Monet Federal Com #9H

30-025-42766
Sec 4-T25S-R33E

Perfs			7 1/2% Acid (Gal)	Sand (#)	Fluid (Gal)
13735	13679	13629	4020	297098	301380
13578	13527	13477	3024	296443	279384
13426	13375	13327	2814	296561	279258
13270	13223	13172	3024	302541	278460
13122	13071	13020	2982	300723	277704
12970	12919	12868	3024	297713	277116
12821	12765	12716	3024	298536	275226
12665	12615	12564	3024	300174	276906
12513	12463	12412	3024	303872	280770
12361	12305	12259	3024	300754	273630
12209	12158	12108	3024	302512	273882
12057	12006	11956	3024	302689	276864
11905	11855	11800	3066	301186	275016
11753	11702	11651	3024	300689	273672
11601	11550	11499	3066	299509	271950
11449	11398	11349	2604	300730	271992
11293	11246	11195	2982	299152	272706
11144	11094	11043	3024	299384	270102
10992	10942	10891	3024	301692	271572
10841	10785	10739	3024	301452	272202
10688	10637	10587	3108	300401	273420
10536	10485	10437	3024	303019	272244
10381	10333	10282	3024	301381	275982
10232	10181	10130	3024	300523	270816
10080	10029	9982	3024	301213	267792
9926	9877	9826	3024	300508	274218
9775	9725	9674	3066	300133	270438
9623	9573	9522	3108	302420	272790
		Totals	**85248**	**8413008**	**7707492**

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

Well Name and Num: Monet Federal Com # 9H
Location: Sec 4, T25S, R33E
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	Degrees @	Depth
0.30	455	1.80	5874	90.30	12476		
0.30	829	2.00	6234	89.50	13612		
0.60	1145	1.40	6632	89.10	13805		
0.30	1525	1.50	7013				
0.40	1873	1.80	7364				
0.60	2189	1.10	7745				
0.90	2537	1.10	7935				
1.40	3011	1.40	8412				
1.50	3392	0.90	8827				
1.00	3676	37.70	9203				
1.80	4056	79.20	9554				
2.40	4278	1.50	9902				
2.30	4720	87.70	10380				
2.80	4978	89.70	10668				
2.50	5427	91.30	11050				
2.30	5588	88.70	11432				
2.50	5427	91.50	11717				
2.30	5588	89.30	12192				

By: _____

Subscribed and sworn to before me this 29th day of February, 2016

_____
Notary Public, Lea County, New Mexico

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

VES SURVEY INTERNATIONAL

February 18, 2016

HOBBS OCD
JUN 23 2016
RECEIVED

Concho Resources, Inc.
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701

Attn: Kanicia Castillo

RE: **Monet Federal Com No 009H**

Please find enclosed a copy of the survey from 0' to 7400' ran on the above referenced well.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
§
COUNTY OF NUECES §

This instrument was acknowledged before me on the 18th day of February, A.D., 2016, by Keith Havelka.

Jennifer Ann Byerly
Notary Public, State of Texas

JENNIFER ANN BYERLY
Notary Public, State of Texas
My Commission Expires
August 16, 2017

VES Survey International
P.O. Box 261021, Corpus Christi, Texas 78426
T (361) 767-0602 F (361) 767-0612
www.vessurvey.com

Company: Concho
Lease/Well: Monet Federal Com No/009H

Rig Name: McVay 7
State/County: New Mexico/Lea
VS-Azi: 179.90 Degrees
Latitude: 31.16622, Longitude: -103.58200
Grid North = True North -0.39 degs (NAD 27)
Grid Correction Applied = -0.39 degs

Depth Reference : RKB = 17 feet

DRILLOG HA GYRO SURVEY CALCULATIONS
Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 2/18/2016 / 13:45

VES Survey International
Midland, Texas
432-563-5444
Surveyor: Adam Askew
Monet Federal Com No 009H / API 30-025-42766

