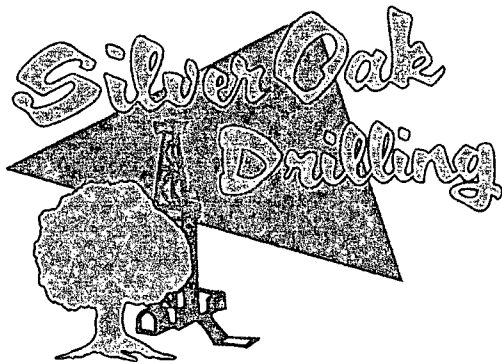




PO Box 1370
Artesia, NM 88211-1370
(575) 748-1288

HOBBS OCD

MAR 20 2014

RECEIVED

January 28, 2014

Mack Energy Corporation
PO Box 960
Artesia, NM 88211-0960

30-025-41557

RE: Cutthroat Federal #5
1650' FNL & 2310' FEL
Sec. 29, T17S, R32E
Lea County, New Mexico

Dear Sir,

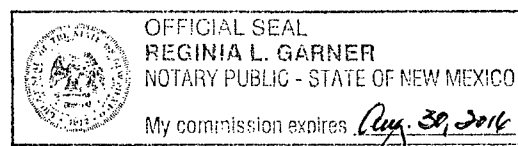
The attached is the Deviation Survey for the above captioned well.

Very truly yours,

Chris Graham
Drilling Superintendent

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 28th day of January, 2014.

Notary Public

MAR 31 2014

Cutthroat Federal #5

Date	Depth	Deviation	Direction	TVD
1/7/2014	249	0.30	0.00	323.00
1/7/2014	511	0.70	0.00	585.00
1/8/2014	793	1.70	0.00	0.00
1/10/2014	803	1.50	0.00	0.00
1/10/2014	897	1.40	0.00	0.00
1/10/2014	990	1.60	0.00	0.00
1/10/2014	1003	1.40	0.00	0.00
1/10/2014	1083	1.60	359.60	0.00
1/10/2014	1270	0.50	335.70	0.00
1/10/2014	1457	0.60	345.70	0.00
1/10/2014	1644	0.70	27.80	0.00
1/10/2014	1831	1.50	48.20	1877.00
1/10/2014	2018	2.20	52.80	2064.00
1/11/2014	2212	1.60	0.00	0.00
1/13/2014	2684	1.70	14.70	2748.00
1/13/2014	2888	1.70	15.20	2935.00
1/13/2014	3075	1.50	4.70	3122.00
1/14/2014	3261	1.30	1.80	0.00
1/14/2014	3448	1.80	352.30	0.00
1/14/2014	3635	1.00	302.20	0.00
1/14/2014	3801	0.70	0.00	0.00
1/14/2014	3988	0.90	0.00	0.00
1/14/2014	4175	0.70	0.00	0.00
1/14/2014	4382	1.00	6.20	0.00
1/14/2014	4569	0.50	347.50	0.00
1/14/2014	4756	0.50	21.80	0.00
1/15/2014	4942	1.20	24.60	0.00
1/15/2014	5129	1.40	16.90	0.00
1/15/2014	5316	1.60	353.50	0.00
1/15/2014	5483	0.60	0.00	0.00
1/15/2014	5670	0.30	0.00	0.00
1/15/2014	5857	0.40	264.90	0.00
1/16/2014	6067	0.90	345.60	0.00
1/16/2014	6234	1.80	0.00	0.00
1/16/2014	6422	1.40	0.00	0.00
1/17/2014	6628	2.10	16.70	0.00
1/17/2014	6815	0.50	146.20	0.00
1/17/2014	7004	1.40	62.60	0.00
1/17/2014	7193	1.70	38.00	0.00
1/18/2014	7379	1.60	139.00	0.00
1/18/2014	7571	1.70	130.10	0.00
1/18/2014	7759	1.50	133.60	0.00
1/18/2014	7948	1.20	144.90	0.00

1/18/2014	8117	1.10	0.00	0.00
1/19/2014	8316	1.00	152.10	0.00
1/19/2014	8519	0.60	174.60	0.00
1/19/2014	8744	1.00	204.50	0.00
1/19/2014	8872	1.10	211.10	0.00
1/19/2014	9062	9.00	224.60	0.00
1/19/2014	9251	0.50	251.00	0.00
1/21/2014	9442	0.40	0.00	0.00
1/21/2014	9631	0.80	0.00	9682.00

EOF