WD Grimes NCT-A #11	30-025-07529	32 -	18S -	38E	ш	12/22/47	Prod.	3169	우			9 5/8 7	12 1/4 8 3/4	307 3140	600 600	Circ.(Calc 2160 (TS
Chevron WD Grimes NCT-A #12	30-025-07530	32 -	- 18S -	38E	F	1/26/48	Prod.	3190	우			9 5/8 7	12 1/4 8 3/4	304 3145	200 700	2irc. (Calo 1090 (TS
Chevron WD Grimes NCT-A #13	30-025-7531	32 -	18S -	38E	т	2/17/48	Prod.	3222	우			8 5/8 5 1/2	12 7 3/8	312 3140	225 600	Circ. 1555 (TS)
Chevron WD Grimes NCT-A #14-Y	30-025-07534	32 -	- 18S -	38E	Σ	3/9/48	Prod.	3256	우			9 5/8 5 1/2	12 1/4 8 3/4	331 3141	225 800	Circ. Calc 355 (TS)
Marathon St #6 (Saga)	30-025-07540	32 -	- 18S -	38E	0	5/12/48	Prod.		3154	3200		8 5/8 5 1/2	11 7	301 3116	125 (750	Circ.(Calc 33(
Marathon St. #7 Saga	30-025-07541	32 -	- 18S -	38E	ס	6/29/48	Prod.	3213	3157	3206		8 5/8 5 1/2	7 11	310 3116	125 1000	Circ. Calo Circ. Calo
Ohio Oil (Marathon) St. Northrup #1	30-025-07535	32 -	- 18S -	38E	ب	6/30/30	Prod.	3227	우			20 12 1/2 10-3/4	16 13.75	100 1482 2868	100 175 200	1142 calc 2341 calc

*

WELL SCHEMATIC - Shell St. A #5

Well plugged 10/19/53



8-5/8" 402' 200 sxs TOC: Circ. Calculated at 80% efficiency

5 sxs cmt plug at 8-5/8 shoe 384' – 400'

5 sxs cmt plug at top of 5-1/2 csg. 900'-930' 6 sxs Cmt Plug 3060 to 3100

5" 3133' 800 sxs TOC:



PBTD: TD:3184 2 sxs cmt plug at surface

Pulled 920 feet of 5" casing.

04/27/98

WELL SCHEMATIC - Amerada St A #3



04/27/98

WELL SCHEMATIC - Chevron WD Grimes NCT-A #11

Well plugged 6/19/96



WELL SCHEMATIC - Chevron WD Grimes NCT-A #12



TD:3190

Well plugged 6/20/96 TOC: Circ. 8-5/8" 312' 225 sxs Perfed at 362 and circ. 132 sxs cmt. and left 5-1/2 full. Perfed at 1407 and sqz'd 35 sxs TOC @ 1256' TOC: 1555 (TS) 5-1/2" 3140' 600 sxs

CIBP @ 3100' + 25 sxs cmt, TOC @ 2860'

PBTD: TD:3222



Replacement well (See page 2)

Well plugged 6/22/96

-

Page 1 of 2



TD:3256

WELL SCHEMATIC - Chevron WD Grimes NCT-A #14

Well plugged _/__/__

Page 2 of 2



8-5/8" 313' 235 sxs TOC: Circ.

TD:2600

Lost initial well during drilling. Circulated 320 sxs of cmt. In 8-5/8" Casing from shoe to surface.

Original Survey: 660 FWL & 660 FSL

Move rig over and drilled new well. New Survey: 990 FWL & 990 FSL

WELL SCHEMATIC - Saga St Sec 32 #6



TD:3240

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WELL SCHEMATIC - Saga St Sec 32 #7

Well plugged 3/25/93



PBTD: TD:3213 Well plugged 7/21/58



WELL SCHEMATIC - NHU 32-311

Well plugged 4/19/84



WELL SCHEMATIC - Chevron WD Grimes NCT-B #6

Well plugged 12/8/95



TD:3229

LIST OF OFFSET OPERATORS & SURFACE OWNERS

North Hobbs (Grayburg/San Andres) Unit Well No. 331 Letter J, Section 32, T-18-S, R-38-E Lea County, New Mexico

Offset Operators

Altura Energy LTD P.O. Box 4294 Houston, TX 77210-4294

Surface Owners

Grimes Land Company, LTD P.O. Box 5102 Hobbs, NM 88241

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 we card to you. Attach this form to the front of the mailpiece, or on the back if space permit. Write '<i>Return Receipt Requested</i>' on the mailpiece below the article The Return Receipt will show to whom the article was delivered and delivered. 	can return this e does not e number. d the date	I also wish to receive the following services (for an extra fee): 1.
N ADDRESS completed c	3. Article Addressed to: Grimes Land Company, LTD P.O. Box 5102 Hobbs, NM 88241	4a. Article Ni P 447 4b. Service 1 Registere Express 1 Return Rec 7. Date of De	umber 842 590 Fype ad IX Certified Mail Insured seipt for Merchandise COD elivery
s your <u>RETUR</u>	 5. Received By: (Print Name) 6. Signature: (Addressee or Agent) X 	8. Addressee and fee is	s's Address (Only if requested paid)
	PS Form 3811, December 1994 102	2595-97-B-0179	Domestic Return Receipt

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 _____

weeks.

