

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNMOC
Hobbs

AUG 29 2016

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMNM198591a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other _____

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.
NMNM1359422. Name of Operator
COG OPERATING LLC

Contact: STORMI DAVIS

8. Lease Name and Well No.
MONET FEDERAL 3H3. Address ONE CONCHO CENTER 600 W ILLINOIS AVENUE
MIDLAND, TX 79701-42873a. Phone No. (include area code)
Ph: 575.748.69469. API Well No.
30-025-42763-00-S1

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

At surface Lot 3 190FNL 1980FWL

At top prod interval reported below

At total depth Sec 4 T25S R33E Mer NMP
SESW 334FSL 1638FWL10. Field and Pool, or Exploratory
DRAPER MILL-BONE SPRING11. Sec., T., R., M., or Block and Survey
or Area Sec 4 T25S R33E Mer NMP12. County or Parish
LEA13. State
NM14. Date Spudded
02/24/201615. Date T.D. Reached
03/08/201616. Date Completed
☐ D & A ☒ Ready to Prod.
05/03/201617. Elevations (DF, KB, RT, GL)*
3462 GL18. Total Depth: MD 14049
TVD 940119. Plug Back T.D.: MD 13984
TVD 940120. Depth Bridge Plug Set: MD
TVD21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
NONE22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

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 Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J-55	54.5	0	1218		750		0	
12.250	9.625 J-55	40.0	0	5004		1500		0	
8.750	5.500 P-110	17.0	0	14037		2025		704	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	8854	8837						

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING	9598	13960	9598 TO 13960	0.000	1044	OPEN - Bone Spring
B)						
C)						
D)						

26. Perforation Record

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

Depth Interval	Amount and Type of Material
9598 TO 13960	SEE ATTACHED

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
05/18/2016	05/28/2016	24	→	813.0	1901.0	3886.0			FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg. 640 SI	Csg. Press.	24 Hr. Rate →	Oil BBL 813	Gas MCF 1901	Water BBL 3886	Gas:Oil Ratio	Well Status POW	

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	

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #341111 VERIFIED BY THE BLM WELL INFORMATION SYSTEM
** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **
DAVID R. GLASS
PETROLEUM ENGINEERRECLAMATION DUE:
NOV 03 2016ACCEPTED FOR RECORD
S/ DAVID R. GLASS

AUG 23 2016

K2

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.)
SOLD

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 Meas. Depth
DELAWARE	5106	5144		TOP OF SALT	1454
BELL CANYON	5145	6061		BASE OF SALT	4866
CHERRY CANYON	6062	7581		DELAWARE	5106
BRUSHY CANYON	7582	9195		BELL CANYON	5145
BONE SPRING LIME	9196	9401		CHERRY CANYON	6062
				BRUSHY CANYON	7582
				BONE SPRING LIME	9196

32. Additional remarks (include plugging procedure):
Surveys & perfs/stimulation are attached.

33. Circle enclosed attachments:

- | | | | |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis | 7 Other: | |

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

Electronic Submission #341111 Verified by the BLM Well Information System.

For COG OPERATING LLC, sent to the Hobbs

Committed to AFMSS for processing by DEBORAH HAM on 06/15/2016 (16DMH0157SE)

Name (please print) STORMI DAVIS

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 06/06/2016

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 statements or representations as to any matter within its jurisdiction.

**** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ****

Monet Federal #3H

30-025-42763

Sec 4-T25S-R33E

	<u>Perfs</u>		<u>7 1/2% Acid (Gal)</u>	<u>Sand (#)</u>	<u>Fluid (Gal)</u>
13960	13909	13859	1512	299871	264348
13771	13739	13706	4536	301734	385350
13656	13605	13554	2982	300191	285978
13504	13453	13405	3024	302172	292320
13356	13301	13250	3024	300958	302778
13199	13151	13095	4536	301074	356412
13047	12998	12945	2982	301549	278796
12895	12844	12793	3024	301076	277578
12743	12692	12645	3024	301467	279090
12590	12540	12489	2982	300283	279132
12438	12388	12337	2982	301206	273084
12286	12235	12185	3024	299595	275226
12134	12083	12033	3024	300141	275604
11982	11931	11880	3024	300330	277830
11828	11779	11727	3024	302925	271950
11678	11627	11576	3024	298916	272370
11525	11475	11426	3066	300977	297024
11371	11323	11272	2982	300910	273252
11221	11170	11120	2982	297393	276150
11069	11018	10967	3066	302773	299796
10919	10862	10815	3024	304544	283248
10765	10714	10663	3024	133581	197190
10612	10562	10511	3024	302297	277956
10460	10412	10357	3024	302682	275646
10308	10257	10207	3066	301622	276276
10156	10105	10054	3024	299751	271824
10004	9955	9902	3024	301219	272748
9852	9801	9750	2982	300468	272160
9699	9649	9598	3024	300125	295512
	Totals		89040	8561830	8216628

