January 3, 2002

Artesia Fishing Tool Co., Inc.

Oil Well Drilling Contractors Artesia, NM 88211-1370 PO Box 1370 746-3518 fax 748-2205 505/746.6651

Mack Energy Corporation PO Drawer 960 Artesia, NM 88211-0960

> RE: Fir Federal #1 1770' FSL & 990' FWL Sec. 25, T17S, R27E Eddy County, New Mexico

Gentlemen:

The following is a Deviation Survey for the above captioned well.

DEPTH	DEVIATION	DEPTH	DEVIATION
262'	1/2°	3362'	1 1/2°
419'	3/4°	3615'	1 3/4°
680'	3/4°	3907'	1 3/4°
930'	1°	<b>43</b> 61'	1 3/4°
1207'	<b>1</b> °	4794'	1 3/4°
1461'	<b>1</b> °	5270'	1 1/2°
1701'	1°	5702'	1 3/4°
1930'	1 1/4°	6189`	1°
2270'	1 1/2°	6689'	1°
2521'	1 1/2°	6795'	1°
2768'	1 1/2°	7208'	1°
3021'	1 1/2°		

Very truly yours,

Eddie C. LaRue Vice President

STATE OF NEW MEXICO COUNTY OF EDDY

The foregoing was acknowledged before me this 3rd day of January, 2002.

orner una Notary Public

aug. 30, 2004

01 1105 Serving Southeast New Mexico and West Texas Since 1974