



DRILLING INC. Oil Well Drilling Contractor

Post Office Box 160 Artesia, New Mexico 88211-0160 Office (575) 748-8704 Fax (575) 748-8719

March 18, 2010

RECEIVED

JUN 11 2010

HOBBSOCD

COG Operating, LLC
550 W. Texas, Suite 1300
Midland, Texas 79701

Attn: John Coffman

30-025-38831
Re: JC Federal # 17 Unit F
Sec. 22, T-17-S, R-32-E
Lea County, New Mexico
2310/N & 1650/W

The following is a Deviation Survey on the referenced well in Lea County, New Mexico:

218' - 1°	6201' - 1.75°
490' - 1.75°	6700' - 2°
760' - 3°	6976' - 2°
1245' - 1.5°	
1715' - 1.75°	
2052' - 1.75°	
2535' - 1.5°	
3033' - 1.75°	
3531' - 1°	
4030' - 2.5°	
4234' - 2.5°	
4714' - 2°	
5211' - 2.25°	
5705' - 2°	

Sincerely,

Gary W. Chappell
Contracts Manager

STATE OF NEW MEXICO)
COUNTY OF EDDY)

The foregoing was acknowledged before me this 18th day of March, 2010 by Gary W. Chappell.
MY COMMISSION EXPIRES

NOTARY PUBLIC

OFFICIAL SEAL
Betsy S. Lachowsky
NOTARY PUBLIC

STATE OF NEW MEXICO

9/7/2013

Kz

