

MAXIMUM HORIZONTAL DEVIATION
 API NUMBER: 30-025-32254
 OPERATOR: RAND OIL AND GAS INC
 OGRID NUMBER: 25815
 LEASE & WELL #: SUMMERS # 001
 PROPERTY NUMBER: 13306
 LOCATION: B 18 T 17 S R 39 E
 660 F/N 1980 F/E

Unit B

DEPTH FEET	INCLINATION DEGREES	MEASURED DISTANCE	DEVIATION	CUMM DEVIATION
415	1	415	7.24	7.24
900	0.75	485	6.35	13.59
1406	0.5	506	4.42	18.01
1886	0.25	480	2.09	20.10
2357	0.25	471	2.06	22.16
2465	0.5	108	0.94	23.10
2933	1	468	8.17	31.27
3420	0.75	487	6.37	37.64
3890	0.5	470	4.10	41.74
4358	0.25	468	2.04	43.78
4791	1	433	7.56	51.34
4950	1	159	2.77	54.12
5033	1.5	83	2.17	56.29
5226	0.75	193	2.53	58.82
5475	1	249	4.35	63.16
5946	1.5	471	12.33	75.49
6446	1	500	8.73	84.22
6944	1	498	8.69	92.91
7053	1	109	1.90	94.81
7546	1	493	8.60	103.41
8037	2.75	491	23.56	126.97
8178	2.25	141	5.54	132.51
8272	2.5	94	4.10	136.61
8363	2.5	91	3.97	140.58
8457	2.5	94	4.10	144.68
8644	2.5	187	8.16	152.83
8737	2	93	3.25	156.08
8860	2	123	4.29	160.37
9110	1	250	4.36	164.74
9298	1	188	3.28	168.02
9548	1	250	4.36	172.38
9782	0.75	234	3.06	175.44
10186	0.75	404	5.29	180.73
10481	0.75	295	3.86	184.59
10933	1.25	452	9.86	194.45
11400	1	467	8.15	202.60
11672	0.75	272	3.56	206.16