FORM 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED
OMB NO. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NO.: NMNM64606

1a. Type of Well: [X] Oil Well [ ] Gas Well [ ] Dry [ ] Other
b. Type of Completion: [X] New Well [ ] Workover [ ] Deepen [ ] Plug Back [ ] Diff. Resvr.
Other

6. INDIAN ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT:

2. Name of Operator: COG Operating LLC

8. FARM OR LEASE NAME: Airbonita 12 Federal Com #1H

3. Address: 2208 W. Main Street, Artesia, NM 88210

3a. Phone No. *(include area code)*: 575-748-6940

9. API WELL NO.: 30-025-41491

4. Location of Well *(Report location clearly and in accordance with Federal requirements)**

HOBBS OCD
JUN 02 2014
RECEIVED

At surface: 190' FSL & 330' FEL, Unit P (SESE) Sec 12-22S-32E

At top prod. Interval reported below

At total depth: 336' FNL & 433' FEL, Unit A (NENE) Sec 12-22S-32E

10. FIELD NAME: Red Tank; Bone Spring

11. SEC. T. R. M., OR BLOCK AND SURVEY OR AREA: 12 T 22S R 32E

12. COUNTY OR PARISH: Lea

13. STATE: NM

14. Date Spudded	15. Date T.D. Reached	16. Date Completed	17. ELEVATIONS (DF, RKB, RT, GR, etc.)*
12/1/13	12/27/13	[ ] D & A [X] Ready to Prod. 2/1/14	3624' GR 3641' KB

18. Total Depth:	19. Plug back T.D.:	20. Depth Bridge Plug Set:
MD 16396'	MD 16328'	MD
TVD 11937'	TVD 11936'	TVD

21. Type Electric & other Logs Run (Submit a copy of each)
None

22. Was well cored? [X] No [ ] Yes (Submit analysis)
Was DST run? [X] No [ ] Yes (Submit report)
Directional Survey? [ ] No [X] Yes (Submit copy)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/ Grade	Wt. (#/ft.)	Top (MD)	Bottom(MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (Bbl)	Cement Top*	Amount Pulled
17 1/2"	13 3/8" J55	54.5#	0	960'		670 sx		0	None
12 1/4"	9 5/8" J55	40#	0	4742'		1550 sx		0	None
7 7/8"	5 1/2" P110	17#	0	16377'	6971'	2890 sx		0	None

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 7/8"	10944'	10928'						

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Inteval	Size	No. of Holes	Perf. Status
A)	Bone Spring	12106'	16288'	12106-16115'	0.43	396	Open
B)				16278-16288'		60	Open
C)							
D)							

27. Acid,Fracture Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
See Attached	See Attached

ACCEPTED FOR RECORD
MAY 21 2014
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

28. Production- Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil Bbl	Gas MCF	Water Bbl	Oil Gravity Corr. API	Gas Gravity	Production Method
2/3/14	2/11/14	24	→	833	1000	1197			Flowing

Choke Size	Tbg. Press Flwg. SI	Csg Press.	24 Hr. Rate	Oil Bbl	Gas MCF	Water Bbl	Gas: Oil Ratio	Well Status
	210#		→	833	1000	1197		Producing

28a. Production- Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil Bbl	Gas MCF	Water Bbl	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press Flwg. SI	Csg Press.	24 Hr. Rate	Oil Bbl	Gas MCF	Water Bbl	Gas: Oil Ratio	Well Status
			→					

RECLAMATION
DUE 8-1-14

* See instructionsand spaces for additional data on page 2)

JUN 04 2014

28b. Production- Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil Bbl	Gas MCF	Water Bbl	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press Flwg. SI	Csg Press.	24 Hr. Rate →	Oil Bbl	Gas MCF	Water Bbl	Gas: Oil Ratio	Well Status

28c. Production- Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil Bbl	Gas MCF	Water Bbl	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press Flwg. SI	Csg Press.	24 Hr. Rate →	Oil Bbl	Gas MCF	Water Bbl	Gas: Oil Ratio	Well Status

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*

Flaring

30. Summary of Porous Zones (include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers:

Formation	Top	Bottom	Descriptions Contents, Etc.	Name	Top Measured Depth
Delaware	4764'	8633'		Rustler	865'
Bone Spring	8634'	11937'		Top of Salt	943'
				Bottom of Salt	4359'
				Delaware	4764'
				Bone Spring Lm	8634'
				1st Bone Spring	9827'
				2nd Bone Spring	10356'
				3rd Bone Spring	11601'
				TVD.	11937'

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/ Mechanical Logs (1 full set required)
- ☐ Geologic Report
- ☐ DST Report
- ☒ Directional Survey
- ☐ Sundry Notice for plugging and cement verification
- ☐ Core Analysis
- ☒ Other: Deviation Report

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Stormi Davis Title Regulatory Analyst

Signature Stormi Davis Date 3/18/14

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent ststements or representations as to any matter within its jurisdiction.

