

Results of Directional Survey

API number:	30-005-29082		
OGRID:		Operator:	MACK ENERGY CORP
		Property:	TOM STATE # 2H

surface	ULSTR:	E	21	T	15S	R	31E
			1675	FNL	330	FWL	

BH Loc	ULSTR:	H	21	T	15S	R	31E
			1664	FNL	4948	FWL	

Top Perf/OH	ULSTR:	E	21	T	15S	R	31E
		9235	1667	FNL	1010	FWL	

Bot Perf/OH	ULSTR:	H	21	T	15S	R	31E
		13034	1658	FNL	4807	FWL	

	MD	N/S	E/W	VD
	9206	6.26	651.13	8800.16
TOP PERFS/OH	9235	7.62	680.09	8800.82
	9237	7.71	682.09	8800.87
	13017	17.95	4460.50	8831.32
BOT PERFS/OH	13034	17.19	4477.48	8831.20
	13048	16.56	4491.46	8831.10

NEXT TO LAST	13110	13.60	4553.39	8830.96
LAST READING	13117	13.27	4560.39	8831.00
TD	13175	10.54	4618.39	8831.33

Surface Location	1675	FN	330	FW
Projected BHL	1664	FN	4948	FW
Location of				
Top Perfs/OH	1667	FN	1010	FW
Bottom Perfs/OH	1658	FN	4807	FW

SUMMARY of Subsurface Locations

Surface Location	E-21-15S-31E	1675	FN	330	FW	Vert. Depth
Top Perfs/OH	E-21-15S-31E	1667	FN	1010	FW	8800.82
Bottom Perfs/OH	H-21-15S-31E	1658	FN	4807	FW	8831.20
Projected TD	H-21-15S-31E	1664	FN	4948	FW	8831.33