

### Results of Directional Survey

API number: <b>30-025-41915</b>			
OGRID:		Operator: <b>COG OPERATING LLC</b>	
		Property: <b>BEN LILLY 2 STATE COM</b>	# 5H

surface	ULSTR: <b>X</b>		<b>2</b>	<b>T 21S</b>	<b>R 33E</b>
				<b>330 FSL</b>	<b>833 FEL</b>

7929

BH Loc	ULSTR: <b>A</b>		<b>2</b>	<b>T 21S</b>	<b>R 33E</b>
<b>18795</b>	<b>MD</b>	<b>11437.1</b>	<b>TVD</b>	<b>181 FNL</b>	<b>976 FEL</b>
<b>7748 FSL</b>					

Top Perf/OH	ULSTR: <b>X</b>		<b>2</b>	<b>T 21S</b>	<b>R 33E</b>
<b>11760</b>	<b>MD</b>	<b>11575.6</b>	<b>TVD</b>	<b>718 FSL</b>	<b>1005 FEL</b>

Bot Perf/OH	ULSTR: <b>A</b>		<b>2</b>	<b>T 21S</b>	<b>R 33E</b>
<b>18600</b>	<b>MD</b>	<b>11440.5</b>	<b>TVD</b>	<b>376 FNL</b>	<b>977 FEL</b>
<b>7553 FSL</b>					

	MD	N/S	E/W	VD
	11728.00	357.70	-170.70	11566.20
TOP PERFS/OH	<b>11760.00</b>	388.30	-171.80	11575.60
	11760.00	388.30	-171.80	11575.60
	18549.00	7171.70	-144.00	11441.60
BOT PERFS/OH	<b>18600.00</b>	7222.65	-143.73	11440.53
	18644.00	7266.60	-143.50	11439.60

NEXT TO LAST	18717.00	7339.60	-143.30	11438.60
LAST READING	18770.00	7392.60	-143.10	11437.60
TD	<b>18795.00</b>	7417.60	-143.01	11437.13

Surface Location	330	FS	833	FE
Projected BHL	7748	FS	976	FE
Location of				
Top Perfs/OH	718	FS	1005	FE
Bottom Perfs/OH	7553	FS	977	FE

#### SUMMARY of Subsurface Locations

Surface Location	X-02-21S-33E	330	FS	833	FE	Vert. Depth
Top Perfs/OH	X-02-21S-33E	718	FS	1005	FE	11575.60
Bottom Perfs/OH	A-02-21S-33E	7553	FS	977	FE	11440.53
Projected TD	A-02-21S-33E	7748	FS	976	FE	11437.13

JAN <sup>29</sup>~~28~~ 2015