(Continued on page 3)

AIRBONITA 12 FEDERAL COM #1H

30-025-41491

Sec 12-T22S-R32E

Perfs	7 1/2% Acid (Gal)	Sand (#)	Fluid (Gal)
15966-16115'	3318	302740	291522
15580-15837'	6000	299994	221760
15194-15451'	5964	300933	224196
14808-15065'	6048	303932	230790
14422-14679'	5964	302835	245910
14036-14293'	6006	299562	224994
13650-13907'	9030	301665	235662
13264-13521'	6006	300499	220122
12878-13135'	6048	301842	207774
12492-12749'	6006	301814	206094
12106-12363'	8568	325625	214494
Totals	**68958**	**3341441**	**2523318**

McVAY DRILLING COMPANY
P.O. Box 2450
Hobbs, New Mexico 88241
(575) 397-3311
FAX: 39-DRILL

Well Name and Num: Airbonita 12 Federal Com 1H
Location: Sec 12, T22S, R32E
Operator: COG
Drilling Contractor: McVay Drilling Company

The undersigned certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

Degrees @	Depth	Degrees @	Depth	Degrees @	Depth
0.40	312	0.60	6862	88.80	12454
1.30	605	0.50	7339	89.40	12643
0.08	1266	0.70	7975	93.00	13116
1.60	1739	1.40	8481	90.70	13680
3.30	2180	1.00	8957	89.90	14152
1.20	2477	1.20	9435	88.50	14431
4.90	2951	0.80	9913	91.40	14714
3.00	3194	0.70	10296	90.40	15282
1.80	3540	2.10	10714	87.90	15752
2.00	3824	0.70	11061	90.80	16228
1.90	4107	2.90	11152	91.30	16349
1.00	4486	4.00	11247		
1.50	4702	5.70	11337		
1.60	5022	25.20	11592		
2.50	5459	47.40	11846		
2.40	5711	75.90	12106		
3.20	6419	80.70	12201		

By: Hank Cramer

Subscribed and sworn to before me this 31st day of December, 2013

Tina Flemens
Notary Public, Lea County, New Mexico

OFFICIAL SEAL
TINA FLEMENS
Notary Public
State of New Mexico
My Comm. Expires 8-16-17

VAUGHN ENERGY SERVICES
A GYRO TECHNOLOGIES INC. COMPANY

P.O. Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612

January 7, 2014

COG Operating LLC (Concho)
One Concho Center
600 W. Illinois Avenue
Midland, TX 79701

HOBBS OCD
JUN 02 2014
RECEIVED

Attn: Kanicia Castillo

Re: **Airbonita 12 Federal Com No 001H**

Please find enclosed a copy of the survey from 0' to 11,012' ran on the above referenced well.

If I can be of any further service, please do not hesitate to call me at 800-606-4976.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
§
COUNTY OF NUECES §

This instrument was acknowledged before me on the 7th day of January, A.D., 2014, by Keith Havelka.

Meredith Darden
Notary Public, State of Texas

MEREDITH DARDEN
Notary Public, State of Texas
My Commission Expires
July 25, 2017

Company: COG Operating LLC-Concho
Lease/Well: Airbonita 12 Federal Com/No 001H

Rig Name: McVay 7
State/County: New Mexico/Lea
Latitude: 32.40, Longitude: -103.62
GRID North is 0.38 Degrees East of True North
VS-Azi: 0.00 Degrees

Depth Reference : RKB: 17'

DRILLOG HA GYRO SURVEY CALCULATIONS
Filename: Gyro.ut
Minimum Curvature Method
Report Date/Time: 1/7/2014 / 09:50

