

Results of Directional Survey

API number:	30-025-37183		
OGRID:		Operator:	CHESAPEAKE OPERATING INC
		Property:	YOUNG 11 FEDERAL # 3

surface	ULSTR:	E	11	T	13S	R	38E
			2412	FNL	417	FWL	

BH Loc	ULSTR:	E	11	T	13S	R	38E
			2149	FNL	548	FWL	

	MD	N/S	E/W	VD
	9103	190.87	113.25	9090.24
TOP PERFS/OH	9122	192.71	113.69	9109.15
	9198	200.05	115.43	9184.77
	9103	190.87	113.25	9090.24
BOT PERFS/OH	9163	196.67	114.63	9149.94
	9198	200.05	115.43	9184.77

NEXT TO LAST	9576	244.75	125.76	9559.97
LAST READING	9671	255.25	128.77	9654.34
TD	9740	262.88	130.96	9722.88

Surface Location	2412	FN	417	FW
Projected BHL	2149	FN	548	FW
Location of				
Top Perfs/OH	2219	FN	531	FW
Bottom Perfs/OH	2215	FN	532	FW

SUMMARY of Subsurface Locations

Surface Location	E-11-13S-38E	2412	FN	417	FW	Vert. Depth
Top Perfs/OH	E-11-13S-38E	2219	FN	531	FW	9109.15
Bottom Perfs/OH	E-11-13S-38E	2215	FN	532	FW	9149.94
Projected TD	E-11-13S-38E	2149	FN	548	FW	9722.88