

Results of Directional Survey

API number:	30-025-41210		
OGRID:		Operator:	CIMAREX ENERGY CO.
		Property:	QUAIL 11 STATE # 4H

surface	ULSTR:	N	11	T	19S	R	34E
				330	FSL	1980	FWL

BH Loc	ULSTR:	C	11	T	19S	R	34E
15162	MD	10873.9	TVD	351	FNL	1907	FWL
				4929	FSL		

Top Perf/OH	ULSTR:	N	11	T	19S	R	34E
10680	MD	10628.1	TVD	522	FSL	1951	FWL

Bot Perf/OH	ULSTR:	C	11	T	19S	R	34E
15125	MD	10874.2	TVD	387	FNL	1912	FWL
				4893	FSL		

	MD	N/S	E/W	VD
	10653	173.15	-30.26	10609.02
TOP PERFS/OH	10680	192.24	-29.12	10628.07
	10685	195.78	-28.91	10631.60
	15058	4496.04	-60.23	10874.74
BOT PERFS/OH	15125	4562.57	-68.14	10874.21
	15162	4599.31	-72.51	10873.92

NEXT TO LAST	15058	4496.04	-60.23	10874.74
LAST READING	15162	4599.31	-72.51	10873.92
TD	15162	4599.31	-72.51	10873.92

Surface Location	330	FS	1980	FW
Projected BHL	4929	FS	1907	FW
Location of				
Top Perfs/OH	522	FS	1951	FW
Bottom Perfs/OH	4893	FS	1912	FW

SUMMARY of Subsurface Locations

Surface Location	N-11-19S-34E	330	FS	1980	FW	Vert. Depth
Top Perfs/OH	N-11-19S-34E	522	FS	1951	FW	10628.07
Bottom Perfs/OH	C-11-19S-34E	4893	FS	1912	FW	10874.21
Projected TD	C-11-19S-34E	4929	FS	1907	FW	10873.92

MAY 07 2014