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section 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	0.00	****
100.00	0.19	158.90	100.00	-0.15	0.06	0.15	0.16	158.90	0.19
200.00	0.30	273.94	200.00	-0.29	-0.14	0.29	0.32	205.89	0.41
300.00	0.15	322.21	300.00	-0.16	-0.48	0.16	0.51	251.05	0.22
400.00	0.14	86.67	400.00	-0.05	-0.43	0.05	0.44	263.23	0.26
500.00	0.18	203.77	500.00	-0.19	-0.37	0.19	0.42	243.26	0.28
600.00	0.11	122.34	600.00	-0.38	-0.35	0.38	0.52	222.83	0.20
700.00	0.23	249.33	700.00	-0.51	-0.46	0.50	0.69	222.58	0.31
800.00	0.36	294.43	800.00	-0.45	-0.94	0.45	1.04	244.47	0.25
900.00	0.36	286.59	899.99	-0.23	-1.52	0.23	1.54	261.38	0.05
1000.00	0.18	56.84	999.99	-0.06	-1.69	0.06	1.70	268.03	0.49
1100.00	0.48	110.15	1099.99	-0.12	-1.17	0.12	1.18	264.24	0.40
1200.00	0.44	84.33	1199.99	-0.22	-0.40	0.22	0.46	240.86	0.21
1300.00	0.62	123.79	1299.99	-0.49	0.43	0.49	0.65	138.77	0.39
1400.00	0.42	154.80	1399.98	-1.11	1.03	1.12	1.52	137.30	0.34
1500.00	0.23	160.05	1499.98	-1.63	1.25	1.63	2.06	142.50	0.19
1600.00	0.31	184.58	1599.98	-2.09	1.30	2.09	2.46	148.13	0.14

