

Results of Directional Survey

API number:	30-025-39634		
OGRID:		Operator:	CIMAREX ENERGY CO OF COLORADO
		Property:	SOUTHERN CALIFORNIA 29 FEDERAL # 15

surface	ULSTR:	M	29	T 19S	R 32E
				375 FSL	330 FWL

BH Loc	ULSTR:	P	29	T 19S	R 32E
13715	MD	9320.7	TVD	366 FSL	4914 FWL

Top Perf/OH	ULSTR:	M	29	T 19S	R 32E
9499	MD	9261.2	TVD	543 FSL	703 FWL

Bot Perf/OH	ULSTR:	P	29	T 19S	R 32E
13621	MD	9321.5	TVD	372 FSL	4820 FWL

	MD	N/S	E/W	VD
	9477	168.40	351.40	9261.1
TOP PERFS/OH	9499	167.70	373.40	9261.20
	9540	166.40	414.40	9261.40
	13554	0.60	4423.10	9322.00
BOT PERFS/OH	13621	-3.44	4489.89	9321.47
	13617	-3.20	4485.90	9321.50

NEXT TO LAST	13554	0.60	4423.10	9322.00
LAST READING	13617	-3.20	4485.90	9321.50
TD	13715	-9.11	4583.59	9320.72

Surface Location	375	FS	330	FW
Projected BHL	366	FS	4914	FW
Location of				
Top Perfs/OH	543	FS	703	FW
Bottom Perfs/OH	372	FS	4820	FW

SUMMARY of Subsurface Locations

Surface Location	M-29-19S-32E	375	FS	330	FW	Vert. Depth
Top Perfs/OH	M-29-19S-32E	543	FS	703	FW	9261.20
Bottom Perfs/OH	P-29-19S-32E	372	FS	4820	FW	9321.47
Projected TD	P-29-19S-32E	366	FS	4914	FW	9320.72