

New Mexico "BN" State NCT-1 Well Number 1

The following work has been completed in the conversion of the above subject well to a Salt Water Disposal Well.

1. Set a Cast Iron Bridge Plug at 8087' and dumped one sack of cement on top of plug.
2. Perforate 5 1/2" Casing with two jet shots per foot from 4790' to 4805', 4810' to 4830', 4870' to 4890', 5107' to 5115', 5120' to 5130', 5220' to 5230', 5390' to 5400', 5415' to 5425', 5535' to 5545', 5685' to 5700', 5975' to 5990', 6290' to 6310', 6340' to 6350', 6365' to 6370', and 6390' to 6400'.
3. Loaded 5 1/2" Casing with salt water, pressured up to 1800 P. S. I., pumped in 60 BBLs, formation broke to 1400 P. S. I., rate was 3 BPM at 1400 P. S. I. Pressured up on Braden Head with 1600 P. S. I., pumped 10 BBLs at 1600 P. S. I. with a rate of 1/4 BPM. Pumped 60 BBLs at 3 1/2 BPM and 900 P. S. I.
4. Acidize perforations with 3000 gallons regular 15% HCL acid. Pressure 1500 P. S. I. at a rate of 3.9 BPM, formation did not break. Set retrievable bridge plug at 4700' and pull tubing.
5. Dumped two sacks sand on top of plug, perforated 2 holes at 4000', set cement retainer at 3980', circulated 15 BBLs fresh water and squeeze with 100 Sacks regular cement, pull tubing.
6. Drill out cement retainer at 3980', pressure up on 5 1/2" casing with 500 P. S. I. for 30 minutes, was O. K., washed sand off top retrievable bridge plug and retrieve plug.
7. Ran 3" tubing with Guiberson tension type packer set at 4100'. Circulated behind tubing with fresh water containing sodium dichromate, set packer with 14000 pounds tension. Pumped 100 BBLs salt water into formation at 4 BPM and 1600 P. S. I. Pulled tubing, tension type packer parted, drove packer to 6634', ran 2" tubing to acidize.
8. Ran 2" tubing to 6420', set Guiberson packer at 4400', acidize perforations with 1500 gallons 15% LSTNE and 3000 gallons chemically retarded acid, maximum pressure 2800 P. S. I., minimum pressure 1400 P. S. I., maximum casing pressure 700 P. S. I., minimum Zero P. S. I., injection rate 4 BPM.
9. Ran Injectivity Test with Salt Water down 2" tubing:

1500 P. S. I.	- - -	2 BPM
2000 P. S. I.	- - -	3 BPM
2500 P. S. I.	- - -	3.8 BPM
3000 P. S. I.	- - -	4.5 BPM
10. Frac with 20,000 gallons salt water & 40,000 lbs. sand. Maximum pressure 3700 P. S. I., Minimum pressure 3100 P. S. I., Injection rate - 28.6 BPM. ISIP - 1800 P. S. I. Ran Injectivity Test and connected to Disposal Pump, Job complete January 10, 1964.