

February 11, 1998

WELL NAME AND NUMBER:
LOCATION:
OPERATOR:
DRILLING CONTRACTOR:

MAC #19 #1-6
SEC. 19 T16S R36E 2523/W & 2370/E
CHESAPEAKE OPERATING
PATTERSON DRILLING 30-025-34250

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:

DEGREE AND DEPTH		DEGREE AND DEPTH		DEGREE AND DEPTH				
0.75	248	1.00	4900	N45E	0.25	9520	S61E	
0.25	489	1.00	5395	N40E	0.50	9900	N11W	
0.00	901	1.25	5833	N4E	2.00	10169	S3780W	
0.50	1331	0.50	6290	S87E	2.00	10353	S65SW	
0.25	2195	N44E	1.25	6787	N74E	6.20	10693	S687W
0.25	2692	N39E	0.50	7185	S54E	6.00	10722	S57W
1.25	3186	N50E	0.50	7676	N46E	5.70	10735	S66.3W
1.75	3686	S81E	0.50	8173	S70E	4.50	11262	S71W
1.25	3936	N82E	0.50	8790	N74E			
1.00	4423	N40E	0.50	9195	N25E			

Drilling Contractor: PATTERSON DRILLING.

By: 
Billy Jensen

Subscribed and sworn to before me on this 11th day of February, 1998

My Commission Expires:
June 30, 2001


Mary G. Henson

RECEIVED
MAY 19 1964