

Results of Directional Survey

API number:	30-025-39523		
OGRID:		Operator:	MANZANO LLC
		Property:	RED RAIDER 3 STATE # 1H

surface

ULSTR:	A	03	T 15S	R 32E
		660	FNL	175
			FEL	

BH Loc

ULSTR:	D	03	T 15S	R 32E
		642	FNL	4937
			FEL	

Top Perf/OH

ULSTR:	A	03	T 15S	R 32E
	9039	740	FNL	333
			FEL	

Bot Perf/OH

ULSTR:	D	03	T 15S	R 32E
	13657	642	FNL	4937
			FEL	

	MD	N/S	E/W	VD
	9015	-77.47	-136.33	8927.05
TOP PERFS/OH	9039	-80.16	-157.89	8937.24
	9047	-81.05	-165.08	8940.63
	13563	15.47	-4668.51	8980.11
BOT PERFS/OH	13657	18.44	-4762.45	8980.37
	13595	16.48	-4700.49	8980.20

NEXT TO LAST	13563	15.47	-4668.51	8980.11
LAST READING	13595	16.48	-4700.49	8980.20
TD	13657	18.44	-4762.45	8980.37

Surface Location	660	FN	175	FE
Projected BHL	642	FN	4937	FE
Location of				
Top Perfs/OH	740	FN	333	FE
Bottom Perfs/OH	642	FN	4937	FE

SUMMARY of Subsurface Locations

Surface Location	A-03-15S-32E	660	FN	175	FE	Vert. Depth
Top Perfs/OH	A-03-15S-32E	740	FN	333	FE	8937.24
Bottom Perfs/OH	D-03-15S-32E	642	FN	4937	FE	8980.37
Projected TD	D-03-15S-32E	642	FN	4937	FE	8980.37