



ENERGY SERVICES
Exploration & Production

November 19, 1998

DEVIATION REPORT

Well Name: ROSA UNIT #160A
Location: N SEC 25 T31N R6W
County, State: RIO ARriba COUNTY, NEW MEXICO
Formation: BLANCO MESAVERDE

DEVIATION	DEPTH
1/2°	125'
1°	239'
1/2°	555'
3/4°	1051'
1/2°	1547'
1/2°	2040'
3/4°	2541'
3/4°	3045'
1°	3636'
1-3/4°	3896'
2°	4048'
2°	4205'
2-1/4°	4359'
2-1/4°	4545'
2-1/4°	4797'
2-1/4°	5044'
3°	5293'
2°	5512'
3°	5820'
3°	5975'
2-3/4°	6109'
2°	5512'

RECEIVED
DEC - 2 1998
OIL COM. DIV.
TULSA

Susan Griguhn
Clerk, Production & Drilling

State of Oklahoma)
County of Tulsa) ss:

The foregoing instrument was acknowledged before me this 20th day of November, by Susan Griguhn.

Shirley A. Davis
Shirley A. Davis

My Commission Expires: 10/10/2001