

WELL LOGS

K Z

API number:	30-025-38703		
OGRID:		Operator:	COG OPERATING LLC
		Property:	MC FEDERAL # 20

surface	ULSTR:	L	21	T	17S	R	32E
			1500	FSL	990	FWL	

BH Loc	ULSTR:	L	21	T	17S	R	32E
			1500	FSL	990	FWL	

Ground Level:	4031	DF:	4051	KB:	4052	
Datum:	KB			TD:	13100	

Land:	FEDERAL	Completion Date: (1)	4/17/2008
		Date Logs Received:	5/8/2008
		Date Logs Due in: (2)	5/7/2008

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		
TD LD CN/GR	200	7006	Three Detector Litho-Density
HRLA	2118	7006	High Resolution Laterolog

K Z

OCD TOPS

Rustler	757	Strawn		
Tansill		Atoka		
Yates	2086	Morrow		
7 rvs	2445			
	2794	Austin		
	2870	Chester		
Queen	3050	Miss Lime		
Penrose				
Grayburg	3428			
San Andres	3824			
Glorieta	5348			
Paddock	5388			
Blinbry				
Tubb	6902			
Drinkard				
Abo				
Wolfcamp				

OPERATOR C O G

WELL/LEASE M C Fed #20 L-21-175-320

COUNTY Lea

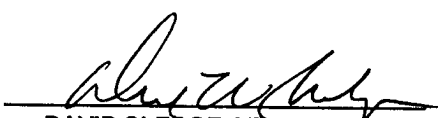
3D-025-38703

1500/S 892/W

STATE OF NEW MEXICO
DEVIATION REPORT

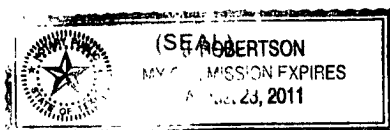
236	0.75
481	0.75
687	0.50
969	0.25
1604	1.00
1287	0.75
1857	1.75
2387	1.50
2673	0.75
2989	1.00
3307	1.25
3592	0.75
3909	0.75
4196	1.25
4512	1.25
4797	1.00
5082	0.75
5314	0.75
5652	0.75
5970	1.00
6224	0.75
6573	0.50
6826	0.50
6955	0.50

SIGNED BY:


DAVID SLEDGE, VP-DRILLING

STATE OF TEXAS
COUNTY OF MIDLAND

ON THIS 18th DAY OF April, 2008, BEFORE ME, J ROBERTSON, A NOTARY PUBLIC, PERSONALLY APPEARED DAVID SLEDGE, WHO ACKNOWLEDGED AND EXECUTED THIS DOCUMENT. WITNESS MY HAND AND OFFICIAL SEAL.




NOTARY PUBLIC