HOBBS OCD

AUG 29 2016

RECEIVED

COG Production LLC

Lea County, NM (NAD27 NME)

Monet Federal

#3H

OH

Design: OH

Survey Report - Geographic

09 March, 2016

IDS
Survey Report - Geographic

Company:	COG Production LLC	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	WELL @ 3481.7usft (Original Well Elev)
Site:	Monet Federal	MD Reference:	WELL @ 3481.7usft (Original Well Elev)
Well:	#3H	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	Monet Federal		
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Site Position:		Northing:	425,010.10 usft	Latitude:	32° 9' 58.383 N
From:	Map	Easting:	733,599.80 usft	Longitude:	103° 34' 42.302 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.40 °

Well	#3H				
Well Position	+N-S	0.0 usft	Northing:	425,009.10 usft	Latitude: 32° 9' 58.383 N
	+E-W	0.0 usft	Easting:	733,449.90 usft	Longitude: 103° 34' 44.046 W
Position Uncertainty	3.0 usft	Wellhead Elevation:	usft	Ground Level:	3,461.7 usft

Wellbore	OH				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/16/2016	7.10	60.03	48,040

Design	OH				
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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	183.50

Survey Program	Date	3/8/2016			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	4,900.0	GYRO (OH)	VESSI_GYROFLEX	VESSI Gyroflex Gyro	
5,087.0	14,049.0	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
0.0	0.00	0.00	0.0	0.0	0.0	425,009.10	733,449.90	32° 9' 58.383 N	103° 34' 44.046 W
100.0	0.33	39.29	100.0	0.2	0.2	425,009.32	733,450.08	32° 9' 58.385 N	103° 34' 44.044 W
First Gyro Survey									
200.0	0.35	26.55	200.0	0.7	0.5	425,009.82	733,450.40	32° 9' 58.390 N	103° 34' 44.040 W
300.0	0.30	28.64	300.0	1.2	0.8	425,010.32	733,450.66	32° 9' 58.395 N	103° 34' 44.037 W
400.0	0.26	32.41	400.0	1.6	1.0	425,010.74	733,450.91	32° 9' 58.399 N	103° 34' 44.034 W
500.0	0.27	39.71	500.0	2.0	1.3	425,011.12	733,451.18	32° 9' 58.403 N	103° 34' 44.031 W
600.0	0.29	15.34	600.0	2.4	1.5	425,011.54	733,451.40	32° 9' 58.407 N	103° 34' 44.028 W
700.0	0.35	23.00	700.0	3.0	1.7	425,012.07	733,451.58	32° 9' 58.412 N	103° 34' 44.026 W
800.0	0.23	34.54	800.0	3.4	1.9	425,012.51	733,451.82	32° 9' 58.417 N	103° 34' 44.023 W
900.0	0.44	51.52	900.0	3.8	2.3	425,012.92	733,452.23	32° 9' 58.421 N	103° 34' 44.018 W

