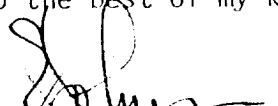


BUFFALO EAST DEEP UNIT #1
Lea County, New Mexico

RECORD OF DEVIATION SURVEYS:

<u>DEPTH, FT.</u>	<u>SURVEY, DEGREES</u>	<u>DEPTH, FT.</u>	<u>SURVEY, DEGREES</u>
100	0.75	8534	0.75
233	1.00	8627	0.50
325	0.75	8729	0.75
412	0.75	9380	0.25
800	0.75	9603	1.75
1000	1.00	9715	2.00
1400	0.50	10,198	2.25
1700	0.75	10,367	2.00
2000	0.75	10,492	2.00
2300	0.75	10,700	2.00
2630	1.50	10,986	2.50
2750	1.50	11,290	2.00
3002	1.50	11,590	2.75
3308	1.25	11,677	3.00
3608	1.25	11,743	2.50
3929	1.75	11,943	2.75
4207	1.75	12,333	3.75
4543	1.75	12,362	3.75
4996	1.75	12,392	4.00
5100	1.00	12,447	3.50
5400	0.50	12,510	4.00
5675	0.75	12,600	3.50
5980	1.00	12,694	3.25
6334	1.00	12,786	3.00
6803	1.25	12,852	4.00
7143	1.25	12,948	2.75
7443	2.00	13,089	2.75
7552	2.00	13,480	3.50
7914	1.75		
8223	2.00		
8318	1.00		
8420	0.25		

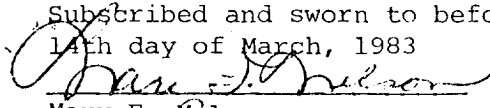
To the best of my knowledge the above record is true and correct.



J. E. Johnson
Drilling Manager - Western Region
Grace Petroleum Corporation

State of Oklahoma
County of Oklahoma

Subscribed and sworn to before me this
14th day of March, 1983



Mary F. Nelson

My commission expires:
10 day of June, 1986