

GOLD STAR SWD LTD. CO (505) 394-2504 FAX (505) 394-2560 801 MAIN P.O. BOX 1480 EUNICE, NEW MEXICO 88231

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

> Re: Request for Administrative Approval For Salt Water Disposal Well Located in the Northwest quarter of The Northeast quarter of Sec. 28, T-22-S, R-37-E of Lea County, New Mexico

Gentlemen:

Enclosed are various documents to support our request for your Administrative Approval for a salt water disposal well to be located 330' FNL and 2310' FEL of Section 28, Township 22 South, Range 37 East, Lea County, New Mexico. We are submitting your form C-108 and the data requested by this form.

The data requested by C-108 item III is supplied Well Data Sheets. The proposed SWD well is presently a shut-in producing well. The well was originally drilled by Repollo Oil Company on March 8, 1938. In May 1957, the well was deepened to 6796' and a 5" OD liner was set from 2992' to 6796' and cemented used 450 sacks of cement. It was perforated from 6443' to 6549' to produce the Drinkard formation. In 1973 additional perforations from 6150' to 6280' were added in the Drinkard formation. Later, a CIBP was set at 6110' and perforations were added from 5678' to 6002'. Following stimulation and testing, no commercial production was obtained. A CIBP was set at 4300' and the San Andres was perforated from 3905' to 4140'. After acidizing, the San Andres only produced water. It is now proposed to drill out the CIBP at 4300' and clean out to 6002' and test the well for injection capacity. It is then proposed to run a Baker model AD-1 plastic coated tension packer on 2 3/8" OD EUE 8R plastic coated tubing and set the packer in the 5" OD liner at approximately 3850'. The annular space between the tubing and casing will be filled with chemically treated fluid from the packer to the surface. The well will then be equipped with surface equipment and be placed on disposal status.



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C-108 item V requested a map identifying all wells, leases and operators within two miles of the disposal well. A circle onehalf mile in radius has been drawn to identify the Area of Review for the disposal well.

C-108 item VI requested data on all wells within the Area of Review which penetrated the zone of injection. A total of four (4) wells penetrated the San Andres in the Area of Review. A Well Data Sheet has been prepared for each of these wells. It appears that fourteen (14) wells were drilled into the Queen but never penetrated into the San Andres. Well Data Sheets were not prepared for these wells.

C-108 item VII requested several items of information. The beginning daily rate of injection will be approximately 1000 BWPD. As additional trucking customers are obtained, the anticipated maximum daily rate may be 3,000 BWPD. The system will be designed as a closed system. The beginning injection pressure is expected to be a vacuum and maximum injection pressure is expected to be 750 psi. The sources of water to be injected will include water from the Queen, Grayburg, San Andres, Paddock, Blinebry, Tubb and Drinkard formations. Water analyses from the Grayburg, San Andres, Paddock, Blinebry, Tubb and Drinkard formations have not been enclosed. These same formation waters are being mixed in disposal wells throughout southeast Lea County and no undue problems have been encountered. Some calcium carbonate scale may be formed but it would be readily removed by HCL acid. Analysis from the Christmas #3 well is attached.

C-108 item VIII requests several geological data. The San Andres formation is a rather thick, predominately lime formation with some sandy dolomite stringers in the upper 350 feet. Overall the formation is approximately 1200 feet thick extending from approximately 3900 feet to its base at approximately 5100 feet. The San Andres is oil and gas productive to the North and West with no well being less than one mile away.

This well was tested through perforation from 3905' to 4140' and it only produced water. The San Andres is a strong water drive formation. It is our plan to inject below a depth of 3905', therefore, we will be injecting into a zone which is already all water. The only known fresh water zones overlaying this area occur between the surface and 150 feet. Fresh water is very spotty and not very prolific in this area.



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C-108 item IX requests information concerning stimulation. The only stimulation needed would be approximately 1,000 gallons of acid to clean up possible wellbore damage.

For C-108 item X electric logs and well completion reports were submitted when the well was originally drilled.

For C-108 item XI two chemical analyses for fresh water is enclosed. The analysis titled Texaco (Able Place) is from a fresh water well located in Unit P, Sec. 21, 2-22-S, R-37-E. The analysis titled Terry Estate is from a fresh water well located in Unit D, Sec. 34, T-22-S, R-37-E.

I, Royce Crowell, Managing Member of Gold Star SWD Ltd. Co. certify that I have examined extensive available geological and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone, which is between 3905' and 6002' and any underground source of drinking water which would be between 100' and 500' from the surface.

C-108 item XIV - Proof of Notice. The surface owner for the disposal well location is the Millard Deck Estate. The oil and gas leasehold operators within the Area of Review includes Chevron U.S.A., P.O. Box 1150, Midland, Texas 79702, Anadarko Petroleum Corporation, P.O. Box 2497, Midland, Texas 79702 and Arch Petroleum, Inc., 10 Desta Drive, Suite 420 E, Midland, Texas 79705. These have all been notified of our application, as evidenced by the Certified Mailing receipts. A copy of the legal advertisement in the Hobbs News-Sun is enclosed for your information. This legal advertisement was published in the $\mathcal{E} \cdot \mathcal{E} \cdot \mathcal{I} \mathcal{I}$ edition.

If there is any additional information that you need, please contact us and we will be happy to supply any information that is available.

Sincerely,

Roye Crowell

Managing Member