IDS

Survey Report - Geographic

Company: COG Production LLC
Project: Lea County, NM (NAD27 NME)
Site: Monet Federal
Well: #3H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #3H
TVD Reference: WELL @ 3481.7usft (Original Well Elev)
MD Reference: WELL @ 3481.7usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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
1,000.0	0.46	49.96	1,000.0	4.3	2.9	425,013.41	733,452.84	32° 9' 58.426 N	103° 34' 44.011 W
1,100.0	0.60	57.10	1,100.0	4.9	3.7	425,013.96	733,453.59	32° 9' 58.431 N	103° 34' 44.002 W
1,200.0	0.46	6.04	1,200.0	5.5	4.2	425,014.64	733,454.07	32° 9' 58.438 N	103° 34' 43.997 W
1,300.0	0.42	56.49	1,300.0	6.1	4.5	425,015.24	733,454.41	32° 9' 58.444 N	103° 34' 43.993 W
1,400.0	0.45	27.84	1,400.0	6.7	5.0	425,015.79	733,454.90	32° 9' 58.449 N	103° 34' 43.987 W
1,500.0	0.29	318.81	1,500.0	7.2	5.0	425,016.33	733,454.92	32° 9' 58.454 N	103° 34' 43.987 W
1,600.0	0.49	11.09	1,600.0	7.8	4.9	425,016.94	733,454.84	32° 9' 58.460 N	103° 34' 43.988 W
1,700.0	0.32	46.22	1,700.0	8.5	5.2	425,017.55	733,455.12	32° 9' 58.466 N	103° 34' 43.984 W
1,800.0	0.08	345.51	1,800.0	8.7	5.4	425,017.81	733,455.30	32° 9' 58.469 N	103° 34' 43.982 W
1,900.0	0.47	16.00	1,900.0	9.2	5.5	425,018.27	733,455.40	32° 9' 58.473 N	103° 34' 43.981 W
2,000.0	0.53	354.80	2,000.0	10.0	5.6	425,019.13	733,455.47	32° 9' 58.482 N	103° 34' 43.980 W
2,100.0	0.45	329.80	2,100.0	10.8	5.3	425,019.93	733,455.23	32° 9' 58.490 N	103° 34' 43.983 W
2,200.0	0.56	345.78	2,200.0	11.6	5.0	425,020.74	733,454.91	32° 9' 58.498 N	103° 34' 43.986 W
2,300.0	0.66	342.75	2,299.9	12.7	4.7	425,021.77	733,454.62	32° 9' 58.508 N	103° 34' 43.990 W
2,400.0	0.74	338.11	2,399.9	13.8	4.3	425,022.92	733,454.21	32° 9' 58.519 N	103° 34' 43.994 W
2,500.0	0.91	328.35	2,499.9	15.1	3.7	425,024.19	733,453.55	32° 9' 58.532 N	103° 34' 44.002 W
2,600.0	1.09	323.73	2,599.9	16.5	2.7	425,025.63	733,452.57	32° 9' 58.546 N	103° 34' 44.013 W
2,700.0	1.12	321.53	2,699.9	18.1	1.5	425,027.17	733,451.40	32° 9' 58.562 N	103° 34' 44.027 W
2,800.0	1.15	318.15	2,799.9	19.6	0.2	425,028.68	733,450.13	32° 9' 58.577 N	103° 34' 44.041 W
2,900.0	1.24	313.39	2,899.9	21.1	-1.2	425,030.17	733,448.67	32° 9' 58.592 N	103° 34' 44.058 W
3,000.0	1.04	315.11	2,999.8	22.5	-2.7	425,031.56	733,447.24	32° 9' 58.605 N	103° 34' 44.075 W
3,100.0	1.39	318.75	3,099.8	24.0	-4.1	425,033.11	733,445.80	32° 9' 58.621 N	103° 34' 44.091 W
3,200.0	1.10	320.14	3,199.8	25.7	-5.5	425,034.76	733,444.39	32° 9' 58.637 N	103° 34' 44.108 W
3,300.0	1.11	321.56	3,299.8	27.2	-6.7	425,036.25	733,443.17	32° 9' 58.652 N	103° 34' 44.122 W
3,400.0	1.14	315.20	3,399.7	28.6	-8.0	425,037.72	733,441.87	32° 9' 58.667 N	103° 34' 44.137 W
