

ZIA ENERGY, INC.

HOBBS, NEW MEXICO 88240

December 30, 1983

State of New Mexico
Energy and Minerals Dept.
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION

ZIA EXHIBIT NO. _____

CASE NO. 8044

Re: Additional information for
Oil Conservation Division
Form C-108 (Application
For Authorization to Inject)
Zia Energy, Inc.
Closson No. 6 SW - NW
Sec. 20, T22S, R36E.

Gentlemen:

This letter is to supply additional information requested on the Oil Conservation Division Form C-108. Zia Energy, Inc. is requesting authorization to inject produced waters into the Closson No. 6 well, located in the SW/4 - NW/4 of Sec. 20, T22S, R36E, Lea County, New Mexico.

An exhibit has been prepared and submitted which supplies the information requested on Form C-108 Section V & VI.

Information requested on Form C-108 - VII will be included here. The proposed average injection volume is 1500 BWPD with a maximum daily volume expected to be 3000 BWPD. The system will be a closed system. The average injection pressure is expected to be a vacuum with a maximum pressure not more than 700 psi. The sources of water to be injected will include water from various formations - Yates, Seven Rivers, Queen, as well as deeper formations that are producing in the area. From these analyses there is no apparent incompatibility between the Seven Rivers formation water and the proposed injection waters.

Form C-108 Section VIII requests several geological data. The injection zone will be in the lower part of the Seven Rivers formation. The Seven Rivers formation consists of dolomite and limestone with sand stringers. It is located between the Yates formation and the Queen formation at a depth extending from 3475' to approximately 3903' in the Closson No. 6.

The Form C-108 Section IX asks for a description of the proposed stimulation program. Since this well was originally drilled as a producer of oil and gas, then later plugged and abandoned, a brief history of this well will be submitted along with a description of our proposed re-entry and completion as a salt water

disposal well. Reference is made to the Plugged Well Data Sheet for a tabulation and schematic of the well bore conditions. The Closson No. 6 was drilled in May, 1941 to a total depth of 3805' with 8 5/8" casing set at 1498' and cemented using 650 sacks of cement. 5 1/2" casing was set at 3750' and cemented using 150 sacks of cement. Completion was in the open hole section from 3750' to 3805'. No record is given of any acid or shot stimulation. This zone potentialled for 960 barrels of fluid per day - 15% oil and 85% water. The record indicates that in August, 1947 that the well was plugged back and the 5 1/2" casing perforated from 3540' to 3580'. These perforations produced 100% water and were squeezed off using a retainer set at 3534' and 100 sacks of cement. The casing was again perforated from 3514' - 3534' with no stimulation indicated. The well flowed 180 BOPD with 30 BWPD and 1008 MCF/D of gas. In June, 1952 the well was plugged back using a retainer set at 3493' and 200 sacks of cement into perforations from 3514' - 3534'. New Perforations were made from 3450' - 3470' and the well potentialled natural flowing 1435 MCF/D of gas and 8 BWPD. In November, 1955 additional perforations were added from 3289' - 3390' and these perforations were acidized using 1000 gallons of acid and then fracture treated using 10,000 gallons of lease crude with 10,000 # of sand. As a result of this work the production was increased from 292 MCF/D to 350 MCF/D. Plugging operations were conducted in January, 1977. It was plugged as indicated on the Well Data Sheet. We propose to re-enter the plugged well bore and clean out to the top of the 5 1/2" casing stub at 2020', 5 1/2" 14 # casing with an overshot will be run and the two 5 1/2" casing strings will be reconnected, and then cemented, using enough cement to circulate cement to the pit on the surface, cleanout and drill out operations will then continue to approximately 3480' and perforations between 3289' and 3470' will be squeezed using at least 200 sacks of cement. Cement will be drilled out to 3470' and the squeeze job pressure tested. If the squeeze job holds, drill out and clean out will continue to total depth of 3805'. The well will then be equipped with 2 3/8" tubing which has been lined with a PVC liner, a Baker AD-1 tension packer set at approximately 3700' and the annulus will be loaded with corrosion inhibited packer fluid. The well will be connected up and injection commenced.

Form C-108 Section XI requests a chemical analysis from two or more fresh water wells within one mile of the disposal well. A survey has been made of the area and there are no fresh water wells within one mile of this disposal well.

Applicant hereby affirms that a copy of this application has been mailed by Certified mail to the following lease operators which are located within one-half mile of the disposal well and to the Bureau of Land Management who is the surface land owner:

<u>NAME</u>	<u>ADDRESS</u>
Bureau of Land Management	P.O. Box 1397, Roswell, NM 88201
Martindale Petroleum Corp.	P.O. Box 1955, Hobbs, NM 88240
Cities Service Company	P.O. Box 1919, Midland, TX 79702
Conoco, Inc.	P.O. Box 460, Hobbs, NM 88240

NAME

Penroc Oil Company
Sun Exploration & Production

ADDRESS

P.O. Drawer 831, Midland, TX 79702
P.O. Box 2880, Dallas, TX 75221

Yours truly,


M. F. Nelson