Vaughn Energy Services
Midland, Texas
432-563-5444
Surveyor: Tim Dillon

Airbonita 12 Federal Com No 001H / API 30-025-41491

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.21	127.20	100.00	-0.11	0.15	0.19	127.20	0.21
200.00	0.37	134.03	200.00	-0.45	0.53	0.70	130.38	0.16
300.00	0.86	150.29	299.99	-1.33	1.14	1.76	139.46	0.51
400.00	0.81	153.87	399.98	-2.63	1.83	3.20	145.17	0.07
500.00	0.58	155.64	499.97	-3.72	2.35	4.40	147.76	0.24
600.00	0.85	171.60	599.97	-4.91	2.66	5.59	151.54	0.33
700.00	0.57	196.97	699.96	-6.12	2.62	6.66	156.79	0.41
800.00	1.40	198.92	799.94	-7.76	2.08	8.03	164.97	0.83
900.00	1.37	200.88	899.91	-10.03	1.26	10.11	172.84	0.06
1000.00	0.79	208.49	999.90	-11.75	0.51	11.76	177.52	0.60
1100.00	0.60	197.93	1099.89	-12.85	0.02	12.85	179.91	0.22
1200.00	0.76	206.77	1199.88	-13.94	-0.44	13.95	181.81	0.19
1300.00	0.68	202.74	1299.87	-15.09	-0.97	15.12	183.69	0.09
1400.00	0.21	239.41	1399.87	-15.73	-1.36	15.79	184.94	0.53
1500.00	0.04	113.39	1499.87	-15.83	-1.48	15.90	185.35	0.23
1600.00	0.59	103.98	1599.87	-15.97	-0.95	16.00	183.42	0.55
1700.00	1.10	106.04	1699.86	-16.36	0.46	16.37	178.38	0.51
1800.00	1.80	116.08	1799.82	-17.31	2.79	17.54	170.83	0.75

VES Survey Date: 12/13/2013

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	2.11	96.21	1899.77	-18.20	6.03	19.18	161.67	0.74
2000.00	2.78	93.11	1999.68	-18.53	10.28	21.20	150.98	0.69
2100.00	3.02	90.49	2099.55	-18.69	15.34	24.18	140.61	0.28
2200.00	3.55	81.06	2199.38	-18.23	21.04	27.84	130.91	0.75
2300.00	3.97	75.00	2299.17	-16.85	27.44	32.20	121.56	0.58
2400.00	4.13	75.26	2398.92	-15.04	34.26	37.42	113.71	0.16
2500.00	4.24	71.34	2498.65	-12.95	41.24	43.22	107.43	0.31
2600.00	4.55	67.44	2598.36	-10.24	48.40	49.47	101.95	0.43
2700.00	5.34	68.89	2697.99	-7.05	56.40	56.84	97.12	0.80
2800.00	5.56	68.54	2797.53	-3.60	65.25	65.35	93.16	0.23
2900.00	5.83	62.41	2897.04	0.53	74.26	74.27	89.59	0.66
3000.00	6.16	60.97	2996.49	5.48	83.46	83.64	86.24	0.36
3100.00	4.74	59.23	3096.04	10.20	91.70	92.26	83.65	1.43
3200.00	2.74	58.41	3195.82	13.56	97.28	98.22	82.06	2.00
3300.00	1.91	54.98	3295.74	15.77	100.68	101.91	81.10	0.84
3400.00	2.00	64.12	3395.68	17.49	103.61	105.07	80.42	0.32
3500.00	1.42	42.62	3495.64	19.16	106.01	107.73	79.76	0.85
3600.00	1.39	36.36	3595.61	21.05	107.57	109.61	78.93	0.16
3700.00	1.89	14.73	3695.57	23.62	108.71	111.25	77.74	0.79
3800.00	1.82	29.46	3795.52	26.60	109.91	113.09	76.39	0.48
3900.00	1.75	14.31	3895.47	29.46	111.07	114.91	75.14	0.48
4000.00	1.96	29.79	3995.42	32.43	112.30	116.89	73.89	0.54
4100.00	1.70	50.59	4095.37	34.86	114.30	119.49	73.04	0.71
4200.00	2.21	67.72	4195.31	36.53	117.22	122.78	72.69	0.77
4300.00	2.19	47.78	4295.24	38.54	120.42	126.44	72.25	0.76
4400.00	2.61	35.49	4395.15	41.68	123.15	130.02	71.30	0.67
4500.00	0.84	28.41	4495.10	44.18	124.83	132.41	70.51	1.78
4600.00	0.65	6.05	4595.09	45.39	125.24	133.21	70.08	0.35
4700.00	1.36	328.83	4695.08	46.97	124.68	133.24	69.36	0.93
4800.00	1.53	322.85	4795.04	49.05	123.26	132.66	68.30	0.23
4900.00	1.73	340.89	4895.00	51.54	121.96	132.41	67.09	0.55
5000.00	1.64	346.11	4994.96	54.35	121.13	132.76	65.83	0.18
5100.00	1.91	341.01	5094.91	57.31	120.24	133.20	64.51	0.31
5200.00	1.94	2.10	5194.86	60.58	119.76	134.21	63.17	0.70
5300.00	2.00	357.87	5294.80	64.02	119.76	135.79	61.87	0.16
5400.00	2.27	6.20	5394.73	67.73	119.91	137.71	60.54	0.41
5500.00	1.94	2.31	5494.66	71.39	120.19	139.79	59.29	0.36
5600.00	2.45	0.99	5594.59	75.21	120.29	141.87	57.99	0.51
5700.00	2.44	3.29	5694.50	79.46	120.45	144.30	56.59	0.10