3,500.0	1.08	313.57	3,499.7	30.0	-9.4	425,039.07	733,440.48	32° 9' 58.680 N	103° 34' 44.153 W
3,600.0	1.13	311.24	3,599.7	31.3	-10.8	425,040.37	733,439.06	32° 9' 58.693 N	103° 34' 44.169 W
3,700.0	1.22	312.30	3,699.7	32.6	-12.4	425,041.74	733,437.53	32° 9' 58.707 N	103° 34' 44.187 W
3,800.0	1.11	313.10	3,799.7	34.0	-13.9	425,043.12	733,436.04	32° 9' 58.721 N	103° 34' 44.204 W
3,900.0	1.05	333.65	3,899.7	35.5	-15.0	425,044.60	733,434.92	32° 9' 58.735 N	103° 34' 44.217 W
4,000.0	1.01	337.03	3,999.6	37.1	-15.7	425,046.23	733,434.17	32° 9' 58.752 N	103° 34' 44.226 W
4,100.0	1.02	339.55	4,099.6	38.8	-16.4	425,047.88	733,433.52	32° 9' 58.768 N	103° 34' 44.233 W
4,200.0	1.02	337.08	4,199.6	40.4	-17.0	425,049.53	733,432.86	32° 9' 58.784 N	103° 34' 44.241 W
4,300.0	1.04	338.89	4,299.6	42.1	-17.7	425,051.20	733,432.19	32° 9' 58.801 N	103° 34' 44.248 W
4,400.0	0.84	9.80	4,399.6	43.7	-17.9	425,052.77	733,431.98	32° 9' 58.816 N	103° 34' 44.251 W
4,500.0	0.62	56.73	4,499.6	44.7	-17.3	425,053.79	733,432.56	32° 9' 58.826 N	103° 34' 44.244 W
4,600.0	0.83	68.65	4,599.6	45.2	-16.2	425,054.35	733,433.69	32° 9' 58.832 N	103° 34' 44.231 W
4,700.0	1.33	91.70	4,699.5	45.5	-14.4	425,054.58	733,435.52	32° 9' 58.834 N	103° 34' 44.209 W
4,800.0	1.49	111.56	4,799.5	45.0	-12.0	425,054.07	733,437.89	32° 9' 58.829 N	103° 34' 44.182 W
4,900.0	0.84	130.17	4,899.5	44.0	-10.2	425,053.11	733,439.66	32° 9' 58.819 N	103° 34' 44.161 W
Final Gyro Survey									
5,087.0	1.40	143.50	5,086.5	41.3	-7.8	425,050.39	733,442.07	32° 9' 58.792 N	103° 34' 44.133 W
First MWD Survey									
5,181.0	1.30	144.00	5,180.4	39.5	-6.5	425,048.61	733,443.38	32° 9' 58.774 N	103° 34' 44.118 W
5,276.0	0.40	101.70	5,275.4	38.6	-5.6	425,047.67	733,444.34	32° 9' 58.765 N	103° 34' 44.107 W
5,370.0	1.20	302.30	5,369.4	39.0	-6.1	425,048.13	733,443.82	32° 9' 58.770 N	103° 34' 44.113 W
5,464.0	4.20	319.10	5,463.3	42.2	-9.2	425,051.26	733,440.74	32° 9' 58.801 N	103° 34' 44.149 W
5,558.0	5.80	317.70	5,556.9	48.3	-14.6	425,057.37	733,435.29	32° 9' 58.862 N	103° 34' 44.212 W
5,653.0	5.60	316.30	5,651.5	55.2	-21.0	425,064.27	733,428.85	32° 9' 58.930 N	103° 34' 44.286 W
5,747.0	5.60	314.60	5,745.0	61.7	-27.5	425,070.81	733,422.42	32° 9' 58.996 N	103° 34' 44.360 W
5,841.0	5.80	312.90	5,838.6	68.2	-34.2	425,077.26	733,415.68	32° 9' 59.060 N	103° 34' 44.438 W
5,936.0	5.50	313.40	5,933.1	74.6	-41.0	425,083.66	733,408.85	32° 9' 59.124 N	103° 34' 44.517 W
6,030.0	5.60	313.40	6,026.7	80.8	-47.7	425,089.91	733,402.25	32° 9' 59.186 N	103° 34' 44.593 W
6,124.0	5.70	300.50	6,120.2	86.3	-55.0	425,095.43	733,394.89	32° 9' 59.241 N	103° 34' 44.679 W
6,218.0	5.80	301.00	6,213.7	91.1	-63.1	425,100.24	733,386.80	32° 9' 59.289 N	103° 34' 44.772 W

