

ARAPAHOE DRILLING CO., INC.

P. O. BOX 26687

ALBUQUERQUE, NEW MEXICO 87125

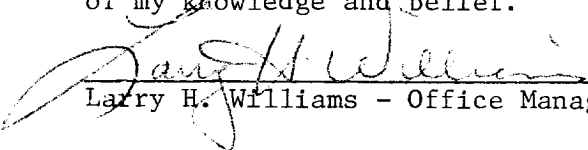
STEVE SCHALK
PRESIDENT

November 13, 1986

Chace Oil Company
313 Washington SE
Albuquerque, NM 87103Jicarilla Tube Contract 47 #27
D 11-23N-4WDEVIATION RECORD
Jicarilla Apache 47-27
Rio Arriba County, New Mexico

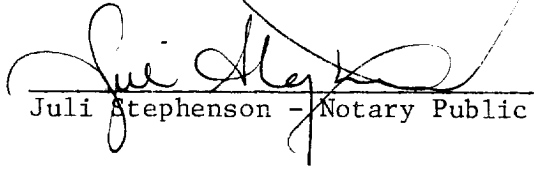
Date	Degree of Deviation	Footage
10-20-86	1°	220'
10-21-86	3/4°	720'
10-22-86	1 1/4°	1,227'
	1 1/4°	1,732'
	2°	2,220'
10-23-86	2 3/4°	2,610'
	2 1/2°	2,764'
	2 3/4°	3,010'
10-24-86	1 3/4°	3,326'
	1°	3,994'
10-25-86	1°	4,481'
	3/4°	4,700'
10-26-86	3/4°	5,209'
10-27-86	1°	5,425'
	3/4°	5,610'
10-28-86	1 1/4°	6,360'
10-29-86	1 1/4°	6,660'
	1 3/4°	7,206'
10-31-86	1°	7,550'

88 I certify that the foregoing instrument is true and complete to the best of my knowledge and belief.


Larry H. Williams - Office Manager

November 13, 1986
Date

The preceding instrument was acknowledged before me, a notary public, by
Larry H. Williams on November 13, 1986.



Juli Stephenson - Notary Public

My Commission Expires: October 24, 1988