VES Survey Date: 2/14/2016

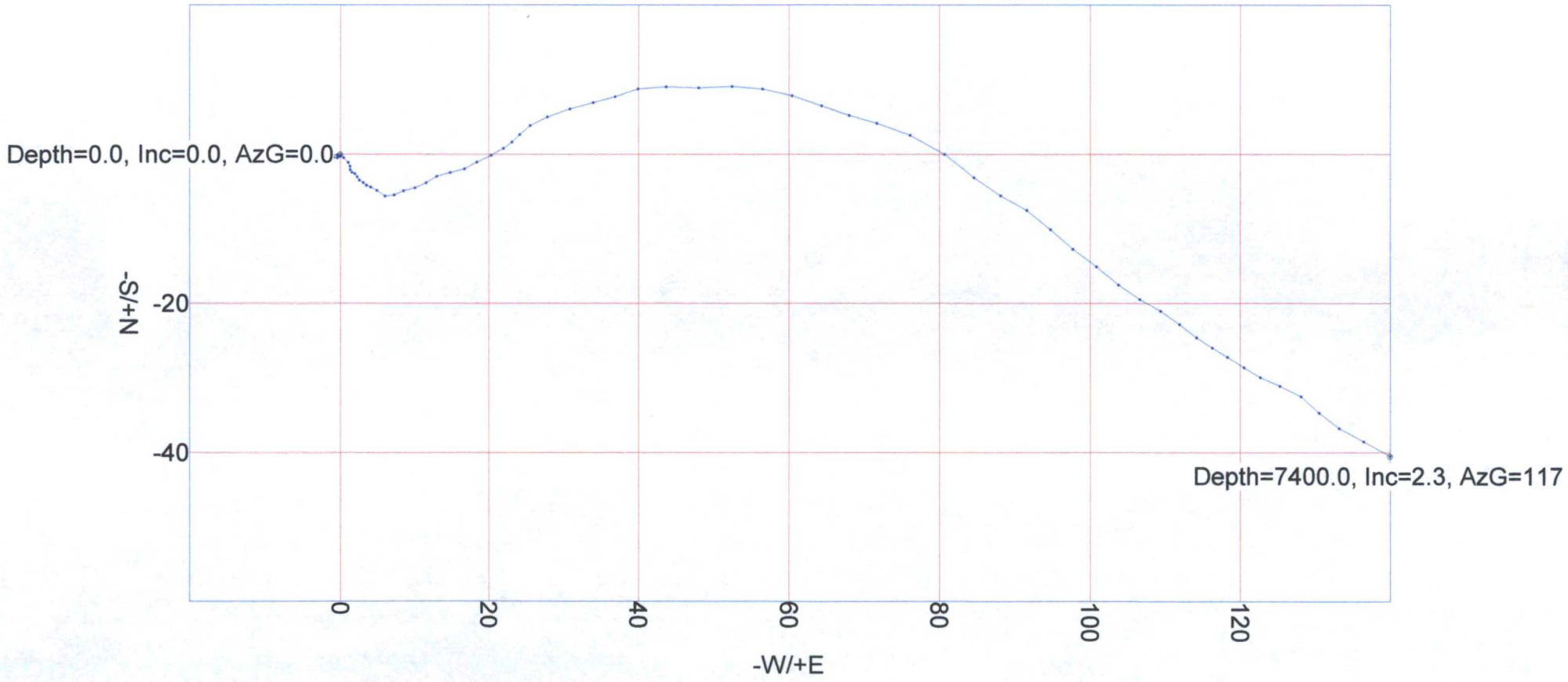
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1700.00	0.26	111.19	1699.98	-2.44	1.48	2.44	2.85	148.68	0.34
1800.00	0.29	115.07	1799.98	-2.63	1.92	2.63	3.25	143.80	0.04
1900.00	0.36	170.16	1899.98	-3.05	2.21	3.05	3.76	144.07	0.31
2000.00	0.34	117.72	1999.97	-3.50	2.52	3.50	4.31	144.16	0.31
2100.00	0.34	127.82	2099.97	-3.82	3.02	3.82	4.87	141.62	0.06
2200.00	0.34	130.55	2199.97	-4.19	3.48	4.19	5.44	140.29	0.02
2300.00	0.36	93.87	2299.97	-4.40	4.02	4.41	5.96	137.61	0.22
2400.00	0.78	128.96	2399.96	-4.85	4.86	4.86	6.87	134.93	0.53
2500.00	0.79	120.18	2499.95	-5.62	5.98	5.63	8.21	133.22	0.12
2600.00	0.89	49.98	2599.95	-5.47	7.17	5.48	9.02	127.35	0.96
2700.00	0.81	84.80	2699.94	-4.91	8.46	4.92	9.78	120.12	0.51
2800.00	0.99	68.28	2799.92	-4.53	9.97	4.54	10.95	114.43	0.31
2900.00	0.93	63.12	2899.91	-3.84	11.48	3.86	12.11	108.50	0.11
3000.00	0.98	53.47	2999.90	-2.97	12.89	2.99	13.23	102.97	0.17
3100.00	1.32	89.97	3099.88	-2.46	14.73	2.48	14.94	99.48	0.79
3200.00	1.04	57.44	3199.86	-1.97	16.65	2.00	16.77	96.75	0.71
3300.00	1.15	64.59	3299.84	-1.05	18.32	1.08	18.35	93.29	0.18
3400.00	1.37	65.68	3399.81	-0.13	20.32	0.16	20.32	90.36	0.22
3500.00	0.84	56.36	3499.80	0.77	22.02	-0.73	22.03	87.99	0.56
3600.00	0.77	48.03	3599.79	1.62	23.13	-1.58	23.19	85.98	0.14
3700.00	0.88	43.76	3699.77	2.63	24.16	-2.58	24.30	83.80	0.13
3800.00	1.25	52.82	3799.76	3.84	25.56	-3.79	25.84	81.46	0.41
3900.00	1.70	70.69	3899.72	4.99	27.83	-4.94	28.27	79.83	0.64
4000.00	1.98	69.31	3999.67	6.09	30.84	-6.04	31.44	78.83	0.28
4100.00	1.73	81.55	4099.62	6.92	33.95	-6.86	34.65	78.48	0.46
4200.00	1.73	67.87	4199.58	7.71	36.85	-7.65	37.64	78.18	0.41
4300.00	2.00	74.18	4299.52	8.76	39.92	-8.69	40.87	77.63	0.35
4400.00	2.37	95.87	4399.45	9.02	43.66	-8.95	44.59	78.32	0.90
4500.00	2.60	87.50	4499.36	8.91	47.99	-8.83	48.81	79.48	0.43
4600.00	2.47	87.65	4599.26	9.10	52.41	-9.01	53.19	80.15	0.14
4700.00	2.26	102.57	4699.18	8.76	56.49	-8.66	57.16	81.19	0.65
4800.00	2.36	103.46	4799.09	7.85	60.42	-7.74	60.92	82.60	0.10
4900.00	2.40	114.35	4899.01	6.51	64.32	-6.39	64.65	84.22	0.45
5000.00	2.11	103.22	4998.93	5.22	68.02	-5.11	68.22	85.61	0.52
5100.00	2.28	109.31	5098.86	4.14	71.69	-4.02	71.81	86.69	0.29
5200.00	3.09	110.51	5198.75	2.54	76.09	-2.41	76.13	88.09	0.81
5300.00	2.99	127.89	5298.61	0.00	80.67	0.15	80.67	90.00	0.92
5400.00	2.76	129.92	5398.48	-3.15	84.58	3.30	84.64	92.13	0.25
5500.00	2.17	117.88	5498.39	-5.58	88.10	5.74	88.28	93.63	0.78