IDS

Survey Report - Geographic

Company:	COG Production LLC	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	WELL @ 3481.7usft (Original Well Elev)
Site:	Monet Federal	MD Reference:	WELL @ 3481.7usft (Original Well Elev)
Well:	#3H	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
6,313.0	6.00	296.90	6,308.2	95.9	-71.6	425,104.96	733,378.26	32° 9' 59.337 N	103° 34' 44.871 W
6,407.0	5.60	279.80	6,401.8	98.9	-80.5	425,107.96	733,369.35	32° 9' 59.367 N	103° 34' 44.975 W
6,502.0	5.50	278.70	6,496.3	100.3	-89.6	425,109.44	733,360.29	32° 9' 59.382 N	103° 34' 45.080 W
6,596.0	5.50	278.20	6,589.9	101.7	-98.5	425,110.77	733,351.37	32° 9' 59.396 N	103° 34' 45.184 W
6,690.0	5.50	280.60	6,683.4	103.1	-107.4	425,112.24	733,342.49	32° 9' 59.411 N	103° 34' 45.287 W
6,784.0	5.40	277.70	6,777.0	104.6	-116.2	425,113.66	733,333.68	32° 9' 59.426 N	103° 34' 45.389 W
6,879.0	5.10	278.00	6,871.6	105.7	-124.8	425,114.84	733,325.07	32° 9' 59.438 N	103° 34' 45.489 W
6,974.0	4.90	275.90	6,966.3	106.7	-133.0	425,115.85	733,316.85	32° 9' 59.449 N	103° 34' 45.585 W
7,068.0	4.70	279.70	7,059.9	107.8	-140.8	425,116.91	733,309.06	32° 9' 59.460 N	103° 34' 45.675 W
7,162.0	4.60	279.10	7,153.6	109.1	-148.4	425,118.16	733,301.54	32° 9' 59.473 N	103° 34' 45.763 W
7,256.0	4.60	275.10	7,247.3	110.0	-155.8	425,119.09	733,294.06	32° 9' 59.482 N	103° 34' 45.850 W
7,350.0	4.50	274.50	7,341.0	110.6	-163.3	425,119.71	733,286.63	32° 9' 59.489 N	103° 34' 45.936 W
7,444.0	3.40	276.30	7,434.8	111.2	-169.7	425,120.31	733,280.19	32° 9' 59.495 N	103° 34' 46.011 W
7,538.0	4.00	290.70	7,528.6	112.7	-175.5	425,121.77	733,274.35	32° 9' 59.510 N	103° 34' 46.079 W
7,632.0	4.00	290.50	7,622.4	115.0	-181.7	425,124.08	733,268.21	32° 9' 59.533 N	103° 34' 46.150 W
7,727.0	3.90	289.00	7,717.1	117.2	-187.8	425,126.29	733,262.05	32° 9' 59.556 N	103° 34' 46.221 W
7,820.0	3.90	287.40	7,809.9	119.2	-193.9	425,128.27	733,256.04	32° 9' 59.576 N	103° 34' 46.291 W
7,915.0	3.90	282.10	7,904.7	120.8	-200.1	425,129.91	733,249.80	32° 9' 59.592 N	103° 34' 46.364 W
8,009.0	4.30	301.70	7,998.5	123.3	-206.2	425,132.43	733,243.68	32° 9' 59.618 N	103° 34' 46.435 W
8,104.0	4.20	304.20	8,093.2	127.2	-212.1	425,136.26	733,237.77	32° 9' 59.656 N	103° 34' 46.503 W
8,199.0	4.00	305.50	8,188.0	131.0	-217.7	425,140.14	733,232.20	32° 9' 59.695 N	103° 34' 46.568 W
8,293.0	3.60	308.20	8,281.8	134.8	-222.7	425,143.87	733,227.21	32° 9' 59.732 N	103° 34' 46.625 W
8,387.0	4.90	298.30	8,375.5	138.5	-228.5	425,147.60	733,221.35	32° 9' 59.769 N	103° 34' 46.693 W
8,482.0	4.90	299.70	8,470.2	142.4	-235.6	425,151.53	733,214.26	32° 9' 59.809 N	103° 34' 46.775 W
8,577.0	4.90	293.80	8,564.8	146.1	-242.9	425,155.18	733,207.02	32° 9' 59.845 N	103° 34' 46.859 W
8,672.0	4.90	293.00	8,659.5	149.3	-250.3	425,158.40	733,199.57	32° 9' 59.878 N	103° 34' 46.946 W
