ARAPAHOE DRILLING CO., INC.

P. O. BOX 26687

ALBUQUERQUE, NEW MEXICO 87125

STEVE SCHALK PRESIDENT

October 7, 1983

Operator: Chace Oil Co., Inc.

Jicarilla 71-21 NW/SE Section 10, Township 23 North, Range 4 West Rio Arriba County, New Mexico

DEVIATION RECORD

DATE	DEPTH	DEVIATION
0.100.100		
9/09/83	223 '	1/4°
9/10/83	747'	1/4°
9/11/83	1238'	1/2°
	1736'	3/4°
	2292 '	1°
9/12/83	2707'	1-1/4°
	3316'	1-1/4°
	3378'	1°
9/13/83	3874'	3/4°
9/14/83	4404'	3/4°
9/15/83	4899'	3/4°
9/16/83	5 4 52'	3/4°
9/17/83	6131'	1-1/2°
9/19/83	6901'	1-1/4°
9/21/83	7550 '	1/2°

ARAPAHOE DRILLING CO., INC.

President

STATE OF NEW MEXICO COUNTY OF BERNALILLO

Subscribed and sworn to before me, a Notary Public, this day of October, 1983, by Steve Schalk,

President of Arapahoe Drilling 69., Inc.

OFFICIAL SEAL LOIS CUNNINGHAM

NOTARY PUBLIC - NEW MEXICO Notary Bond Filed with Secretary of State

My Commission Expires: