

RICE Engineering Corporation

122 WEST TAYLOR TELEPHONE (505) 393-9174

HOBBS, NEW MEXICO 88240

June 28, 1988

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P.O.Box 2088
Santa Fe, New Mexico 87504-2088

RE: Rule 701-Injection of Fluids
into Reservoirs (Salt Water
Disposal)

Gentlemen:

Rice Engineering Corporation, as an agent for the American Exploration Company of Houston, Texas, hereby applies for an administrative approval for the purpose of securing a permit under Rule 701 to complete the currently shut-in and temporarily abandoned American Exploration Company-Henry No.2 well, located in SE/4,SW/4,section 26, Township 25 South, Range 37 East,N.M.P.M.,Lea County, New Mexico, as a salt water disposal well in the Justis Salt Water Disposal System.

Rice Engineering Corporation further deposes and states the following:

- A. That said well is located 330 feet from the South line and 1650 feet from the West line of Section 26, Township 25 South, Range 37 East, N.M.P.M.,Lea County, New Mexico (Exhibit "A").
- B. That said well was drilled on December 8, 1938 by Culbertson and Irwin as a Langlie Mattix Queen oil well and has been shut-in and temporarily abandoned since August 1, 1961 by the current operator, American Exploration Company.
- C. That said well has 12½" O.D. casing set at 132 feet and 8-5/8" O.D. casing set at 1218 feet with 7" O.D. casing set at 3213 feet and shot open hole to a total depth of 3297 feet (Exhibit "B").
- D. That said well will be recompleted as a salt water disposal well in the San Andres-Glorieta by (1) deepening to an approximate depth of 5000 feet, (2) setting a liner of 5½" O.D. casing from approximately 3200 feet to 3500 feet and (3) disposing of produced salt water in the open hole

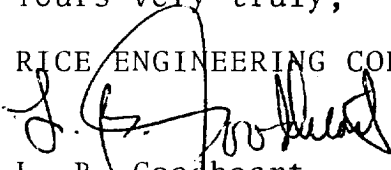
interval from 3500 feet to 5000 feet (Exhibit "C")

- E. That the salt water to be injected is produced in the Fowler, North Justis and Justis pool areas from the Langlie Mattix(Seven Rivers-Oueen), Justis(Glorieta), Justis(Paddock), Justis(Blinebry), Justis(Tubb-Drinkard), Fowler(Blinebry), Fowler(Devonian), Justis(Fusselman), Justis(Montoya), North Justis(Montoya), North Justis(McKee), Fowler(Ellenburger), and Justis(Ellenburger) pools.
- F. That the volume of salt water to be disposed shall be approximately 5000 barrels per day by gravity injection.
- G. That the proposed stimulation program is approximately 10,000 gallons of 15% HCl acid.
- H. That the proposed injection zones are San Andres and Glorieta formations of the Leonard Age, Permian System, Paleozoic Era which occur at approximate depths of 3500 feet(-450') and 4700 feet(-1650') respectively with approximate thicknesses of 1300 feet for San Andres and 300 feet for Glorieta.
- I. That the underground water-bearing formations are Alluvium and Triassic occurring at approximate depths of 0-125 feet and 400-850 feet respectively.
- J. That all available geologic and engineering data have been examined and no evidence of open faults or any other hydrologic connection between the disposal zone and underground sources of drinking water has been found and verified by Mr. Paul Katz, geologist at OCD District I office.

Therefore, Rice Engineering Corporation respectfully requests from the Oil Conservation Division to grant a permit by administrative approval to dispose of salt water in the American Exploration Company Henry No.2 well.

Yours very truly,

RICE ENGINEERING CORPORATION


L. B. Goodheart

Division Manager

SAH

Attachments: Form C-108

Affidavit of Publication for legal notice

Exhibit "A" : Lease Map of Area

Exhibit "B" : Current wellbore diagram

Exhibit "C" : Proposed wellbore diagram

Exhibit "D" : Data on wells within the area of review

Exhibit "E" : Copy of log

Exhibit "F" : Production data at or within one mile

Exhibit "G" : Fresh water sample analyses

Exhibit "H" : Typical produced water analyses

Receipts for certified mail to offset operators

RECEIVED

JUN 29 1988

COMM
HOBBS OFFICE