8,767.0	4.80	289.40	8,754.1	152.2	-257.8	425,161.30	733,192.09	32° 9' 59.907 N	103° 34' 47.032 W
8,791.0	4.60	289.50	8,778.0	152.9	-259.7	425,161.96	733,190.24	32° 9' 59.914 N	103° 34' 47.054 W
8,841.0	4.70	285.30	8,827.9	154.1	-263.5	425,163.17	733,186.37	32° 9' 59.926 N	103° 34' 47.099 W
8,872.0	6.50	244.10	8,858.7	153.6	-266.3	425,162.74	733,183.56	32° 9' 59.922 N	103° 34' 47.131 W
8,935.0	15.70	213.60	8,920.5	145.0	-274.3	425,154.06	733,175.62	32° 9' 59.836 N	103° 34' 47.225 W
8,981.0	23.80	208.40	8,963.8	131.6	-282.2	425,140.68	733,167.74	32° 9' 59.705 N	103° 34' 47.317 W
9,030.0	30.70	203.00	9,007.3	111.3	-291.8	425,120.45	733,158.14	32° 9' 59.505 N	103° 34' 47.431 W
9,077.0	35.80	198.30	9,046.6	87.2	-300.8	425,096.33	733,149.13	32° 9' 59.267 N	103° 34' 47.537 W
9,124.0	39.10	193.20	9,084.0	59.7	-308.5	425,068.84	733,141.43	32° 9' 58.996 N	103° 34' 47.629 W
9,171.0	42.60	188.30	9,119.5	29.5	-314.2	425,038.65	733,135.74	32° 9' 58.697 N	103° 34' 47.698 W
9,219.0	44.00	183.90	9,154.5	-3.2	-317.6	425,005.93	733,132.26	32° 9' 58.374 N	103° 34' 47.741 W
9,251.0	44.30	183.30	9,177.4	-25.4	-319.0	424,983.69	733,130.86	32° 9' 58.154 N	103° 34' 47.759 W
9,314.0	45.10	181.30	9,222.2	-69.7	-320.8	424,939.41	733,129.09	32° 9' 57.716 N	103° 34' 47.783 W
9,361.0	47.70	179.00	9,254.6	-103.7	-320.9	424,905.38	733,129.02	32° 9' 57.379 N	103° 34' 47.787 W
9,409.0	55.00	180.50	9,284.6	-141.2	-320.7	424,867.93	733,129.15	32° 9' 57.008 N	103° 34' 47.788 W
9,456.0	62.40	181.90	9,309.0	-181.3	-321.6	424,827.80	733,128.29	32° 9' 56.611 N	103° 34' 47.802 W
9,504.0	65.80	183.20	9,329.9	-224.4	-323.5	424,784.68	733,126.37	32° 9' 56.185 N	103° 34' 47.828 W
9,551.0	71.80	182.90	9,346.9	-268.2	-325.9	424,740.94	733,124.04	32° 9' 55.752 N	103° 34' 47.858 W
9,598.0	75.80	180.60	9,360.0	-313.3	-327.2	424,695.84	733,122.67	32° 9' 55.306 N	103° 34' 47.878 W
9,662.0	84.20	178.20	9,371.1	-376.2	-326.6	424,632.88	733,123.35	32° 9' 54.683 N	103° 34' 47.875 W
9,694.0	88.20	180.50	9,373.3	-408.1	-326.2	424,600.96	733,123.71	32° 9' 54.367 N	103° 34' 47.874 W
9,757.0	90.40	181.40	9,374.0	-471.1	-327.2	424,537.97	733,122.66	32° 9' 53.744 N	103° 34' 47.891 W
9,822.0	90.60	179.20	9,373.5	-536.1	-327.6	424,472.98	733,122.32	32° 9' 53.101 N	103° 34' 47.900 W
9,917.0	92.40	178.80	9,371.0	-631.1	-325.9	424,378.03	733,123.98	32° 9' 52.161 N	103° 34' 47.889 W
10,012.0	90.80	179.40	9,368.3	-726.0	-324.4	424,283.09	733,125.47	32° 9' 51.221 N	103° 34' 47.879 W
10,106.0	89.30	176.90	9,368.2	-820.0	-321.4	424,189.14	733,128.50	32° 9' 50.291 N	103° 34' 47.851 W
10,202.0	88.00	176.70	9,370.5	-915.8	-316.0	424,093.32	733,133.86	32° 9' 49.343 N	103° 34' 47.797 W
10,296.0	89.20	175.50	9,372.8	-1,009.5	-309.6	423,999.57	733,140.25	32° 9' 48.415 N	103° 34' 47.730 W
10,390.0	86.80	177.60	9,376.1	-1,103.3	-304.0	423,905.81	733,145.91	32° 9' 47.486 N	103° 34' 47.672 W

