



DRILLING INC. Oil Well Drilling Contractor

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

October 28, 2011

30-015-38972

COG Operating, LLC2096
500 W. Texas, Suite 1300
Midland, Texas 79701

Re: Empire State SWD 9 #4
Sec. 9 T-17-S R-29-E
Eddy County, New Mexico

Attn: John Coffman

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

197' - 0.75°	2336' - 1°	5524' - 1°	7753' - 1.25°
503' - 1°	2835' - 0.75°	5902' - 0.5°	8159' - 0.25°
745' - 0.5°	3309' - 1°	6295' - 0.25°	8315' - 0.75°
1117' - 0.25°	4199' - 1°	6653' - 1°	
1618' - 0.5°	4585' - 0.25°	7029' - 0.25°	
2088' - 0.75°	5055' - 0.5°	7406' - 1.5°	

Sincerely,

Gary W. Chappell
Contracts Manager

STATE OF NEW MEXICO)
COUNTY OF EDDY)

The foregoing was acknowledged before me this 28th day of October, 2011 by Gary W. Chappell.

Cheryl A. Bartlett
NOTARY PUBLIC



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

My commission expires: _____