VES Survey Date: 12/13/2013

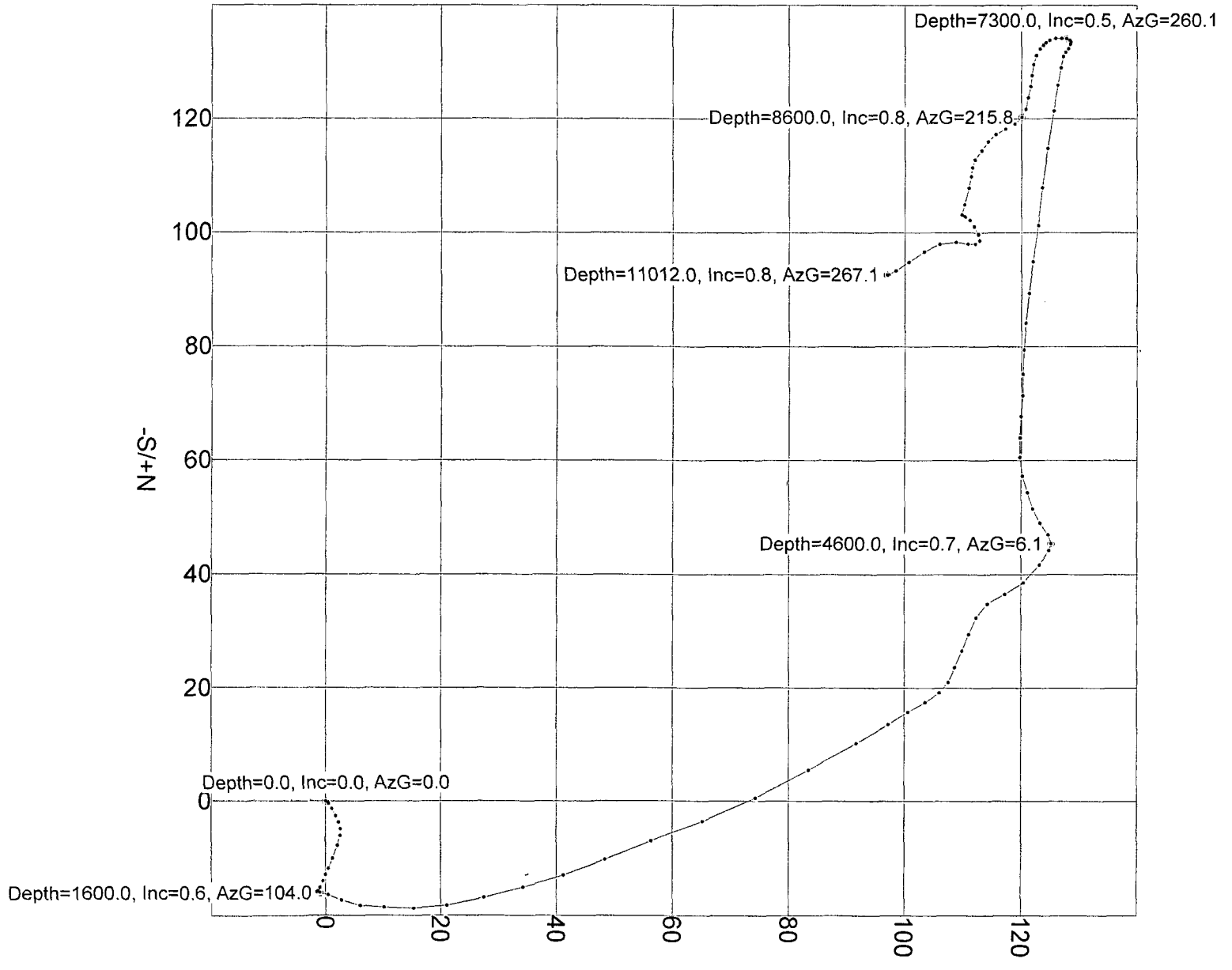
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	2.93	5.28	5794.39	84.13	120.81	147.22	55.15	0.51
5900.00	3.02	6.34	5894.25	89.29	121.34	150.65	53.65	0.10
6000.00	3.46	8.47	5994.09	94.90	122.07	154.62	52.14	0.46
6100.00	3.89	7.13	6093.89	101.25	122.94	159.26	50.53	0.44
6200.00	3.74	4.97	6193.67	107.86	123.64	164.08	48.90	0.21
6300.00	4.26	10.18	6293.42	114.77	124.58	169.39	47.35	0.63
6400.00	3.45	6.80	6393.20	121.41	125.59	174.69	45.97	0.84
6500.00	1.81	12.64	6493.09	125.94	126.29	178.36	45.08	1.66
6600.00	1.74	8.12	6593.04	128.99	126.85	180.92	44.52	0.16
6700.00	0.59	15.85	6693.02	130.99	127.21	182.60	44.16	1.16
6800.00	0.41	45.22	6793.01	131.74	127.60	183.41	44.09	0.31
6900.00	0.55	32.14	6893.01	132.39	128.11	184.23	44.06	0.18
7000.00	0.42	19.21	6993.01	133.15	128.49	185.03	43.98	0.16
7100.00	0.02	275.30	7093.00	133.50	128.59	185.36	43.93	0.43
7200.00	0.42	339.26	7193.00	133.84	128.44	185.50	43.82	0.41
7300.00	0.51	260.09	7293.00	134.11	127.87	185.30	43.64	0.60
7400.00	0.53	284.96	7393.00	134.15	126.98	184.72	43.43	0.23
7500.00	0.67	258.52	7492.99	134.16	125.96	184.02	43.20	0.30
7600.00	0.58	242.78	7592.99	133.81	124.94	183.07	43.04	0.19
7700.00	0.33	221.62	7692.98	133.36	124.29	182.30	42.98	0.30
7800.00	0.40	229.84	7792.98	132.92	123.84	181.67	42.97	0.09
7900.00	0.57	225.32	7892.98	132.35	123.22	180.83	42.95	0.18
8000.00	0.97	199.36	7992.97	131.20	122.59	179.56	43.06	0.52
8100.00	0.97	192.46	8092.95	129.58	122.12	178.06	43.30	0.12
8200.00	1.25	184.10	8192.94	127.66	121.86	176.48	43.67	0.32
8300.00	0.99	191.09	8292.92	125.72	121.62	174.92	44.05	0.30
8400.00	1.32	190.24	8392.90	123.75	121.25	173.25	44.42	0.33
8500.00	1.06	198.00	8492.87	121.73	120.76	171.47	44.77	0.30
8600.00	0.79	215.85	8592.86	120.30	120.07	169.96	44.95	0.39
8700.00	1.19	232.32	8692.85	119.11	118.85	168.26	44.94	0.49
8800.00	0.91	250.43	8792.83	118.21	117.28	166.52	44.77	0.43
8900.00	1.31	233.46	8892.81	117.26	115.61	164.67	44.59	0.51
9000.00	0.83	211.41	8992.79	115.97	114.32	162.84	44.59	0.62
9100.00	1.36	217.12	9092.78	114.41	113.23	160.96	44.70	0.55
9200.00	0.91	213.47	9192.76	112.79	112.07	159.00	44.82	0.45
9300.00	0.81	184.48	9292.74	111.43	111.58	157.69	45.04	0.44
9400.00	0.97	187.31	9392.73	109.88	111.41	156.48	45.40	0.16
9500.00	1.47	192.70	9492.71	107.79	111.02	154.74	45.85	0.52
9600.00	1.96	194.85	9592.66	104.88	110.30	152.20	46.44	0.49