1

Beginning with the issue dated

April 13 1998 and ending with the issue dated

April 13 1998

TASAL.

Publisher Sworn and subscribed to before

me this <u>13th</u> day of

April _____ 1998

TOMAN

Notary Public.

My Commission expires October 18, 2000 (Seal) LEGAL NOTICE April 13, 1998

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. 331 Location: 2310' FSL & 2310' FEL, Unit Letter J, Sec. 32, T-18-S, R-38-E, Lea Co., NM Well No. 142 Location: 1250' FSL & 185' FWL, Unit Letter M, 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 4000 BWPD and the expected maximum injection pressure is approximately 805 psi. Interested parties must file objections or requests for hearing with the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, NM 87505 within fifteen (15) davs. #15867

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.

02101173000 01519805

Altura Energy LTD P. O. Box 4294 a/c# 003015 Houston, TX 77210-4294

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

> OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88241-1980 (505) 393-6161

GOVERNOR

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

RE: Proposed:

MC	
DHC	
NSL	
NSP	
SWD	
WFX	
PMX	

Gentlemen:

I have examined the application for the:

<u>331-J-32-185-38e</u> nery Lease & Operator

and my recommendations are as follows:

REmmund approval

Yours very truly,

Chris Williams Supervisor, District 1

/ed



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

18 19 51

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88241-1980 (505) 393-6161

GOVERNOR

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

RE: Proposed:

MC		
DHC		
NSL		
NSP		
SWD		
WFX		
PMX	X	

Gentlemen:

I have examined the application for the:

142-M-33-185-38e Enero Urn Operator Lease

and my recommendations are as follows:

ili Mining contina

Yours very truly,

Chris Williams Supervisor, District 1

/ed

Dia, ict I PO Box 1980, Hobbs, NM 88241-1980 District II PO Drawer DD, Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Form C-102 Revised February 21, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT												
¹ API Number				² Pool Code					³ Pool Name			
30-025-28411				31920 HOBBS; GRA					AYBURG - SAN ANDRES			
4 Property			5 Prop	oerty	Name		_	⁶ Well Number				
19520)	NO	RTH H	OBBS	(GRAYE	BUR	RG-SAN ANE	DRES) UNI	S) UNIT 142			
⁷ OGRID	No.				*Oper	rator	Name			_	⁹ Elevation	
15798	\$4	L		AL	IURA E	NE	RGY LID.				535.00°	
					¹⁰ Surfa	ace	Location					
UL or lot no.	Section	Township	Range	Lot Idn.	ot Idn. Feet from the		North/South line	Feet from the	East/West	line	County	
M	33	185	<u> 38E</u>		1250		SOUTH	185'	WE:	51	LEA	
		1	^{II} Bott	om Hol	e Locatio	n 1	If Different Fro	om Surface				
UL or lot no.	Section	Township	Range	Lot Idn.	Feet from	the	North/South line	Feet from the	East/West	line	County	
Dedicated Acro	u I IS Ioint	or Infil 1 H	Consolidation	Code L ¹⁶ C	mder No							
-Dedicated Act					idel No.							
NO ALLOY	VABLE V	WILL BE	ASSIGNE	TO TH	IS COMPL	ETI	ON UNTIL ALL	INTERESTS F	LAVE BE	EN CO	NSOLIDATED	
		ORA	NON-ST	ANDARD	UNIT HA	S BI	EEN APPROVED	BY THE DIV	ISION			
16								¹⁷ OPER	ATOR	CERT	FICATION	
								I bereby certif	y that the in	formation of	contained herein is	
								true and com	plete to the	best of my l	mowledge and belief.	
						1						
						Ì			11	,		
								 Signature	<u>IK Ský</u>	Mins		
						İ		Mark S	tephen	S		
	İ					i		Printed Nam	e ,	1 . /	(0)	
						İ		Busine	ess Ana	lyst (
						1		April	30, 19	98		
								Date				
	I			1	 		·····	18 SURV	EYOR	CERT	FICATION	
	İ					İ		I bereby certify	that the we	l location	hown on this plat	
						Ì		was plotted fro	m field not	es of actual	surveys made by	
						Ì		and correct to	the best of n	n, and that 17 belief.		
<u>185</u> ′	ĺ					Ì		JA	NUARY	15,	1998	
						Í		Date of Survey	y			
Well No.	42			7				Signature and	Seal of Pro	femional Su	rveyor	
	RA					İ						
`.						İ		ſ)	~ /	1, ,	
125						i			arrix	Q.C	Tisken	
						i			ARR	A. FIS	SHER	
								Certificate Nu	mber 1'	1013		
										1013		

