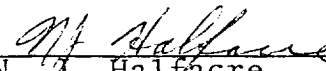


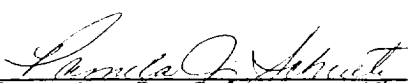
DEVIATION TESTS
FOR
AMOCO PRODUCTION COMPANY
FEDERAL "AF" COM. WELL NO. 1
SECTION 8, T-18-S, R-32-E
LEA COUNTY, NEW MEXICO

<u>DEPTH (FEET)</u>	<u>DEVIATION (DEGREES)</u>	<u>DEPTH (FEET)</u>	<u>DEVIATION (DEGREES)</u>
100	1/4	10,500	1 1/2
411	1 1/4	11,360	3/4
1,050	1	11,650	1/2
1,342	1	12,200	3/4
1,946	1	12,215	3/4
2,280	3/4	12,700	1
2,580	3/4	12,820	2
2,860	3/4		
3,200	1/2		
3,550	3/4		
3,860	3/4		
4,165	1		
4,553	1		
4,920	3/4		
5,345	1/4		
5,687	1/2		
6,125	1		
6,410	1 3/4		
6,620	1		
6,800	1 1/4		
6,443	1 1/4		
7,950	3/4		
8,310	1 1/2		
8,810	1 3/4		
9,286	1 3/4		

WARTON DRILLING COMPANY


N. J. Halfacre
Vice President/Operations Manager

SUBSCRIBED AND SWORN TO before me this 13th day of
July, A. D. 1981.


Pamela J. Schuetz, Notary Public
in and for the State of Texas



PAMELA J. SCHUETZ
Notary Public State of Texas
My Commission Expires August 16 1984