



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

May 10, 1995

Olsen Energy, Inc.
16414 San Pedro, Suite 470
San Antonio, Texas 78232-2246

Attn: Mr. Dick Morton

Re: Recent Application for Authorization to Inject

Dear Mr. Morton,

Reference is made to your application for authorization to inject into the Corbin "35" State No.1, received by this office on April 17, 1995. In reviewing the application, it became apparent that several of the wells in the one-half mile area of review, in their current condition, will disqualify the subject well from being utilized for salt water disposal.

Division policy is that all wellbores in the area of review, be cemented entirely across the proposed injection interval to approximately 500 feet above that interval. The four wells listed below do not meet this criteria.

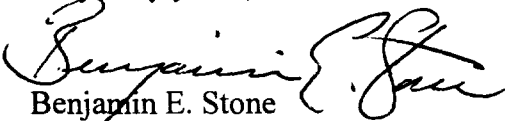
Wyatt "A" Federal No.9	Section 34, Twp. 17 South, Rge. 33 East
State "35" No.1	Section 35, Twp. 17 South, Rge. 33 East
State "35" No.3	Section 35, Twp. 17 South, Rge. 33 East
Denius Federal No.8	Section 34, Twp. 17 South, Rge. 33 East

From the construction information provided with your application, it appears the first 3 wells shown could be cement squeezed and brought into conformance. In the case of the Denius Federal No.8 however, not knowing where the top of the 4 1/2" casing (liner?) is set, it may be substantially more difficult if not impossible to correct.

If you would like to continue the application process, please address these concerns in writing as to how you company would propose to rectify the situation. If you would like to withdraw your application, please advise.

If I may be of assistance, please don't hesitate to call me at (505) 827-8186.

Very truly yours,


Benjamin E. Stone
UIC Program Administrator

/BES

cc: file

EXHIBIT "A"

WELL REPAIR and MONITORING GUIDANCE

Corbin '35' State Well No.1

Section 35, Township 17 South, Range 33 East, Lea County, New Mexico

DIVISION ORDER SWD-596

A. WELL REPAIR

- 1) The operator shall set a cast iron bridge plug in the 4-1/2 inch casing between approximately 3950 feet and 3980 feet and cap the plug with 30 feet of cement. (In any case, there should be a minimum of 40 feet rat-hole below the bottom perforation to facilitate detection of downward fluid movement as described in Section B - Injection Monitoring.) In the case that this has been accomplished prior to the issuance of this order, the operator shall continue with items B. through C. as described below.
- 2) Pressure test the plug by running the packer below the perforated interval and pressuring the casing to 850 psig and maintaining this pressure for 30 minutes with less than a ten percent drop in pressure.
- 3) Reconfigure the well for injection operations. The well may be placed on injection pursuant to all provisions of this Division Order.

B. INJECTION MONITORING

- 1) At a time when injection into the well has been determined to be stabilized, but not to exceed six months from initial injection, the operator shall run an injection profile. This type of injection profile will be run again at the first, second and third anniversary date. Subsequent injection profiles shall be run at three (3) year intervals thereafter. The injection profiles will always be witnessed by a representative of the Division. Such profiles shall be run in accordance with the following guidelines, items 2) through 8).
- 2) All injections profiles shall be a combination of temperature and radioactive tracer logs.
- 3) All log curves shall be started (finished) at a minimum of 200 feet above the top perforation. If the well is on vacuum or goes on vacuum within minutes of shutting in the well, temperature curves will be run a) while injecting, b) 30 minutes after shut-in, c) 1 hour after shut-in, and d) 2 hours after shut-in. If the well is holding surface pressure, temperature curves will be run a) while injecting, b) 1 hour after shut-in, c) 2 hours after shut-in, and d) 18 to 24 hours after shut-in.

- 4) Radioactive tracer runs shall start at a minimum of 150 feet above the top perforation and consist primarily of an "intensity" type survey. The initial recorded runs through the radioactive material should have a minimum of 6 inches deflection immediately above any anticipated loss interval. The tracer intensity shall be recorded until the R/A residual falls below 1 chart division deflection over background.
- 5) The "velocity" type and "drop shot" type surveys are not required but may be run at the discretion of the oil company.
- 6) Channel (leak) checks should be made at the bottom and top perforations. The R/A "burst" or "slug" should be of very high intensity and recorded on time-drive for a minimum of 5 minutes. At the conclusion of the time-drive survey, the logger shall drop below the remaining R/A material and make a number of depth-drive (log through) runs until the existence or severity of any channelling or leak is determined. In the cases of the upward channel check, every effort should be made to establish the top of the channel if one exists. If there is a severe channel, this might include "unloading" the R/A ejector tool at the top or bottom perforation in an attempt to saturate the fluid moving up or down in the channel. The logging unit operator should be able to allocate the usage of R/A material so as to leave no doubt about the existence and severity of channels at these two positions. A "no flow" should be established inside the 4-1/2 inch casing within 15 feet of the bottom perforation. If fluid is moving below the perforations, a percentage of total fluid movement shall be determined. Further, movement should be recorded to the CIBP or to the point of exit from the wellbore.
- 7) If a downward (or upward) channel exists, or fluid is moving below the perforations, the Division representative on location shall make the determination, based on their judgement as to the severity of the channel or leak, to immediately shut the well in or not.
- 8) Copies of all logs shall be forwarded to the District office and the Division office of the Oil Conservation Division. After reviewing the results in the Division office, a final determination shall be made as to the future status of the well.

C. MECHANICAL INTEGRITY TESTING

Prior to commencing injection operations into said well and every 5 years thereafter, the casing shall be pressure tested to 500 psi and monitored for 30 minutes. A successful test will be that which has lost no more than 10 percent (50 psi) for the