

NMOCD Case 15059

**Mesquite Blue Quail Well No. 1
2100 N and 1660 W, Section 11-25S-32E
Lea County, New Mexico**

Proposed Injection Interval = 4790-6200 open-hole

Consider pressure in wellbore and adjacent formation at top of injection interval (4790 feet) under various conditions:

Condition	Surface Psi	Pressure (Psi) from Water Column	Total Pressure (Psi) at 4790 Feet	Equivalent Mud Weight, Lbs/Gallon
Natural – No Well	0	2074	2074	8.3
Wellbore filled, TDS = 276,000 ppm	0	2526	2526	10.2
Apply 0.2 Psi/Foot At Surface	958	2526	3484	13.9
Step Rate Test ---> 0.3 Psi/Foot Surface	1437	2526	3963	15.9

