

NOVEMBER 20, 1997

WELL NAME AND NUMBER: H. B. 11 FED #11
LOCATION: Sec. 11 T24S R29E
OPERATOR: SANTA FE ENERGY RESOURCES
DRILLING CONTRACTOR: PATTERSON DRILLING

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

<u>DEGREE AND DEPTH</u>		<u>DEGREE AND DEPTH</u>		<u>DEGREE AND DEPTH</u>	
1.50	353	MR	4504	2.00	7630
1.25	810	0.50	4500	1.75	7819
0.50	1310	1.00	5007	1.00	8064
1.00	1652	1.00	5476	1.00	8460
1.00	1995	0.75	5945		
0.75	2306	0.75	6440		
1.25	2640	1.25	6763		
1.75	2836	1.75	7000		
0.75	3023	2.25	7220		
0.75	3500	2.50	7410		
0.50	4006	2.25	7534		

Drilling Contractor: Patterson Drilling

By: Billy Jensen
Billy Jensen

Subscribed and sworn to before me this 20th day of Nov. 1997.

My Commission Expires:
June 30, 2001

Mary G. Henson
Mary G. Henson