



October 3, 1998

DEVIATION REPORT

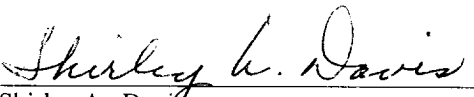
Well Name: ROSA UNIT #170
Location: N SEC 21 T31N R6W
County, State: RIO ARRIBA COUNTY, NEW MEXICO
Formation: BLANCO MESAVERDE

DEVIATION	DEPTH
1/2°	241'
1°	476'
3/4°	799'
1/4°	1327'
3/4°	1822'
3/4°	2348'
1/2°	2851'
1/2°	3345'
1/2°	3934'
2°	4424'
2-3/4°	4675'
2°	4769'
1-3/4°	5018'
1-3/4°	5520'
2°	5850'
2°	6160'

Susan Griguhn
Clerk, Production & Drilling

State of Oklahoma)
) ss:
County of Tulsa)

The foregoing instrument was acknowledged before me this 5th day of October, 1998, by Susan Griguhn.


Shirley A. Davis

My Commission Expires: 10/10/2001