VES Survey Date: 2/14/2016

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5600.00	2.37	120.75	5598.31	-7.53	91.55	7.69	91.86	94.70	0.23
5700.00	2.35	138.12	5698.23	-10.11	94.70	10.27	95.24	96.09	0.71
5800.00	2.25	124.10	5798.15	-12.73	97.69	12.90	98.51	97.43	0.57
5900.00	2.29	128.98	5898.07	-15.09	100.86	15.26	101.99	98.51	0.20
6000.00	2.08	131.76	5998.00	-17.55	103.77	17.73	105.24	99.60	0.23
6100.00	1.89	115.13	6097.94	-19.46	106.61	19.64	108.37	100.34	0.60
6200.00	1.78	124.68	6197.89	-21.04	109.38	21.23	111.39	100.89	0.32
6300.00	1.75	127.50	6297.84	-22.86	111.88	23.05	114.19	101.55	0.09
6400.00	1.57	127.35	6397.80	-24.62	114.18	24.82	116.80	102.17	0.18
6500.00	1.28	118.60	6497.77	-25.98	116.24	26.18	119.11	102.60	0.36
6600.00	1.48	123.42	6597.74	-27.23	118.30	27.43	121.39	102.96	0.23
6700.00	1.48	121.95	6697.71	-28.62	120.47	28.83	123.82	103.36	0.04
6800.00	1.45	119.48	6797.67	-29.93	122.67	30.14	126.27	103.71	0.07
6900.00	1.79	110.35	6897.63	-31.09	125.24	31.31	129.04	103.94	0.42
7000.00	1.83	123.08	6997.58	-32.51	128.04	32.73	132.10	104.25	0.40
7100.00	1.94	140.36	7097.53	-34.69	130.46	34.91	134.99	104.89	0.58
7200.00	2.02	115.67	7197.47	-36.76	133.13	36.99	138.11	105.44	0.85
7300.00	2.30	120.24	7297.40	-38.53	136.46	38.77	141.79	105.77	0.32
7400.00	2.32	117.73	7397.32	-40.49	139.98	40.73	145.72	106.13	0.10

VES Survey Date: 2/14/2016

VES Survey International
Midland, Texas
432-563-5444
Surveyor: Adam Askew
Monet Federal Com No 009H / API 30-025-42766



VES Survey Date: 2/14/2016

VES SURVEY INTERNATIONAL

HOBBS OCD

JUN 23 2016

RECEIVED

I Adam Askew certify that I am employed by VES Survey International. That I did on the day(s) of 02/14/16 through 02/14/16 conduct or supervise the taking of a Rate Gyro survey from a depth of 0.00 feet to a depth of 7,400.00 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Concho for the Monet Federal Com Well # 9H API # 30-025-42766 in Lea County / Parish New Mexico ; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services

Adam Askew
Service Technician
Vaughn Energy Services

CONCHO

COG Operating, LLC

Lea County, NM
Sec 4, T25S, R33E
Monet Federal #9H

Wellbore #1

Survey: MWD

DDC Survey Report

07 March, 2016

DDC
The DIRECTIONAL DRILLING COMPANY

The Directional Drilling Company
11390 FM 830
Willis, TX 77318
Phone: (936) 856-4332
Fax: (936) 856-8678

Survey Certification Sheet

Company	Job Number	Date
COG Operating, LLC	WT-160053	3/7/2016

Lease	Well Name	County & State
N/A	Monet Federal #9H	Lea, NM

API No.	Survey Depth Range	Survey Type
30-025-42766	7400 feet to 13855 feet MD	MWD

Sidetrack Information	Directional Supervisor/Surveyor
N/A	Daniel Longoria

Certification Statement

The data and calculations for this survey have been checked by me and conform to the standards and procedures set forth by The Directional Drilling Company (DDC). This report represents a true and correct directional survey of this well based on the original data obtained at the well site. Wellbore coordinates are calculated using minimum curvature.