District I PO Box 1980, Hobbs, NM 88241–1980 District II

PO Drawer DD, Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV PO Box 2088, Santa Fe, NM 87504-2088 State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Form C-102 Revised February 21, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICA									AT			
1 /	PI Numb	er		2 Poo	l Code		³ Pool Name					
30-0	8411		319	920		HOBBS; (N ANDRES					
⁴ Property (Code	<u>م</u> ا					Name $C = C \wedge N = A N I C$	DECT UNI	⁶ Well Number			
19520	/ 	N				ATBUR	JREST UNI	-37 01411 142				
15798	No. 14				AI THR	°Operator A FNF	Name RCY ITD			3/	⁹ Elevation	
					10		Leastier	<u> </u>]			
III or lot no.	Section	Townsh	in Paner	T t at T	da Reat	Surface	Location	Fort from the	Ramfillant		Courses	
M	33	185	185 38F		.an. rect	250'	SOUTH	185'	WES	ST LEA		
			¹¹ Bot	tom	Hole I	ration	If Different Fr	om Surface				
UL or lot no.	Section	Townshi	DOL D Range	Lot I	dn. Feet	from the	North/South line	Feet from the	FastWest	line	County	
			1 -0									
¹² Dedicated Acre	s ¹⁵ Joint	or Infill	¹⁴ Consolidati	on Code	¹⁵ Order N	ło.	I		L			
NO ALLOW	VABLE	WILL B	E ASSIGNI	D TO	THIS C	OMPLETI	ON UNTIL ALL	INTERESTS I	IAVE BE	EN CO	NSOLIDATED	
<u></u>		OR	A NON-S	TANDA	RD UNI	<u>r has b</u>	EEN APPROVED	BY THE DIV	ISION	_		
16								¹⁷ OPER	ATOR	CERT	IFICATION	
	!							I bereby certis	ly that the init	formation of my l	contained herein is	
				ļ								
	ļ					1						
]											
	\			_ <u> </u>		· [-		- Ma	rk Ski	turs		
	1					1		Signature Mark S	/ Stenhens	3		
						I I		Printed Nam	e			
-	1					1		Busine	ess Ana	lyst (SG)	
	1					1		Title April	30, 19	98		
						1		Date	50, 17			
	<u>لال</u>		······································			<u>1</u>		18 CT ID W	EVOD	ОБрд	IFICATION	
						l 1		J bernhar cartif		UCICI. Ubration	hown on this plat	
								was plotted fro	un field not	s of actual	surveys made by	
	İ					j		and correct to	the best of m	i, and mar iy belief.	ine same a true	
185'	Ī					Í		JAI	NUARY	15,	1998	
								Date of Surve	у			
📍 Well No. 1	42							Signature and	Seri of Prof	emonal Su	rveyor	
ALTUR	A											
20,						1		ſ)	\sim (1.0	
12:						ł		0	arry	U.<	Jishen	
						l		L/	ARRY	<u>A. FIS</u>	SHER	
1 1						1		Certificate Nu	mber 11	013		

District I PO Box 1980, Hobbs, NM 88241-1980 District II

PO Drawer DD, Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec, NM 87410

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PO Box 2088 Santa Fe, NM 87504–2088 Form C-102 Revised February 21, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

		WE	LL LOO	CATION	CREAGE DEDICATION PLAT					
1	er		² Pool Cod	c	³ Pool Name					
30-025-28411				31920)	HOBBS; (GRAYBURG	- SA	N AN	IDRES
4 Property	Code				⁵ Property	Name		⁶ Well Number		
19520)	NO		OBB2	GRAYBU	RG-SAN ANL	JRES) UNI	S) UNI 142		
⁷ OGRID	No.				*Operato	r Name			_	⁹ Elevation
15/98	\$4			AL	IURA ENE	RGY LID.			31	535.00'
UL or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West	line	County
М	33	18S	38E		1250'	SOUTH	185'	WE:	ST	LEA
			¹¹ Bott	om Hol	e Location	If Different Fro	om Surface			
UL or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West	line	County
L										
¹² Dedicated Acre	s ¹⁵ Joint	or Infill 140	Consolidation	a Code ¹⁶ C	order No.					
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED										
	1		NON-51	ANDARD		EEN AFFROVED		19101		
10							"OPER	ATOR	CERT	IFICATION
				ļ		I bereby certil	fy that the in plete to the l	formation of the l	contained herein is	
					l					
	[<u> </u>		- Ma	nK Sta	Just	
							Signature		20022023	
							Mark S	Stephen	s	
							Busine	e ess Ana	lvst (SG)
]						Title			
							April	30, 19	98	
							Date			
							¹⁸ SURV	EYOR	CERT	IFICATION
							I hereby certify	y that the we	ll location a	hown on this plat
							was plotted fro	om field not	es of actual n. and that	surveys made by the same is true
							and correct to	the best of a	ny belief.	
185'							JA	NUARY	<u> 15,</u>	1998
							Date of Surve	y 	• • • • •	
📍 Well No. 1	42						Signature and	i Sest of Pro	remonal Su	ичеуог
ALTUR	RA									
ò)	\sim	2.0
125								arry	$\mathcal{U}_{\cdot} \subset$	Jisken
							Ĺ	ARR	A. FIS	SHER
	[Certificate Nu	unber 1	1013	

