

APRIL 7, 1997

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

20 #1. Unit E
PATTY ~~#1-20~~
SEC. 20 T16S R36E 2156/N & 990/W
CHESAPEAKE OPERATING
ZIADRIL, INC. 30-025-33756

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		
2.50	371'	S56E	1.00	4095'	N30E	1.00	9525'	S30W
3.25	548'	N20W	0.75	4525'		0.50	10042'	S5W
2.75	707'	N2W	0.75	4962'	N8W	1.00	10457'	S15W
0.75	2007'	N11E	1.25	5428'	N75W	1.25	10457'	N25W
1.50	2413'	N15E	0.75	5988'	N41W	1.00	10457'	S15W
2.00	2734'	N44E	0.25	6483'	N21W	1.50	10959'	S90W
1.50	2840'	N55E	0.75	6983'	N8E	1.25	11020'	S55W
1.50	3161'	N38E	0.25	7516'	N88W	1.75	11396'	S9E
0.50	3530'	N38E	0.25	8078'	S28W	2.50	11770'	S15W
1.25	3810'	N28E	1.00	8574'	S7W			
0.50	3936'	N23E	1.00	9035'	S60W			

Drilling Contractor: ZIADRIL, Inc.

By: Billy Jensen
Billy Jensen

Subscribed and sworn to before me on this 7th day of April 1997.

My Commission Expires:
December 6, 2000.

Nancy A. Shelley
Nancy A. Shelley

