

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

GOVERNOR

11/22/99

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

OIL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501 RE: Proposed: MC DHC NSL NSP SWD WFX	
Gentlemen:	
I have examined the application for the: Attera Energy Ltd North Hobbs 6B/5A Unit #313-B Operator Lease & Well No. Unit S-T-R 30.185-38e and my recommendations are as follows: OK	
Yours very truly, Thus Williams Supervisor, District 1	





November 16, 1999

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. 313 Letter B, Section 30, 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. 313 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. 313). 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

ENERGY, MINERALS AND NATURAL RESCURCES DEPARTMENT

2040 SOUTH PACHECO SANTA FE, NEW MEXICO 87505

Revised 4-1-98

APPLICATION FOR AUTHORIZATION TO INJECT

Ĺ	PURPOSE: Secondary Recovery X Pressure Maintenance Disposal Storage Application qualifies for administrative approval? X Yes No
I.	OPERATOR: Altura Energy LTD
	ADDRESS: P.O. Box 4294, Houston, TX 77210-4294
	CONTACT PARTY: Mark Stephens, Rm. 338-B, WL2 PHONE: (281) 552-1158
П.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
ĩV.	Is this an expansion of an existing project? X Yes No If yes, give the Division order number authorizing the project: R-6199 (11/30/79)
v.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
VI.	Attach a tabulation of data on all wells of public record within the area of review which 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:
*VI II	 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.). Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic 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 sources known to be immediately underlying the injection interval.
EX.	Describe the proposed stimulation program, if any.
*X .	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
*X I.	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 sources 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 with this application is true and correct to the best of my knowledge and belief.
	NAME: Mark Stephens
	SIGNATURE:DATE:DATE:DATE:DATE:DATE:
•	If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: Hearing October 3, 1979; Case No. 6653, Order No. R-6199

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate 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:
 - (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 repea ed.
 - (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 locatio 1.

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 cays from the date this application was mailed to them.

Attachment To Form C-108 Miscellaneous Data

North Hobbs (Grayburg/San Andres) Unit Well No. 313 Letter B, Section 30, 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 Rate 1500 BWPD Maximum Injection Rate 4000 BWPD
- 2. Closed Injection System
- 3. Average Injection Pressure 500 PSIG

 Maximum Injection Pressure 805 PSIG (approx.)

 (will not exceed 0.2 psi/ft. to top perforation)
- 4. Source Water San Andres Produced Water (Champion Technologies, Inc. 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. 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.

DISTRICT III

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT II P.O. Drawer DD. Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
P.O. BOX 2086, SANTA FE, N.M. 67504-2088

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

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code		Pool Name	
30-025-23270	31920	HOBES: GRAYBURG	- SAN ANDRES	
Property Code 19520		operty Name OBBS G/SA UNIT	Well Number	
ogrid no. 157984	Op	erator Name ENERGY	Elevation 3654	

Surface Location

	UL or lot No.	Section	Township	Range	Lot Idn	feet from the	V: 11 /G 11				
	В	30	18 S	38 E	DOC IGH	408	North/South line	Feet from the	East/West line	County	
(L	100	,5///	22/3	EAST	LEA	

Bottom Hole Location If Different From Surface

							iacc		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r Infill Co	nsolidation	Code Or	der No.				

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

LOT 1		408	BLEN APPROVED I	
	SPC NME NAD 27 Y=629178 X=852800	WELL #313	2273	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
37.81 ACRES				Signature Mark Stephens
				Printed Name
			†	Business Analyst (SG) Title
				November 16, 1999
37.85 ACRES				SURVEYOR CERTIFICATION
				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 supervison, and that the same is true and correct to the best of my belief.
37.87 ACRES				Date Survey DMCC
LOT 4				Signature of Seal of O. M. Protestal Surgeyor O. M. ME F. C. M.
37.91 ACRES				Ceruinia No. RONALO SEDSON 3239 12641 101111111111111111111111111111111111

INJECTION WELL DATA SHEET

Operator Altura Ene	eray I TD	Lease			County	
Well No.	Footage Location	North Hob	bs G/SA Unit		Lea	
30-313	405 FNL & 2272 FEL	Section 30	Township 18-S	Range 38-E	Unit L	etter
13-3/8 " @ 382'	Schematic	Surface Casir Size 13-0 TOC Surf Hole size	<u>Tub</u> ng 3/8 Cem	ular Data ented with	400 Circ.	sxs.
8-5/8* @ 3849'		Intermediate (Size 8-5/TOC 600 Hole size	8 Ceme	ented with mined by	1256 T.S.	sxs.
		Size 5-1/2 TOC 1500 Hole size	2" Ceme	ented with mined by	570 T.S.	SXS.
5-1/2°		Total depth Injection interverse 4000 Completion typ	feet to	435	0 feet	
@ 6047' Tubing size	2-7/8" lined with					
-		Fiberglass E	poxy		set in a	
Giberson Ur	ni VI (brand and model)	packer at	±3950	feet		
	injection formation San An					
2. Name of field	or Pool Hobbs ((Grayburg/San /	Andres) Pool			
3. Is this a new If no, for w	well drilled for injection? rhat purpose was the will originally o	Yes drilled? Sai	n Andres produ	No		
uetaii (saci	ever been perforated in any other zooks of cement or bridge plug(s) used (5851-5951'), capped with the	one(s)? List all su	ch perforated inter	vals and giv	e plugging	
5. Give the depti Grayburg	n to and name of any overlying and g - 3700, Glorieta - 5300	or underlying oil an	d gas zones (pool	s) in this are	ea.	

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