

P.O. BOX 8206 WICHITA FALLS, TEXAS 76307-8206 TELEPHONE (940) 716-5100 PRODUCTION FAX (940) 716-5110 WELL LOG FAX (940) 716-5180 LAND FAX (940) 716-5210 ACCOUNTING FAX (940) 716-5150 EXPLORATION FAX (940) 716-5170

May 22, 2001

The State of New Mexico Oil Conservation Division 2040 Pacheco Street Santa Fe, New Mexico 87505

Re: T. P. "A" State Unit SWD #1 Section 15, T10S-R36E Lea County, New Mexico

Gentlemen:

Enclosed is Cobra Oil & Gas Corporation's Application For Authorization to Inject for the above captioned well. The T. P. "A" State Unit SWD #1 was drilled as a Devonian producer and has since reached uneconomical status. Surface, intermediate and production casing strings remain intact. Upon approval, Cobra intends to begin disposal of produced Devonian water into the open hole interval from 12,313 feet-12,329 feet in this wellbore. Due to the high cost of trucking produced water to a disposal facility, this disposal well is critical to prolonging the producing life of the Lewis Unit #1 and Gainer Unit #1 wells by significantly reducing the operating costs associated with the trucking of the produced water.

Thank you for your consideration of this application. Should you require additional information, please advise.

Sincerely Yours,

Rory Edwards

Production Supervisor

RE:bas

Enclosures

M:/Wpfiles/Rory/LTR595

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: Secondary Recovery Pressure Maintenance Application qualifies for administrative approval? XXYes No	Storage	
II.	OPERATOR: COBRA OIL & GAS CORPORATION		
	ADDRESS: P O BOX 8206; WICHITA FALLS, TEXAS 76307-8206		
	CONTACT PARTY: RORY EDWARDS	PHONE: 940/716-5100	
III.	WELL DATA: Complete the data required on the reverse side of this form for each well pro sheets may be attached if necessary.	cessed for injection. Additional	
IV.	Is this an expansion of an existing project: Yes XX No If yes, give the Division order number authorizing the project		
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:		
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.). 		
*VIII.	Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/1 or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.		
IX.	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.)		
* XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.		
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.		
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.		
_XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.		
	NAME: RORY EDWARDS TITLE: PRODU	OCTION SUPERVISOR	
	SIGNATURE: DAT	TE: 05/22/01	
*	If the information required under Sections VI, VIII, X, and XI above has been previous resubmitted. Please show the date and circumstance of the earlier submittal.	usly submitted, it need not be	

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 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;
- 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, PO Box 2088, Santa Fe, NM 87504-2088 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 101 nearing of administrative applications within 15 days from the date this application was mailed to them.

CO0 Hepps

Transl.

Application for Authorization to Inject

Cobra Oil & Gas Corporation T. P. "A" State Unit SWD #1 810' FSL & 660' FWL Unit M, Section 15, T10S-R36E Lea County, New Mexico

- VI. Attached is a tabulation of all wells of public record that fall within the half (1/2) mile radius of the proposed salt water disposal well, The T. P. "A" State Unit SWD #1. There is one producing well, four plugged wells, and one T A well, along with one abandoned SWD well. The wells each have a good cement seal around their casing shoe to prevent any upward migration of the disposal water into any potable water zone. The T. P. "A" State Unit SWD #1 well was drilled as a Devonian test in 1964 and plugged and abandoned in March 1979. The well was reentered in October 1998 by Petroleum Development Corporation and directional drilled to the Devonian.
- VII. The proposed average daily injection rate for the subject well is 1,500 BWPD with a maximum daily rate of 7,500 BWPD. This will be a closed system with an average pressure of 500 psi/1,000 psi and a maximum pressure of 5,000 psi. Produced Devonian water will be injected in the proposed well. There should be no incompatibility concerns in injection of Devonian water into a former producing Devonian well.
- VIII. The disposal zone will be the Devonian Formation, a dolomite section. The open hole interval from 12,313 feet to 12,329 feet will be utilized as the disposal interval. The main source of drinking water in this area is the Cretaceous Formation, the base of which is approximately 180 feet. There are no known sources of drinking water underlying the injection interval.
- IX. The well will be stimulated with 1,000-2,000 gallons of 20% NEFE HCL, if required, after a pump-in test.
- X. Log is on file with the Division.
- XI. Attached is an analysis of the water from the nearest water well.
- XII. Cobra Oil & Gas Corporation has examined the available geologic and engineering data and can find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. The required "Proof of Notice" is attached.