VES Survey Date: 12/13/2013

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
9700.00	0.16	182.04	9692.64	103.08	109.86	150.65	46.82	1.80
9800.00	0.58	107.47	9792.64	102.78	110.34	150.79	47.03	0.56
9900.00	0.63	145.48	9892.64	102.17	111.14	150.97	47.41	0.40
10000.00	0.92	146.33	9992.63	101.05	111.89	150.77	47.91	0.28
10100.00	0.91	157.90	10092.61	99.65	112.64	150.39	48.50	0.18
10200.00	0.41	196.81	10192.61	98.57	112.83	149.83	48.86	0.65
10300.00	0.74	248.66	10292.60	98.00	112.13	148.92	48.85	0.58
10400.00	0.86	289.49	10392.59	98.01	110.82	147.95	48.51	0.57
10500.00	1.45	272.60	10492.57	98.32	108.85	146.68	47.91	0.68
10600.00	1.85	254.35	10592.53	97.94	106.03	144.34	47.27	0.66
10700.00	1.62	232.83	10692.49	96.65	103.35	141.50	46.92	0.69
10800.00	2.03	237.13	10792.44	94.84	100.73	138.35	46.73	0.43
10900.00	1.09	231.83	10892.40	93.29	98.49	135.66	46.55	0.95
11000.00	0.76	260.24	10992.39	92.59	97.09	134.16	46.36	0.56
11012.00	0.79	267.12	11004.38	92.57	96.93	134.03	46.32	0.83

