



DRILLING INC. Oil Well Drilling Contractor

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

August 9, 2011

30-015-38971

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

Re: Raptor 12 State Com #1H
Sec. 12, T-16-S, R-28-E
Eddy County, New Mexico

Attn: John Coffman

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

286' - 1.5°	2534' - 0.25°	4918' - 0.75°	6148' - 3°
684' - 0.75°	3009' - 0.25°	5259' - 0.5°	6369' - 4.5°
1123' - 1.25°	3485' - 0.5°	5747' - 1.5°	6854' - 4°
1565' - 0.5°	3922' - 0.25°	5812' - 2°	
2060' - 0.75°	4421' - 0.25°	5910' - 3°	

Sincerely,

Gary W. Chappell
Contracts Manager

STATE OF NEW MEXICO)
COUNTY OF EDDY)

The foregoing was acknowledged before me this 9th day of August, 2011 by Gary W. Chappell.

MY COMMISSION EXPIRES

10/28/2014

NOTARY PUBLIC



OFFICIAL SEAL
Crisha Morgan
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 10/28/2014