



HOBBS OCD

FEB 18 2014

RECEIVED

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

COG OPER, LLC  
RECEIVED

AUG 16 2013

ARTESIA WEST

July 31, 2013

COG, LLC  
One Concho Center  
600 W. Illinois Ave.  
Midland, TX 79701

30-025-41208

RE: Pintail 3 Federal SWD #1  
2500' FSL & 1400' FEL  
Sec. 3, T17S, R32E  
Lea County, New Mexico

Dear Sir,

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

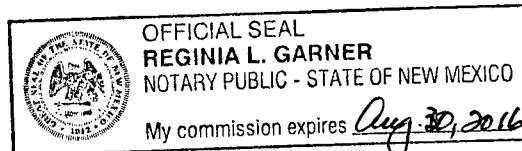
Very truly yours,

Chris Graham  
Drilling Superintendent

State of New Mexico }  
County of Eddy }

The foregoing was acknowledged before me this 31<sup>st</sup> day of July, 2013.

Notary Public



APR 07 2014

PINTAIL 3 FED SWD#1

| Date      | Depth | Deviation | Direction |
|-----------|-------|-----------|-----------|
| 7/17/2013 | 218   | 0.10      | 0.00      |
| 7/17/2013 | 652   | 3.60      | 0.00      |
| 7/17/2013 | 777   | 3.80      | 0.00      |
| 7/18/2013 | 914   | 3.40      | 0.00      |
| 7/20/2013 | 955   | 3.70      | 0.00      |
| 7/20/2013 | 1049  | 2.90      | 0.00      |
| 7/20/2013 | 1081  | 1.90      | 0.00      |
| 7/20/2013 | 1113  | 1.70      | 0.00      |
| 7/20/2013 | 1144  | 1.40      | 0.00      |
| 7/20/2013 | 1175  | 0.90      | 103.30    |
| 7/20/2013 | 1206  | 1.00      | 106.20    |
| 7/20/2013 | 1237  | 1.00      | 159.90    |
| 7/20/2013 | 1269  | 0.80      | 94.60     |
| 7/20/2013 | 1300  | 0.80      | 115.50    |
| 7/20/2013 | 1331  | 1.00      | 100.30    |
| 7/20/2013 | 1520  | 1.00      | 114.60    |
| 7/20/2013 | 1614  | 1.00      | 114.20    |
| 7/20/2013 | 1676  | 1.30      | 106.00    |
| 7/21/2013 | 1802  | 1.00      | 109.30    |
| 7/21/2013 | 1896  | 0.60      | 168.30    |
| 7/21/2013 | 1958  | 0.40      | 140.40    |
| 7/21/2013 | 2053  | 0.70      | 178.80    |
| 7/21/2013 | 2147  | 0.50      | 170.10    |
| 7/21/2013 | 2241  | 0.70      | 181.60    |
| 7/21/2013 | 2365  | 0.60      | 211.80    |
| 7/21/2013 | 2490  | 0.80      | 221.80    |
| 7/21/2013 | 2647  | 1.20      | 235.40    |
| 7/22/2013 | 2678  | 1.50      | 242.20    |
| 7/22/2013 | 2772  | 0.70      | 250.50    |
| 7/22/2013 | 2865  | 0.60      | 279.50    |
| 7/22/2013 | 2528  | 0.50      | 277.50    |
| 7/22/2013 | 2990  | 0.30      | 251.90    |
| 7/22/2013 | 3083  | 0.30      | 281.70    |
| 7/22/2013 | 3176  | 0.40      | 49.80     |
| 7/22/2013 | 3270  | 0.80      | 77.80     |
| 7/22/2013 | 3363  | 1.80      | 78.00     |
| 7/22/2013 | 3425  | 1.50      | 85.50     |
| 7/23/2013 | 3550  | 1.00      | 90.90     |
| 7/23/2013 | 3645  | 1.00      | 95.80     |
| 7/23/2013 | 3707  | 1.10      | 103.00    |
| 7/23/2013 | 3770  | 1.10      | 110.50    |
| 7/23/2013 | 3832  | 1.20      | 95.30     |
| 7/23/2013 | 3894  | 1.80      | 99.00     |

| Date      | Depth | Deviation | Direction |
|-----------|-------|-----------|-----------|
| 7/23/2013 | 3957  | 2.60      | 103.70    |
| 7/24/2013 | 4019  | 2.10      | 117.30    |
| 7/24/2013 | 4082  | 2.10      | 0.00      |
| 7/24/2013 | 4144  | 2.40      | 127.70    |
| 7/24/2013 | 4206  | 3.00      | 129.40    |
| 7/24/2013 | 4363  | 4.60      | 138.80    |
| 7/26/2013 | 4520  | 5.00      | 0.00      |
| 7/26/2013 | 4771  | 2.50      | 0.00      |
| 7/27/2013 | 5258  | 0.40      | 0.00      |
| 7/27/2013 | 5754  | 0.30      | 0.00      |
| 7/27/2013 | 6205  | 0.00      | 0.00      |
| 7/27/2013 | 6563  | 0.60      | 0.00      |