District I PO Box 1980, Hobbs, NM 88241–1980 District II PO Drawer DD, Artesia, NM 88211–0719 District III

1000 Rio Brazos Rd., Aztec, NM 87410

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WELL LOCATION AND ACREAGE DEDIC									AT		
30-C	API Numb)25-2		2 Pool Cod 31920	le)		³ Pool Name HOBBS; GRAYBURG - SAN ANDRES					
* Property Code 19520 NORTH				^{\$Property Name} TH HOBBS (GRAYBURG-SAN ANDRE					r	6 1	Well Number 142
⁷ OGRID No. 157984				AL	^{ە مە} TURA E	NE	Name RGY LTD.		⁹ Elevation 3635.00'		
UL or lot no.	Section	Township	Range	Lot Idn.	t Idn. Feet from the		North/South line	Feet from the	East/West line Cou		County
М	33	185	38E		1250)'	SOUTH	185'	WE:	ST	LEA
			¹¹ Botte	om Hol	e Locatio	on]	If Different Fro	om Surface			
UL or lot no.	Section	Township	Range	Lot Idn.	Feet from	the	North/South line	Feet from the	East/West	line	County
	- 1. 7			0.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1				L			
-Dedicated Acre	a – Jom	or think -	Consolidation		nger No.						
NO ALLOY	NABLE V	WILL BE	ASSIGNE		IIS COMPI	ETI	ON UNTIL ALL	INTERESTS I	IAVE BE	EN CO	NSOLIDATED
		OR A	<u>A NON-ST</u>	ANDARD	UNIT HA	S BI	EEN APPROVED	BY THE DIV	ISION		
								17 OPER 1 bereby certific true and comp Signature Mark S Printed Name Busine Title April Date	ATOR y that the in olete to the tephen ess Ana 30, 19	CERTI formation of best of my b S 1yst (98	SG)
185' Well No. 1 AL TUF	142 RA							SUKV. I bereby certify was plotted from the or under a and correct to JAM Date of Survey Signature and Certificate Nut	LIUK y that the we an field not sy supervisio the best of a NUARY Seel of Pro Seel of Pro ARR ARR 1	CERT Il location e er of actual a, and that ay belief <u>15</u> , fessional Su <u>A. FIS</u> 101.3	IFICATION bown on this plat surveys made by the same is true <u>1998</u> riveyor Jushen SHER

Operator Altura Energy LTD.		Lease North Hobbs	s G/SA Unit	County							
Well No. Footage Location	5' E\//I	Section	Township	Range	Unit Le	tter					
16"		Surface Casing Size <u>16</u> " TOC <u>Circ.</u>	Tubular Data Surface Casing Size 16" Cemented with TOC Circ. Determined by								
@ 40'		Hole size Intermediate C Size <u>8-5/8</u> TOC <u>Circ.</u>	20" asing "Ceme 12.1/4"		750	sxs.					
		Hole size Long string Ca Size <u>5-1/2</u> TOC <u>340'</u>	<u>12-1/4</u> sing Ceme Deter	 ented with mined by	910 CBL	sxs.					
		Hole size Total depth	4370'	_							
		Injection interv 4029	<u>al</u> feet to	4370	0 feet						
5-1/2" @ 4370'		Completion typ	e Perforat	ions							
Tubing size2-7/8"	lined with	Fiberglass	Ероху		set in a	ı					
Guiberson Uni VI (brand and model)		packer at4000' feet									
Other Data											
1. Name of the injection formation San Andres											
2. Name of field or Pool Hobbs (Grayburg/San Andres)											
3. Is this a new well drilled for injection? Yes <u>No</u> If no, for what purpose was the will originally drilled? <u>San Andres producer</u>											
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)											
· <u>······</u> ·····························	No										
5. Give the depth to and name of any overlying and/or underlying oil and gas zones (pools) in this area. Grayburg – 3720, Glorieta - 5300											

INJECTION WELL DATA SHEET

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