



DRILLING INC. Oil Well Drilling Contractor

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

HOBBS OCD

FEB 14 2012

November 14, 2011

RECEIVED

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

Re: JC Federal #37
Sec. 21, T-17-S, R-32-E
Lea County, New Mexico

Attn: John Coffman

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

350' - 0.75°	2633' - 0.75°	5126' - 1°	7066' - 0.75°
755' - 0.25°	3130' - 0.75°	5212' - 1.75°	
1120' - 0.5°	3628' - 1°	5721' - 1°	
1615' - 1°	4127' - 0.5°	6220' - 1.25°	
2061' - 2°	4625' - 1.5°	6717' - 1°	

Sincerely,

Gary W. Chappell
Contracts Manager

STATE OF NEW MEXICO)
)
COUNTY OF EDDY)

The foregoing was acknowledged before me this 14th day of November, 2011 by Gary W. Chappell.



OFFICIAL SEAL
CHERYL A. BARTLETT
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 4-29-13

NOTARY PUBLIC

FEB 23 2012