

Results of Directional Survey

API number:	30-025-41977		
OGRID:		Operator:	COG OPERATING LLC
		Property:	MAGNUM PRONTO STATE # 6H

surface	ULSTR:	D	32	T	19S	R	32E
				190	FNL	330	FWL

BH Loc	ULSTR:	M	32	T	19S	R	32E
13750	MD	9396.6	TVD	415	FSL	394	FWL
4965 FNL							

Top Perf/OH	ULSTR:	D	32	T	19S	R	32E
9464	MD	9234.4	TVD	688	FNL	353	FWL

Bot Perf/OH	ULSTR:	M	32	T	19S	R	32E
13660	MD	9396.1	TVD	405	FSL	394	FWL
4875 FNL							

	MD	N/S	E/W	VD
	9441.00	-475.20	21.20	9229.20
TOP PERFS/OH	9464.00	-497.53	22.68	9234.39
	9472.00	-505.30	23.20	9236.20
	13585.00	-4610.50	71.40	9395.60
BOT PERFS/OH	13660.00	-4685.41	67.99	9396.05
	13750.00	-4775.30	63.90	9396.60

NEXT TO LAST	13585.00	-4610.50	71.40	9395.60
LAST READING	13750.00	-4775.30	63.90	9396.60
TD	13750.00	-4775.30	63.90	9396.60

Surface Location	190	FN	330	FW
Projected BHL	4965	FN	394	FW
Location of				
Top Perfs/OH	688	FN	353	FW
Bottom Perfs/OH	4875	FN	398	FW

SUMMARY of Subsurface Locations

Surface Location	D-32-19S-32E	190	FN	330	FW	Vert. Depth
Top Perfs/OH	D-32-19S-32E	688	FN	353	FW	9234.39
Bottom Perfs/OH	M-32-19S-32E	4875	FN	398	FW	9396.05
Projected TD	M-32-19S-32E	4965	FN	394	FW	9396.60

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JAN 28 2015