

A Gyrodata Directional Survey

for

POGO PRODUCERS

Well: W.B. FEDERAL NO. 5

Location: TMBR/SHARP #23, EDDY COUNTY, NEW MEXICO

Job Number: MD0101GMW106

Run Date: 1/8/01

Surveyor: Robert Williams Tom Morren

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 31.868590 deg. N

Azimuth Correction:

Gyro: Bearings are Relative to True North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location