

OPERATOR COG Operating  
WELL/LEASE Macho Nacho #7 State SWD #1  
COUNTY Lea Co., NM.

30-025-42463

HOBBS OCD

MAY 21 2015

STATE OF NEW MEXICO  
DEVIATION REPORT

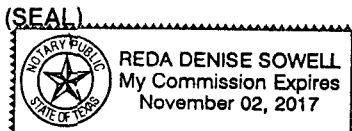
RECEIVED

250	0.15
480	0.60
825	0.90
1100	0.64
1265	0.50
1823	0.60
2107	0.50
2391	0.60
2731	0.90
2958	1.10
3521	1.30
3866	0.90
4377	2.20
4661	1.80
4954	0.50
5134	0.40
5342	0.40
5417	0.60
5819	0.60
6269	0.90
6670	0.50
7141	0.60
7346	0.30

SIGNED BY: *Ron Scandolari*  
RON SCANDOLARI, VP-CONTRACT DRILLING

STATE OF TEXAS  
COUNTY OF MIDLAND

ON THIS 31 DAY OF March, <sup>2015</sup>~~2014~~, BEFORE ME, R SOWELL, A NOTARY  
PUBLIC, PERSONALLY APPEARED RON SCANDOLARI, WHO ACKNOWLEDGED AND EXECUTED  
THIS DOCUMENT. WITNESS MY HAND AND OFFICIAL SEAL.



*Reda Denise Sowell*  
NOTARY PUBLIC

JUN 09 2015



HOBBS OCD

MAY 21 2015

RECEIVED

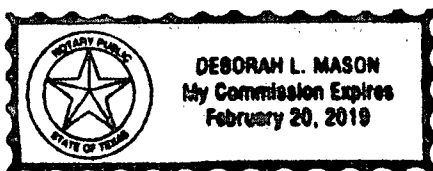
State of New Mexico  
County of Eddy

I, Donald D. Mason, certify that: I am employed by Terra Directional Services LLC; that I did on the day(s) of 02/14/2015 through 03/05/2015 conduct or supervise the taking of a MWD survey from a depth of 5636 feet to a depth 13030 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Terra Directional Services LLC; that I am authorized and qualified to make this report; that this survey was conducted at the request of Concho Oil & Gas for the Ridge Nose Federal Com #1H Well API 30-015-42391 in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Terra Directional Services LLC.

Donald D. Mason  
President

State of Texas  
County of Burnet

Before me, a notary public, on this day personally appeared Donald D. Mason, known to me to be the person whose name is subscribed to the foregoing document and, being by me first duly sworn, declared that the statements therein contained are true and correct.



Notary Public's Signature



Customer Name: COG Operating, LLC.  
 Well Name: Macho Nacho 7 St SWD 1  
 API Number: 30-025-42463  
 County / Parish: Lea County, NM

M.W.D. Operator: Sam Royce  
 Directional Driller: Benny Kimbrell  
 Total Magnetic Correction: 6.81  
 Job #: NM 521

Vertical Section: 0.00

Tie In Survey(s) Provided By:

	Meas. Depth	Inc.	Azm.	T.V.D.	Ver. Sect.	+N / -S	+E / -W	Dist.	Angle	DLS
<b>Tie - In</b>										
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	1265.00	0.50	260.30	1264.98	-0.93	-0.93	-5.44	5.52	260.30	0.04
2	1539.00	0.40	308.50	1538.98	-0.54	-0.54	-7.37	7.39	265.84	0.14
3	1823.00	0.60	329.20	1822.97	1.36	1.36	-8.90	9.01	278.67	0.09
4	2107.00	0.50	15.20	2106.95	3.83	3.83	-9.34	10.10	292.30	0.15
5	2391.00	0.60	32.50	2390.94	6.28	6.28	-8.22	10.34	307.39	0.07
6	2486.00	0.40	26.50	2485.94	7.00	7.00	-7.80	10.48	311.89	0.22
7	2675.00	0.90	55.50	2674.92	8.43	8.43	-6.28	10.51	323.29	0.31
8	2958.00	1.10	57.30	2957.88	11.16	11.16	-2.17	11.36	349.01	0.07
9	3241.00	1.20	63.40	3240.82	13.95	13.95	2.77	14.22	11.23	0.06
10	3526.00	1.30	58.50	3525.76	16.98	16.98	8.19	18.85	25.77	0.05
11	3810.00	0.90	55.30	3809.70	19.93	19.93	12.77	23.67	32.66	0.14
12	4094.00	0.80	54.80	4093.67	22.34	22.34	16.23	27.61	35.99	0.04
13	4377.00	2.20	98.70	4376.58	22.66	22.66	23.21	32.44	45.69	0.61
13	4661.00	1.80	103.80	4660.40	20.77	20.77	32.93	38.93	57.76	0.15
14	4945.00	0.50	104.70	4944.34	19.39	19.39	38.46	43.07	63.24	0.46
15	5134.00	0.40	98.90	5133.33	19.08	19.08	39.91	44.24	64.45	0.06
16	5286.00	0.40	74.80	5285.33	19.14	19.14	40.95	45.20	64.95	0.11
PTB	5342.00	0.40	74.80	5341.33	19.24	19.24	41.33	45.58	65.04	0.00