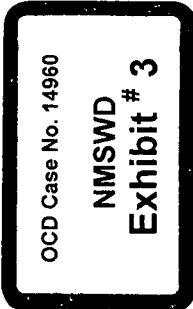


New Mexico Salt Water Disposal #1 State 28
 State 28 #1
 1980' FSL & 660 FEL
 Unit I, Sec. 28, T10S-R34E Lea Co., NM

30-025-25558



Ancillary or Supplementary to C-108 application filed with OCD

KB 4223'
 GL 4203'

Plan: plug-back from Devonian SWD-206 and re-complete in Permian Glorietta Formation 5,584' to 5,664' KB.

Item VI: Data on wells in AOR that penetrate the proposed injection interval:

API	WELL_NAME	STATUS	SECT	SEC	T10N	R34E	T10S	R34E	1980 S	660 E	1	NEW MEXICO SALT WATER DISPOSAL	WELL	LOAD	PLUG DATE	SPUD	EDWELL	TWD DEPTH
3002525558	STATE 28001	Active	1	28	T10S	R34E	1980 S	660 E	1	NEW MEXICO SALT WATER DISPOSAL	\$	\$			26-Aug-77	4203	14024	

1. 3002525558 New Mexico Salt Water Disposal, Inc., State 28 #1, OCD Unit I, Sec. 28, T10S-R34E, Lea Co., 1980' FSL & 660' FEL. Spud 6/17/1977. 15" hole set 12-3/4" @427' w/450 sx cmt, circ 55 sx. 9-3/4" hole set 8-5/8" 24/28/32# 8-5/8" @4,206' w/1350 sx cmt, circ to surface. 7-7/8" hole to 13,531' set 4-1/2" N-80 w/DV @10,001' stage 1 w/1100 sx cmt, stage 2 w/1125 sx cmt, TOC 3,900' TS. Drilled OH w/3-3/4" bit to TD 14,024'. DST 13,431'-531' open 1 hr, rec 2500' WB + 6560' sulf wtr. Completed as SWD-206.

Item VII:

1. The maximum injected volume anticipated is to be 3,500 BWPD. Average anticipated is 1,700 BWPD.
2. Injection will be through a closed system.
3. Maximum injection pressure is expected to be 1,167 psi, or as adjusted for top perforation.
4. Sources well be produced water. Theses will be compatible with waters in the disposal zone.
5. NM WAIDS analysis produced water from the overlying San Andres in Legacy Reserves Lane B3, Sec. 1, T10S-R33E, API 30-025-00975, located 5.1 miles NE of the subject well. TDS 84,547 mg/L.

STIFF DAVIS METHOD SCALE CALCULATION

LeasWell	General Character	pH	0	Total hardness	0	Ionic Strength	
		Specific Gravity	0	Resistivity	0	Total Dissolved Solid	84547
Ions mg/L							
Ca ⁺⁺	0	Mg ⁺⁺	0	Na ⁺	0	Ba ⁺⁺	0
CO ₃ ⁼	0	HCO ₃ ⁻	407	SO ₄ ⁼	211	Cl ⁻	51580
						OH ⁻	0
						Sr ⁺⁺	0

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Item VIII:

Disposal will be into the Permian Glorieta Formation underlying the San Andres Formation. The lithology is generally a white, fine- to medium-grained siliceous to anhydritic and/or calcareous sandstone. Logs show the Glorieta in the subject well suggest good porosity and permeability. The Glorieta in this area is not known to be productive of hydrocarbons.



New Mexico Office of the State Engineer
Active & Inactive Points of Diversion
(with Well Drill Dates & Depths)

No PODs found.

POD Search:

POD Basin: Lea County

Basin/County Search:

County: Lea

UTM/NAD83 Radius Search (in meters):

Easting (X): 643940

Northing (Y): 3698330

Radius: 805

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

2/24/13 11:31 AM

ACTIVE & INACTIVE POINTS OF DIVERSION

Review of the records of the NM OSE show no known water wells within the AOR of this application.

The surface geology of the greater area, including the 2-mile radius as shown in Applicant's C-108 application is Quaternary Ogallala Formation deposits of lower Pliocene to middle Miocene age with surficial Recent blow sands. Potable waters in the greater area are confined to the Ogallala. In the subject area the Ogallala waters are protected by both the surface and intermediate casing strings which were both cemented to the surface.

Item IX:

Operator may attempt to acidize the Glorieta after evaluating formation perforation.

Item X:

Log intervals of the subject well are attached in the original C-108 application. No logs are on file with OCD.

Item XI:

No domestic or locatable livestock water wells are known in the 1-mile area surrounding the proposed disposal. Please see Item VIII above.

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Item XII:

There is no geological evidence of open faults or hydrologic connection between the disposal zone and any possible underground sources of protectable water.

Addendum:

Operator formation tops: Anhydrite 2200', T/salt 2250', B/salt 2800', Yates 2550', San Andres 4254', Glorieta 5580', Tubb 7040', Abo 7827', Wolfcamp 9193', Penn (Cisco) 9910', Canyon 10454', Strawn 11110', Atoka 11614', Mississippian 12560', Woodford 13336, Devonian 13420.

Modifications provided by:

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