



DRILLING INC. Oil Well Drilling Contractor

30-025-40310

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December 22, 2011

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

Re: Maljamar SWD "30" # 2
Sec. 30, 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:

358' - 0.5°	2702' - 1.5°	5392' - 1.5°	7280' - 3°
690' - 0.75°	2801' - 1.25°	5552' - 1°	7302' - 3.25°
1015' - 0.5°	2890' - 0.5°	6019' - 1.25°	7398' - 3°
1359' - 0.5°	3177' - 1°	6398' - 2°	7534' - 2.75°
1701' - 1.25°	3424' - 1°	6585' - 2.25°	7586' - 2.75°
1858' - 2°	3677' - 0.75°	6773' - 5°	7711' - 2°
1982' - 2°	3955' - 1.5°	6864' - 5°	7961' - 1.5°
2076' - 1.75°	4055' - 1°	6926' - 3.5°	8275' - 1.75°
2169' - 1.5°	4459' - 1°	6993' - 3.5°	8680' - 1°
2300' - 1.25°	4678' - 1°	7087' - 4.5°	9087' - 0.75°
2451' - 1°	5081' - 1°	7220' - 4°	9513' - 1.5°
			9952' - 1°

Sincerely,

Gary W. Chappell
Contracts Manager

STATE OF NEW MEXICO)
)
COUNTY OF EDDY)

The foregoing was acknowledged before me this 22nd day of December, 2011 by Gary W. Chappell.



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

My commission expires: 4-29-12

NOTARY PUBLIC

JUL 23 2015