IDS

Survey Report - Geographic

Company: COG Production LLC
Project: Lea County, NM (NAD27 NME)
Site: Monet Federal
Well: #3H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #3H
TVD Reference: WELL @ 3481.7usft (Original Well Elev)
MD Reference: WELL @ 3481.7usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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
10,483.0	88.30	179.40	9,380.1	-1,196.2	-301.6	423,812.94	733,148.34	32° 9' 46.567 N	103° 34' 47.651 W
10,577.0	91.10	181.90	9,380.5	-1,290.1	-302.6	423,718.96	733,147.27	32° 9' 45.637 N	103° 34' 47.671 W
10,672.0	89.10	181.30	9,380.4	-1,385.1	-305.3	423,624.00	733,144.62	32° 9' 44.698 N	103° 34' 47.710 W
10,767.0	87.30	179.80	9,383.4	-1,480.0	-306.2	423,529.06	733,143.71	32° 9' 43.758 N	103° 34' 47.728 W
10,861.0	89.30	179.80	9,386.2	-1,574.0	-305.9	423,435.11	733,144.04	32° 9' 42.829 N	103° 34' 47.732 W
10,956.0	91.50	181.30	9,385.5	-1,669.0	-306.8	423,340.12	733,143.12	32° 9' 41.889 N	103° 34' 47.750 W
11,051.0	88.30	179.10	9,385.7	-1,764.0	-307.1	423,245.14	733,142.79	32° 9' 40.949 N	103° 34' 47.762 W
11,147.0	87.60	179.90	9,389.1	-1,859.9	-306.3	423,149.21	733,143.63	32° 9' 39.999 N	103° 34' 47.760 W
11,242.0	87.30	179.80	9,393.3	-1,954.8	-306.0	423,054.30	733,143.88	32° 9' 39.060 N	103° 34' 47.765 W
11,336.0	89.50	179.50	9,395.9	-2,048.8	-305.4	422,960.35	733,144.45	32° 9' 38.131 N	103° 34' 47.766 W
11,431.0	89.30	179.80	9,396.9	-2,143.7	-304.9	422,865.35	733,145.03	32° 9' 37.190 N	103° 34' 47.767 W
11,526.0	89.40	180.00	9,398.0	-2,238.7	-304.7	422,770.36	733,145.20	32° 9' 36.250 N	103° 34' 47.773 W
11,621.0	89.00	180.00	9,399.3	-2,333.7	-304.7	422,675.37	733,145.20	32° 9' 35.310 N	103° 34' 47.780 W
11,715.0	90.40	180.20	9,399.8	-2,427.7	-304.9	422,581.37	733,145.03	32° 9' 34.380 N	103° 34' 47.790 W
11,810.0	90.00	180.10	9,399.5	-2,522.7	-305.1	422,486.37	733,144.79	32° 9' 33.440 N	103° 34' 47.801 W
11,904.0	89.00	179.80	9,400.3	-2,616.7	-305.0	422,392.38	733,144.87	32° 9' 32.510 N	103° 34' 47.807 W
11,999.0	90.40	180.60	9,400.8	-2,711.7	-305.4	422,297.38	733,144.54	32° 9' 31.570 N	103° 34' 47.819 W
12,093.0	91.50	181.30	9,399.3	-2,805.7	-306.9	422,203.41	733,142.98	32° 9' 30.640 N	103° 34' 47.845 W
12,187.0	91.10	181.60	9,397.1	-2,899.6	-309.3	422,109.47	733,140.60	32° 9' 29.711 N	103° 34' 47.880 W
12,282.0	90.90	181.50	9,395.5	-2,994.6	-311.9	422,014.52	733,138.03	32° 9' 28.771 N	103° 34' 47.918 W
12,377.0	90.60	181.90	9,394.2	-3,089.5	-314.7	421,919.57	733,135.21	32° 9' 27.832 N	103° 34' 47.958 W
12,471.0	93.10	181.20	9,391.2	-3,183.4	-317.2	421,825.66	733,132.67	32° 9' 26.903 N	103° 34' 47.995 W
12,566.0	92.80	181.60	9,386.3	-3,278.3	-319.5	421,730.81	733,130.35	32° 9' 25.964 N	103° 34' 48.030 W
12,661.0	92.40	181.80	9,382.0	-3,373.1	-322.4	421,635.95	733,127.54	32° 9' 25.026 N	103° 34' 48.070 W
12,756.0	92.30	179.80	9,378.1	-3,468.1	-323.7	421,541.05	733,126.21	32° 9' 24.087 N	103° 34' 48.094 W
12,850.0	90.00	180.50	9,376.2	-3,562.0	-323.9	421,447.07	733,125.97	32° 9' 23.157 N	103° 34' 48.104 W
12,945.0	90.00	179.80	9,376.2	-3,657.0	-324.2	421,352.07	733,125.72	32° 9' 22.217 N	103° 34' 48.115 W
13,038.0	89.60	178.90	9,376.5	-3,750.0	-323.1	421,259.08	733,126.77	32° 9' 21.297 N	103° 34' 48.110 W
13,133.0	89.30	179.70	9,377.4	-3,845.0	-322.0	421,164.09	733,127.93	32° 9' 20.357 N	103° 34' 48.104 W
13,228.0	88.30	179.90	9,379.4	-3,940.0	-321.6	421,069.12	733,128.26	32° 9' 19.417 N	103° 34' 48.108 W
13,322.0	88.50	181.50	9,382.1	-4,033.9	-322.8	420,975.16	733,127.12	32° 9' 18.487 N	103° 34' 48.129 W
13,418.0	89.30	179.90	9,383.9	-4,129.9	-324.0	420,879.19	733,125.94	32° 9' 17.537 N	103° 34' 48.151 W
13,513.0	88.90	179.10	9,385.4	-4,224.9	-323.1	420,784.21	733,126.77	32° 9' 16.597 N	103° 34' 48.149 W
13,602.0	89.80	178.40	9,386.4	-4,313.9	-321.2	420,695.24	733,128.71	32° 9' 15.717 N	103° 34' 48.133 W
13,696.0	93.70	178.30	9,383.5	-4,407.8	-318.5	420,601.34	733,131.42	32° 9' 14.788 N	103° 34' 48.109 W
13,791.0	93.80	178.90	9,377.3	-4,502.5	-316.2	420,506.57	733,133.74	32° 9' 13.850 N	103° 34' 48.090 W
13,885.0	91.40	177.70	9,373.1	-4,596.4	-313.4	420,412.72	733,136.52	32° 9' 12.921 N	103° 34' 48.065 W
13,981.0	90.70	176.40	9,371.3	-4,692.2	-308.4	420,316.86	733,141.46	32° 9' 11.972 N	103° 34' 48.016 W
Final MWD Survey									
14,049.0	90.70	176.40	9,370.5	-4,760.1	-304.2	420,249.00	733,145.73	32° 9' 11.300 N	103° 34' 47.972 W
Projection to TD									

