

WELL LOGS

K z

DD

API number:	30-025-39873		
OGRID:		Operator:	COG OPERATING LLC
		Property:	JC FEDERAL # 48

surface	ULSTR:	J	22	T	17S	R	32E
			2490	FSL	1980	FEL	

BH Loc	ULSTR:	J	22	T	17S	R	32E
			2267	FSL	2308	FEL	

Ground Level:	3999	DF:	4018	KB:	4019
Datum:	KB			TD:	7090

Land: **FEDERAL**

Completion Date: (1) 3/5/2011

Date Logs Received: 4/12/2011

Date C105 Received: 4/12/2011

Date Logs/C105 Due in: (2) 3/25/2011

LATE

LATE

Confidential:	NO			Date out:	
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Confidential period: 90 Days for State & Fee, 1 Year for federal

Date Due In: (1) is equal to Completion Date (1) + 20 days

Logs	Depth interval		
DSN/SDL	100	7006	Spectral Density Dual Spaced Neutron

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OCD TOPS

Rustler	812	Strawn		
Tansill		Atoka		
Yates	2107	Morrow		
7 rvs	2490			
	2844	Austin		
	2919	Chester		
Queen	3094	Miss Lime		
Penrose				
Grayburg	3466			
San Andres	3891			
Glorieta	5409			
Yeso	5497			
Blinbry				
Tubb	6908			
Drinkard				
Abo				
Wolfcamp				

Results of Directional Survey

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		Property:	JC FEDERAL # 48

surface	ULSTR:	J	22	T 17S	R 32E
				2490 FSL	1980 FEL

BH Loc	ULSTR:	J	22	T 17S	R 32E
7090	MD	7063.2	TVD	2267 FSL	2308 FEL

Top Perf/OH	ULSTR:	J	22	T 17S	R 32E
5500	MD	5473.3	TVD	2283 FSL	2298 FEL

Bot Perf/OH	ULSTR:	J	22	T 17S	R 32E
6770	MD	6743.2	TVD	2270 FSL	2307 FEL

	MD	N/S	E/W	VD
	5491	-206.50	-318.00	5464.3
TOP PERFS/OH	5500	-206.58	-318.29	5473.29
	5587	-207.30	-321.10	5560.20
	5871	-209.40	-324.50	5844.20
BOT PERFS/OH	6770	-219.55	-327.40	6743.20
	5933	-210.10	-324.70	5906.20

NEXT TO LAST	5871	-209.40	-324.50	5844.20
LAST READING	5933	-210.10	-324.70	5906.20
TD	7090	-223.16	-328.43	7063.20

Surface Location	2490	FS	1980	FE
Projected BHL	2267	FS	2308	FE
Location of				
Top Perfs/OH	2283	FS	2298	FE
Bottom Perfs/OH	2270	FS	2307	FE

SUMMARY of Subsurface Locations

Surface Location	J-22-17S-32E	2490	FS	1980	FE	Vert. Depth
Top Perfs/OH	J-22-17S-32E	2283	FS	2298	FE	5473.29
Bottom Perfs/OH	J-22-17S-32E	2270	FS	2307	FE	6743.20
Projected TD	J-22-17S-32E	2267	FS	2308	FE	7063.20