

ARAPAHOE DRILLING CO., INC.

P. O. BOX 26687

ALBUQUERQUE, NEW MEXICO 87125

STEVE SCHALK
PRESIDENT

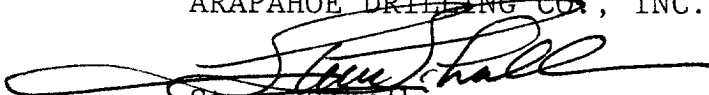
August 19, 1983

Jicarilla 71-12
NE/NW Section 10, Township 23 North, Range 4 West
Rio Arriba County, New Mexico

DEVIATION RECORD

DATE	DEPTH	DEVIATION
7/30/83	217'	1 1/2°
7/31/83	731'	1°
	1255'	1°
	1778'	1°
8/01/83	2148'	1°
	2644'	1°
	3139'	1°
8/02/83	3293'	1°
	3817'	1°
8/03/83	4342'	1°
8/04/83	4741'	1°
	5112'	1°
8/06/83	5633'	1°
8/07/83	6128'	1°
8/08/83	6622'	1°
8/10/83	7107'	1°
8/11/83	7615'	1°

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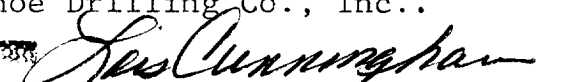

Steve Schalk
President

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

Subscribed and sworn to before me, a Notary Public,
this 19th day of August, 1983, by Steve Schalk,
President of Arapahoe Drilling Co., Inc..



OFFICIAL SEAL
LOIS CUNNINGHAM
NOTARY PUBLIC - NEW MEXICO
Notary Bond Filed with Secretary of State
My Commission Expires: 3/7/87


Notary Public

RECEIVED
AUG 25 1983
OIL CON. DIV.
DIST. 3