

ARAPAHOE DRILLING CO., INC.

P. O. BOX 26687

ALBUQUERQUE, NEW MEXICO 87125

STEVE SCHALK
PRESIDENT

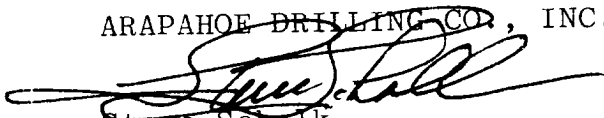
August 3, 1983

Jicarilla 71-19
SW/SE Section 3, Township 23 North, Range 4 West
Rio Arriba County, New Mexico

DEVIATION RECORD

DATE	DEPTH	DEVIATION
07/15/83	215'	1/2°
07/16/83	730'	1/2°
	1192'	1/2°
07/17/83	1685'	1°
	2179'	1°
	2708'	1°
07/18/83	3227'	1°
	3722'	1°
07/19/83	3908'	1°
07/20/83	4430'	1°
07/21/83	4953'	1°
07/22/83	5479'	3/4°
	5815'	1°
07/24/83	6337'	1°
07/25/83	6891'	1°
07/27/83	7281'	3/4°

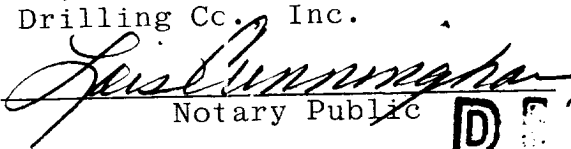
ARAPAHOE DRILLING CO., INC.


Steve Schalk
President

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

Subscribed and sworn to before me, a Notary Public,
this 4th 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 12 1983

CR. ON. DIV.
DIST. 3