

NORTH SHUGART FEDERAL NO. 1
NORTH SHUGART (MORROW) FIELD
EDDY COUNTY, NEW MEXICO

WELL PLAN SUMMARY

WELLBORE DIAGRAM	CASING	CEMENT	MUD PROGRAM	EVALUATION PROGRAM	DEVIATION	LITHOLOGY
	13-3/8" 48# H-40, STC	420 $\pm$ CLASS "C" + 2% CaCl ₂ + 0.25 ppm CELLO-SEAL	SPUD MUD FW GEL/LIME WEIGHT: 8.9-9.0 PPG VIS: 35-45 FILTRATE: N/C		SURVEY @ 200' AND TD MAX DEVIATION: 1.5 DEG MAX CHANGE 1 DEG/100'	ALLUVIUM
	8-5/8" 24#, 32# K-55, STC	LEAD: 1135 $\pm$ PACESETTER LITE + 6% GEL + 15% SALT + 1 ppm H ₂ SEAL TAIL: 200 $\pm$ CLASS "C" + 2% CaCl ₂	BRINE WATER WEIGHT: 10.0 PPG VIS: 28-32 FILTRATE: N/C		SURVEY EVERY 500' MAX DEVIATION: 3 DEG MAX CHANGE 1 DEG/100'	SALT QUEEN SAN ANDRES
	5-1/2" 17#, K-55 & N-80, LTC	FIRST STAGE: 520 $\pm$ SUPER "H" + 6% SALT + 0.4% DIACEL LWL + 0.3% CF-2 SECOND STAGE: 1000 $\pm$ SUPER "H" + 5% SALT + 0.3% CF-2	CUT BRINE (+ 30,000 CH-) WEIGHT: 8.9-9.2 PPG VIS: 28-30 FILTRATE: N/C MUD UP @ 9500' CUT BRINE/DRISPAC WEIGHT: 8.9-9.2 PPG VIS: 30-32 FILTRATE: 15-20 cc @ 11400' CUT BRINE/KCL/PAC WEIGHT: 8.9-9.2 PPG VIS: 34-36 FILTRATE: 10-12 cc	MUD LOGGER: SCP-TD ELECTRIC LOGS: CNL/FDC/CAL/GR: TD-SCP CNL/GR: SCP-SURF DLL/MSFL: TD-SCP	SURVEY EVERY 500' MAX DEVIATION: 5 DEG MAX CHANGE 1 DEG/100'	BONE SPRING 1ST BONE SPRING 2ND BONE SPRING L. LEONARD WOLFCAMP STRAWN ATOKA MORROW MISSISSIPPIAN