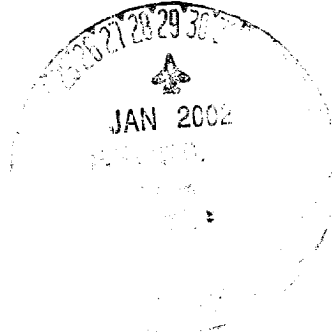


DATE: 10/8/2001

TO: RICHARDSON OPERATING COMPANY
1700 LINCOLN, SUITE 1700
DENVER, CO 80203



Re: Directional Survey
Well WF Federal 27 #2
1021' FNL & 1940' FWL
Sec. 27-T30N-R14W NMPM
San Juan County, NM

Below is the directional survey for your well WF Federal 27 #2.

130' 3/4°

650' 3/4°

1150' 3/4°

1350' 3/4°

ACKNOWLEDGEMENT

STATE OF NEW MEXICO]
COUNTY OF SAN JUAN]

SIGNED & ACKNOWLEDGED BY:

James L. Delist

The foregoing instrument was acknowledged before me this 8th day of Oct. 2001

Esther Hatch
NOTARY PUBLIC

My commission expires: 10/23/2003