

Januray 2, 1997

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

LOVINGTON "5" #1
SEC 8 T16S R36E
CHESAPEAKE OPERATING
ZIADRIL, INC.

Unit T 2190/S & 810/W
30-D25-33686

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		
1.00	442'		17.9	8849'	N85W	29.9	10670'	N85.4W
0.75	502'		18.4	8880'	N85W	29.7	10702'	N85.0W
0.50	865'		20.2	8943'	N85.2W	30.0	10763'	N86.2W
1.00	1239'		22.2	9007'	N84.6W	30.2	10825'	N88.3W
0.50	1415'	N0E	22.9	9038'	N84.1W	29.9	10856'	N88W
0.00	1916'		23.9	9070'	N84.5W	28.3	10919'	N88.3W
1.50	2395'		25.7	9133'	N86W	27.6	10950'	N87.7W
1.50	2456'	N50W	26.5	9165'	N85.6W	27.7	10982'	N87.6W
0.25	2788'	N78E	28.2	9227'	N85.3W	28.8	11074'	N88.1W
0.50	3267'	N51E	29.2	9259'	N85.3W	27.9	11105'	N86.6W
0.75	3659'	N45E	30.0	9321'	N85.3W	26.4	11199'	N82.8W
0.75	4156'	N65E	30.0	9447'	N85.2W	26.4	11198'	N82.8W
1.00	4606'	S55E	31.0	9479'	N85.6W	26.9	11229'	N83.3W
1.00	4951'	S70E	31.0	9510'	N85.6W	27.1	11260'	N83.6W
0.50	5541'	S40E	30.5	9572'	N85.5W	26.4	11291'	N83.3W
1.25	6044'	S40E	30.6	9604'	N85.1W	26.4	11322'	N84.1W
1.00	6355'	S25E	30.1	9730'	N84.1W	25.9	11363'	N83.7W
0.75	6849'	S10W	29.8	9761'	N84.5W	25.9	11384'	N83.2W
0.75	7349'	N8E	30.1	9793'	N84.2W	25.6	11415'	N82.6W
0.50	7813'	N70W	30.0	9823'	N83.6W	26.0	11445'	N83.5W
0.10	8100'	N73.8W	30.2	9854'	N83.1W	26.5	11476'	N84.6W
0.10	8130'	N13.9W	30.1	9885'	N82.3W	26.9	11508'	N85.9W
0.50	8161'	N71.5W	31.0	10042'	N82.3W	26.3	11538'	N87.1W
1.70	8224'	N83.3W	30.9	10073'	N82.3W	24.4	11602'	S89.1W
3.40	8286'	S89.9W	31.0	10105'	N82.3W	24.8	11633'	S87.4W
4.30	8317'	N89.9W	29.8	10295'	N82.8W	26.3	11664'	S87.1W
6.20	8379'	N86.9W	29.8	10325'	N83.2W	27.4	11695'	S87.5W
7.00	8411'	N88.5W	29.6	10357'	N84.4w	27.2	11726'	S85.4W
8.10	8443'	N85.1W	29.3	10421'	N84.3W	28.5	11757'	S83.9W
9.60	8506'	N83.4W	29.6	10357'	N84.4W	29.1	11788'	S84.1W
10.9	8569'	N81.8W	29.3	10452'	N84.9W	29.7	11819'	S84.2W
11.9	8600'	N79.7W	30.2	10483'	N84.5W	30.6	11850'	S84.7W
12.3	8632'	N81.4W	29.8	10545'	N84.7W	31.3	11943'	S85.7W
13.2	8663'	N81.9W	30.2	10576'	N84.9W	31.0	11974'	S85.8W
14.4	8727'	N83.0W	30.3	10607'	N85.7W	30.5	12005'	S86.0W
17.0	8819'	N85.2W	30.2	10638'	N85.6W			

Drilling Contractor: ZIADRIL, INC.

By: Billy Jensen
Billy Jensen

Subscribed and sworn to before me on this 2nd day of January 1997.
My Commission Expires:
December 6, 2000

Nancy A. Shelley
Nancy A. Shelley