

ARAPAHOE DRILLING CO., INC.

P. O. BOX 26687

ALBUQUERQUE, NEW MEXICO 87125

STEVE SCHALK
PRESIDENT

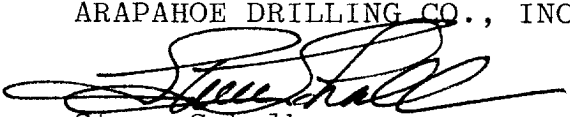
June 30, 1983

Jicarilla 47-4 JV
Section 11, Township 23 North, Range 4 West
Rio Arriba County, New Mexico

DEVIATION RECORD

DATE	FOOTAGE	DEVIATION
6/02/83	217'	3/4°
6/03/83	518'	1/2°
6/03/83	1533'	1-1/4°
6/04/83	2028'	2°
6/04/83	2527'	1/2°
6/04/83	2773'	1/4°
6/05/83	3361'	1/4°
6/05/83	3574'	1/4°
6/06/83	4099'	1/2°
6/07/83	4589'	1/2°
6/08/83	5145'	1/2°
6/09/83	5482'	3/4°
6/10/83	6005'	3/4°
6/11/83	6492'	3/4°
6/13/83	7141'	3/4°
6/13/83	7290'	1/2°
6/15/83	7650'	3/4°

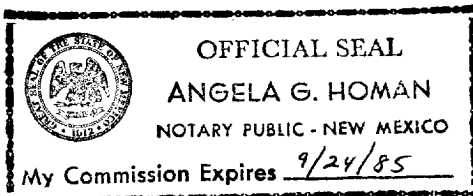
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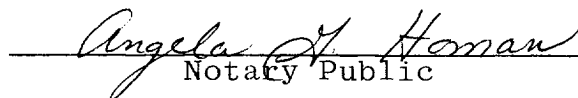

Steve Schalk
President

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

RECEIVED
JUL 1 1983
OIL CON. DIV.
DIST. 3

Subscribed and sworn to before me, a Notary Public, this
5th day of July, 1983, by Steve Schalk, President
of Arapahoe Drilling Co., Inc.




Notary Public