



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

NM OIL CONSERVATION
ARTESIA DISTRICT

JAN 18 2018

RECEIVED

October 31, 2017

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

RE: Malco 23 Fed Com 13H
125' FNL & 1543' FWL
Sec. 23, T17S, R28E
Eddy County, New Mexico

30-015-44297

Dear Sir,

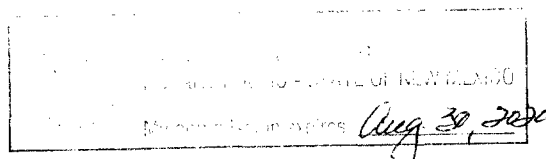
The attached is the Deviation Survey for the above captioned well.

Very truly yours,

Chris Graham
Asst. Operations Manager

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 31st day of October, 2017.

Notary Public

MALCO 23 FED COM # 13H

Depth	Deviation	Direction
86	0.20	
177	1.10	
273	0.90	
507	0.90	
775	0.70	
1029	0.20	
1290	0.10	233.49
1322	0.12	145.32
1417	2.06	20.67
1512	2.93	24.32
1607	3.88	31.99
1702	4.81	35.82
1797	5.48	36.04
1892	7.19	41.25
1987	8.33	40.52
2081	8.57	39.22
2178	8.51	40.69
2273	8.70	40.10
2367	8.88	40.05
2461	8.01	39.05
2556	6.86	38.65
2650	5.55	37.78
2745	3.81	38.61
2935	0.97	88.60
3030	1.57	155.94
3124	6.02	179.20
3156	6.00	179.20
3219	14.11	181.03
3251	18.04	181.49
3282	20.79	181.73
3313	23.15	181.81
3345	25.79	181.29
3377	28.12	180.71
3408	30.91	180.21
3440	34.99	179.76
3472	38.77	179.59
3503	41.44	179.60
3535	43.58	179.57
3566	44.58	179.23
3598	45.10	180.69
3629	45.17	180.63
3661	45.27	180.48

Depth	Deviation	Direction
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3692	45.27	180.39
3724	45.27	174.71
3857	57.45	178.96
3889	60.05	178.51
3951	68.78	178.38
4046	75.71	179.01
4140	81.79	180.50
4456	90.41	178.98
4645	91.50	180.00
4927	91.70	178.00
5400	91.90	179.00
5494	92.00	179.00
5684	90.97	180.91
5776	91.03	181.21
5871	91.45	180.93
6060	91.35	181.02
6155	91.13	180.09
6345	91.14	180.42
6629	91.00	180.00
6723	91.00	180.00
7198	90.00	181.00
7386	91.52	182.14
7575	91.57	181.18
7765	91.27	180.37
7860	92.21	180.81
7953	92.40	180.93
8043	91.70	181.29
8238	91.69	180.96
8332	91.95	181.42
8386	91.96	181.96
8480	91.84	181.82
8575	91.82	182.51
8605	91.74	182.35