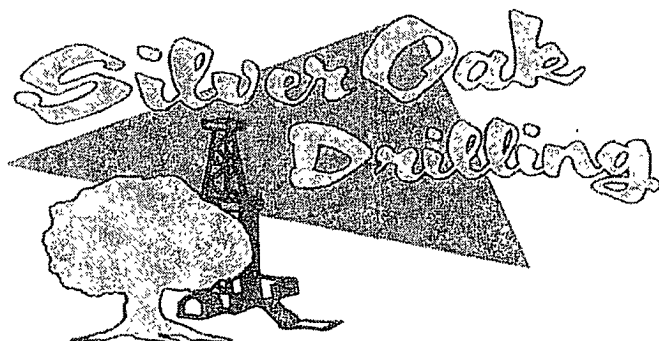




PO Box 1370
Artesia, NM 88211-1370
(575) 748-1288

November 5, 2009

COG, LLC
Fasken Center, Tower II
550 West Texas Ave, Suite 1300
Midland, TX 79701

RE: Harvard Federal #19
1675' FNL & 330' FWL
Sec. 12, T17S, R30E
Eddy County, New Mexico

Dear Sir,

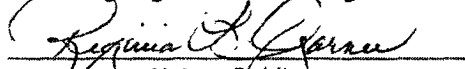
The attached is the Deviation Survey for the above captioned well.

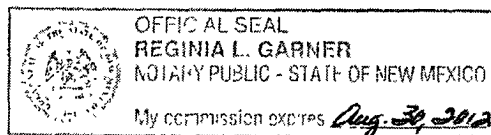
Very truly yours,


Eddie C. LaRue
Operations Manager

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 5th day of November, 2009.


Notary Public



Date	epth	Dev	TVD
10/18	325.00	0.70	
10/19	793.00	1.30	835.00
10/20	1,265.00	1.60	
10/21	1,468.00	0.70	
10/21	1,947.00	0.40	
10/22	2,423.00	0.80	
10/22	2,934.00	0.70	3,009.00
10/23	3,252.00	0.60	3,323.00
10/23	3,731.00	0.70	3,801.00
10/24	4,143.00	0.70	4,215.00
10/25	4,621.00	0.50	4,693.00
10/25	5,100.00	0.10	5,171.00
10/26	5,579.00	0.20	5,649.00

11/200

11/200

11/200

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