VES Survey Date: 12/13/2013

Vaughn Energy Services
Midland, Texas
432-563-5444
Surveyor: Tim Dillon
Airbonita 12 Federal Com No 001H / API 30-025-41491



VES Survey Date: 12/13/2013

CONCHO

COG Operating LLC

Lea County, NM (NAD27 NME)
Airbonita 12 Fed
1H

OH

Survey: MWD #1

Survey Report - Geographic

31 December, 2013

Wellplanning

Survey Report - Geographic

Company:	COG Operating LLC	**Local Co-ordinate Reference:**	Well 1H
Project:	Lea County, NM (NAD27 NME)	**TVD Reference:**	WELL @ 3641.0usft (Original Well Elev)
Site:	Airbonita 12 Fed	**MD Reference:**	WELL @ 3641.0usft (Original Well Elev)
Well:	1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.1 Single User Db

Project Lea County, NM (NAD27 NME)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Airbonita 12 Fed

Site Position:		**Northing:**	0.00 usft	**Latitude:**	30° 59' 24.512 N
From:	Map	**Easting:**	0.00 usft	**Longitude:**	105° 55' 44.137 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	-0.82 °

Well 1H

Well Position	**+N/-S**	0.0 usft	**Northing:**	509,792.30 usft	**Latitude:**	32° 23' 58.260 N
	+E/-W	0.0 usft	**Easting:**	720,045.20 usft	**Longitude:**	103° 37' 13.430 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,624.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/4/2013	7.32	60.28	48,468

Design OH

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	46.31

Survey Program **Date** 12/31/2013

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	11,012.0	GYRO (OH)	MWD	MWD - Standard
11,056.0	16,396.0	MWD #1 (OH)	MWD	MWD - Standard

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,012.0	0.79	267.12	11,004.4	92.6	97.0	509,884.91	720,142.15	32° 23' 59.170 N	103° 37' 12.292 W
11,056.0	0.60	322.20	11,048.4	92.8	96.5	509,885.07	720,141.71	32° 23' 59.172 N	103° 37' 12.297 W
KOP - 11056.0 'MD, 0.60° INC, 322.20° AZI									
11,152.0	2.90	275.30	11,144.3	93.4	93.8	509,885.70	720,138.98	32° 23' 59.178 N	103° 37' 12.329 W
11,247.0	4.00	292.60	11,239.2	94.9	88.3	509,887.19	720,133.53	32° 23' 59.194 N	103° 37' 12.393 W
11,337.0	5.70	270.40	11,328.8	96.1	81.0	509,888.43	720,126.16	32° 23' 59.206 N	103° 37' 12.478 W
11,401.0	7.30	279.00	11,392.4	96.8	73.8	509,889.09	720,118.96	32° 23' 59.213 N	103° 37' 12.562 W
11,433.0	6.90	277.60	11,424.2	97.4	69.9	509,889.66	720,115.05	32° 23' 59.219 N	103° 37' 12.608 W
11,465.0	8.00	297.30	11,455.9	98.6	66.0	509,890.94	720,111.17	32° 23' 59.232 N	103° 37' 12.653 W
11,528.0	17.10	322.40	11,517.4	108.0	56.4	509,900.31	720,101.59	32° 23' 59.325 N	103° 37' 12.764 W
11,560.0	21.80	328.00	11,547.6	116.8	50.4	509,909.08	720,095.57	32° 23' 59.413 N	103° 37' 12.834 W

