

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

February 14, 2012

APR 16 2012

RECEIVED

30-025-39930

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

Re: JC Federal # 54 Unit m
Sec. 22 T-17-S, R-32-E
Lea County, New Mexico

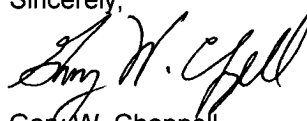
Attn: John Coffman

700/S 4445/W

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

409' - 0.5°	2231' - 2°	3920' - 0.75°	5915' - 1°
843' - 0.75°	2482' - 1°	4418' - 1°	6351' - 1°
1284' - 0.75°	2980' - 0.75°	4918' - 1°	6787' - 1°
1784' - 1°	3449' - 1.5°	5417' - 0.75°	7067' - 1°

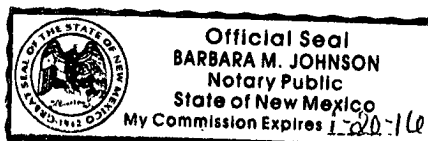
Sincerely,


Gary W. Chappell
Contracts Manager

STATE OF NEW MEXICO)
COUNTY OF EDDY)

The foregoing was acknowledged before me this 14th day of February, 2012 by Gary W. Chappell.


NOTARY PUBLIC





APR 18 2012