



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

May 26, 2011

JUL 01 2011

30-025-39861

RECEIVED

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

Re: JC FED #52
Sec. 22, 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:

107' - 1°	717' - 3.75°	3007' - 0.25°	5846' - 0.75°
195' - 0.25°	806' - 4°	3507' - 0.75°	6344' - 0.75°
284' - 0.25°	1095' - 2°	4007' - 0.5°	7061' - 1°
372' - 1°	1594' - 1.75°	4505' - 0.75°	
548' - 4°	2032' - 1°	5003' - 0.75°	
630' - 3.75°	2506' - 0.75°	5368' - 0.5°	

Sincerely,

Gary W. Chappell
Contracts Manager

STATE OF NEW MEXICO)
COUNTY OF EDDY)

The foregoing was acknowledged before me this 26th day of May, 2011 by Gary W. Chappell.



OFFICIAL SEAL
Crisha Morgan
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 10/28/2014

NOTARY PUBLIC

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JUL 07 2011