Company:	COG Operating LLC	**Local Co-ordinate Reference:**	Well 1H
Project:	Lea County, NM (NAD27 NME)	**TVD Reference:**	WELL @ 3641.0usft (Original Well Elev)
Site:	Airbonita 12 Fed	**MD Reference:**	WELL @ 3641.0usft (Original Well Elev)
Well:	1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,592.0	25.20	330.10	11,576.9	127.7	43.8	509,920.03	720,089.02	32° 23' 59.521 N	103° 37' 12.909 W
11,624.0	28.40	331.10	11,605.5	140.3	36.8	509,932.60	720,081.95	32° 23' 59.646 N	103° 37' 12.991 W
11,688.0	34.20	330.70	11,660.1	169.3	20.6	509,961.64	720,065.78	32° 23' 59.935 N	103° 37' 13.177 W
11,719.0	38.10	329.40	11,685.1	185.2	11.4	509,977.47	720,056.64	32° 24' 0.092 N	103° 37' 13.282 W
11,814.0	46.90	335.20	11,755.1	242.0	-18.1	510,034.32	720,027.10	32° 24' 0.656 N	103° 37' 13.622 W
11,846.0	47.40	334.90	11,776.9	263.3	-28.0	510,055.59	720,017.21	32° 24' 0.868 N	103° 37' 13.736 W
11,885.0	52.30	336.40	11,802.1	290.4	-40.3	510,082.74	720,004.93	32° 24' 1.137 N	103° 37' 13.877 W
11,916.0	56.20	337.70	11,820.2	313.6	-50.1	510,105.91	719,995.13	32° 24' 1.367 N	103° 37' 13.990 W
11,948.0	59.30	339.50	11,837.2	338.8	-59.9	510,131.10	719,985.27	32° 24' 1.617 N	103° 37' 14.103 W
12,011.0	63.30	341.50	11,867.5	390.9	-78.4	510,183.19	719,966.84	32° 24' 2.133 N	103° 37' 14.314 W
12,043.0	66.70	343.00	11,881.0	418.5	-87.2	510,210.80	719,958.01	32° 24' 2.407 N	103° 37' 14.414 W
12,075.0	71.30	343.90	11,892.5	447.1	-95.7	510,239.43	719,949.50	32° 24' 2.691 N	103° 37' 14.511 W
12,170.0	79.00	347.70	11,916.8	536.1	-118.1	510,328.38	719,927.05	32° 24' 3.573 N	103° 37' 14.766 W
12,201.0	80.70	349.60	11,922.3	566.0	-124.1	510,358.30	719,921.05	32° 24' 3.869 N	103° 37' 14.834 W
12,233.0	82.20	352.00	11,927.0	597.2	-129.2	510,389.53	719,915.99	32° 24' 4.179 N	103° 37' 14.891 W
12,264.0	83.40	353.00	11,930.9	627.7	-133.2	510,420.02	719,911.98	32° 24' 4.481 N	103° 37' 14.935 W
12,296.0	86.40	354.10	11,933.8	659.4	-136.8	510,451.69	719,908.40	32° 24' 4.794 N	103° 37' 14.974 W
12,359.0	91.50	355.20	11,934.9	722.1	-142.7	510,514.39	719,902.53	32° 24' 5.415 N	103° 37' 15.038 W
EOC- 12359.0 'MD, 91.50° INC, 355.20° AZI									
12,454.0	88.80	356.20	11,934.7	816.8	-149.8	510,609.11	719,895.40	32° 24' 6.353 N	103° 37' 15.114 W
12,548.0	88.20	358.10	11,937.1	910.7	-154.5	510,702.95	719,890.73	32° 24' 7.282 N	103° 37' 15.161 W
12,643.0	89.40	0.00	11,939.1	1,005.6	-156.0	510,797.91	719,889.16	32° 24' 8.222 N	103° 37' 15.172 W
12,928.0	87.40	359.60	11,947.1	1,290.5	-157.0	511,082.79	719,888.16	32° 24' 11.041 N	103° 37' 15.161 W
13,211.0	92.80	1.90	11,946.6	1,573.3	-153.3	511,365.64	719,891.87	32° 24' 13.839 N	103° 37' 15.096 W
13,305.0	92.60	1.50	11,942.2	1,667.2	-150.5	511,459.49	719,894.65	32° 24' 14.768 N	103° 37' 15.056 W
13,397.0	92.20	1.30	11,938.3	1,759.1	-148.3	511,551.38	719,896.90	32° 24' 15.677 N	103° 37' 15.023 W
13,490.0	91.90	0.50	11,935.0	1,852.0	-146.8	511,644.31	719,898.36	32° 24' 16.596 N	103° 37' 14.999 W
13,680.0	90.70	359.60	11,930.7	2,042.0	-146.7	511,834.26	719,898.52	32° 24' 18.476 N	103° 37' 14.982 W
13,868.0	89.00	1.40	11,931.2	2,229.9	-145.0	512,022.24	719,900.16	32° 24' 20.336 N	103° 37' 14.948 W