Design Targets

Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP(MonetF#3)	- actual wellpath misses target center by 16.6usft at 8902.7usft MD (8889.1 TVD, 150.8 N, -269.8 E)	0.00	0.01	8,886.0	138.1	-280.0	425,147.20	733,169.90	32° 9' 59.769 N	103° 34' 47.292 W
- Point										
PBHL(MonetF#3H)	- actual wellpath misses target center by 19.6usft at 14049.0usft MD (9370.5 TVD, -4760.1 N, -304.2 E)	0.00	179.70	9,385.0	-4,764.1	-291.7	420,245.00	733,158.20	32° 9' 11.260 N	103° 34' 47.827 W
- Rectangle (sides W100.0 H4,419.9 D0.0)										

IDS
Survey Report - Geographic

Company:	COG Production LLC	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	WELL @ 3481.7usft (Original Well Elev)
Site:	Monel Federal	MD Reference:	WELL @ 3481.7usft (Original Well Elev)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
100.0	100.0	0.2	0.2	First Gyro Survey
4,900.0	4,899.5	44.0	-10.2	Final Gyro Survey
5,087.0	5,086.5	41.3	-7.8	First MWD Survey
13,981.0	9,371.3	-4,692.2	-308.4	Final MWD Survey
14,049.0	9,370.5	-4,760.1	-304.2	Projection to TD

Checked By: _____	Approved By: _____	Date: _____
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