13,963.0	88.50	1.10	11,933.2	2,324.9	-143.0	512,117.19	719,902.23	32° 24' 21.275 N	103° 37' 14.917 W
14,057.0	88.10	0.70	11,936.0	2,418.8	-141.5	512,211.14	719,903.71	32° 24' 22.205 N	103° 37' 14.892 W
14,152.0	89.90	2.90	11,937.7	2,513.8	-138.5	512,306.07	719,906.69	32° 24' 23.144 N	103° 37' 14.850 W
14,247.0	89.50	2.30	11,938.2	2,608.7	-134.2	512,400.97	719,911.00	32° 24' 24.083 N	103° 37' 14.792 W
14,338.0	88.80	1.90	11,939.5	2,699.6	-130.9	512,491.89	719,914.34	32° 24' 24.982 N	103° 37' 14.746 W
14,431.0	88.50	1.20	11,941.7	2,792.5	-128.3	512,584.83	719,916.85	32° 24' 25.902 N	103° 37' 14.710 W
14,525.0	89.50	2.70	11,943.4	2,886.5	-125.1	512,678.76	719,920.05	32° 24' 26.831 N	103° 37' 14.665 W
14,650.0	91.60	1.30	11,942.2	3,011.4	-120.8	512,803.67	719,924.41	32° 24' 28.067 N	103° 37' 14.605 W
14,807.0	91.30	0.10	11,938.2	3,168.3	-118.9	512,960.60	719,926.33	32° 24' 29.620 N	103° 37' 14.570 W
14,997.0	91.20	357.90	11,934.0	3,358.2	-122.2	513,150.52	719,923.02	32° 24' 31.499 N	103° 37' 14.594 W
15,092.0	91.00	357.00	11,932.2	3,453.1	-126.4	513,245.41	719,918.79	32° 24' 32.438 N	103° 37' 14.636 W
15,187.0	90.90	356.00	11,930.6	3,547.9	-132.2	513,340.21	719,912.99	32° 24' 33.377 N	103° 37' 14.696 W
15,282.0	90.40	355.50	11,929.6	3,642.6	-139.2	513,434.95	719,905.95	32° 24' 34.315 N	103° 37' 14.771 W
15,376.0	89.90	357.20	11,929.3	3,736.4	-145.2	513,528.75	719,899.97	32° 24' 35.243 N	103° 37' 14.833 W
15,471.0	90.30	359.90	11,929.1	3,831.4	-147.6	513,623.71	719,897.56	32° 24' 36.183 N	103° 37' 14.854 W
15,564.0	88.00	1.50	11,930.5	3,924.4	-146.5	513,716.69	719,898.70	32° 24' 37.103 N	103° 37' 14.834 W
15,659.0	87.90	1.10	11,933.9	4,019.3	-144.3	513,811.60	719,900.85	32° 24' 38.042 N	103° 37' 14.801 W
15,752.0	87.90	0.50	11,937.3	4,112.2	-143.0	513,904.53	719,902.15	32° 24' 38.962 N	103° 37' 14.779 W
15,848.0	88.10	2.00	11,940.7	4,208.1	-141.0	514,000.44	719,904.24	32° 24' 39.911 N	103° 37' 14.747 W
15,943.0	90.10	3.90	11,942.2	4,303.0	-136.1	514,095.30	719,909.13	32° 24' 40.849 N	103° 37' 14.683 W
16,038.0	90.30	3.40	11,941.8	4,397.8	-130.0	514,190.10	719,915.18	32° 24' 41.787 N	103° 37' 14.605 W
16,133.0	90.60	3.90	11,941.1	4,492.6	-124.0	514,284.91	719,921.23	32° 24' 42.724 N	103° 37' 14.527 W
16,228.0	90.80	4.40	11,939.9	4,587.3	-117.1	514,379.65	719,928.10	32° 24' 43.661 N	103° 37' 14.439 W
16,396.0	91.30	5.20	11,936.9	4,754.7	-103.0	514,547.03	719,942.16	32° 24' 45.317 N	103° 37' 14.262 W
BHL- 16396.0 'MD, 91.30° INC, 5.20° AZI - PBHL Airbonita Fed #1H									

Company:	COG Operating LLC	**Local Co-ordinate Reference:**	Well 1H
Project:	Lea County, NM (NAD27 NME)	**TVD Reference:**	WELL @ 3641.0usft (Original Well Elev)
Site:	Airbonita 12 Fed	**MD Reference:**	WELL @ 3641.0usft (Original Well Elev)
Well:	1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 5000.1 Single User Db

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
11,056.0	11,048.4	92.8	96.5	KOP - 11056.0 'MD, 0.60° INC, 322.20° AZI
12,359.0	11,934.9	722.1	-142.7	EOC- 12359.0 'MD, 91.50° INC, 355.20° AZI
16,396.0	11,936.9	4,754.7	-103.0	BHL- 16396.0 'MD, 91.30° INC, 5.20° AZI

Checked By: _____ Approved By: _____ Date: _____