Christopher Hughes

Digitally signed by Christopher Hughes
DN: cn=Christopher Hughes, o=DDC, ou, email=Chrish@directionaldrillers.com, c=US
Date: 2016.03.08 08:02:03 -06'00'

Christopher Hughes
MWD Compliance Manager
The Directional Drilling Company

CONCHO

DDC
Survey Report

DDC

Company:	COG Operating, LLC	**Local Co-ordinate Reference:**	Well Monet Federal #9H
Project:	Lea County, NM	**TVD Reference:**	well @ 3480.0usft (McVay #7)
Site:	Sec 4, T25S, R33E	**MD Reference:**	well @ 3480.0usft (McVay #7)
Well:	Monet Federal #9H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM5002

Project	Lea County, NM		
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	Sec 4, T25S, R33E				
Site Position:		**Northing:**	424,999.76 usft	**Latitude:**	32° 9' 58.399 N
From:	Lat/Long	**Easting:**	731,880.25 usft	**Longitude:**	103° 35' 2.306 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.40 °

Well	Monet Federal #9H					
Well Position	**+N/-S**	0.0 usft	**Northing:**	425,003.65 usft	**Latitude:**	32° 9' 58.396 N
	+E/-W	0.0 usft	**Easting:**	732,490.17 usft	**Longitude:**	103° 34' 55.211 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	0.0 usft	**Ground Level:**	3,463.0 usft

Wellbore	Wellbore #1			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	2/10/2016	7.10	60.03	48,041

Design	Wellbore #1			
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	179.90

Survey Program **Date** 2/21/2016

From (usft)	**To (usft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
100.0	7,400.0	GYRO (Wellbore #1)	Good_gyro	Good Gyro
7,554.0	13,855.0	MWD (Wellbore #1)	MWD default	MWD - Standard

Survey

Measured Depth (usft)	**Inclination (°)**	**Azimuth (°)**	**Vertical Depth (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Vertical Section (usft)**	**Dogleg Rate (°/100usft)**	**Build Rate (°/100usft)**	**Turn Rate (°/100usft)**
Tie In @ 7400' MD / 7397' TVD									
7,400.0	2.32	117.73	7,397.3	-40.5	140.0	40.7	0.00	0.00	0.00
7,554.0	2.50	118.80	7,551.2	-43.6	145.7	43.8	0.12	0.12	0.69
7,650.0	1.90	125.20	7,647.1	-45.5	148.8	45.7	0.67	-0.63	6.67
7,745.0	1.10	163.50	7,742.1	-47.3	150.4	47.5	1.31	-0.84	40.32
7,840.0	1.20	159.60	7,837.1	-49.1	151.0	49.3	0.13	0.11	-4.11
7,935.0	1.10	196.20	7,932.0	-50.9	151.1	51.1	0.77	-0.11	38.53
8,031.0	1.10	173.70	8,028.0	-52.7	150.9	52.9	0.45	0.00	-23.44
8,126.0	1.40	205.70	8,123.0	-54.6	150.5	54.9	0.79	0.32	33.68
8,221.0	1.40	203.90	8,218.0	-56.7	149.6	57.0	0.05	0.00	-1.89

Company:	COG Operating, LLC	**Local Co-ordinate Reference:**	Well Monet Federal #9H
Project:	Lea County, NM	**TVD Reference:**	well @ 3480.0usft (McVay #7)
Site:	Sec 4, T25S, R33E	**MD Reference:**	well @ 3480.0usft (McVay #7)
Well:	Monet Federal #9H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM5002

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,317.0	1.40	197.30	8,313.9	-58.9	148.7	59.2	0.17	0.00	-6.88
8,412.0	1.40	194.80	8,408.9	-61.2	148.1	61.4	0.06	0.00	-2.63
8,508.0	1.40	179.70	8,504.9	-63.5	147.8	63.7	0.38	0.00	-15.73
8,604.0	0.50	228.50	8,600.9	-64.9	147.5	65.2	1.18	-0.94	50.83
8,699.0	0.50	221.10	8,695.9	-65.5	146.9	65.8	0.07	0.00	-7.79
8,795.0	0.30	106.20	8,791.9	-65.9	146.9	66.1	0.71	-0.21	-119.69
8,827.0	0.90	159.30	8,823.9	-66.1	147.0	66.4	2.37	1.88	165.94
8,855.0	2.50	173.90	8,851.9	-67.0	147.2	67.2	5.87	5.71	52.14
8,886.0	4.90	183.50	8,882.8	-69.0	147.2	69.2	7.97	7.74	30.97
8,918.0	8.40	187.10	8,914.6	-72.6	146.8	72.9	11.01	10.94	11.25
8,950.0	11.70	190.90	8,946.1	-78.1	145.9	78.4	10.51	10.31	11.88
8,982.0	14.80	193.70	8,977.2	-85.3	144.3	85.6	9.89	9.69	8.75
9,014.0	18.40	193.90	9,007.9	-94.2	142.1	94.4	11.25	11.25	0.63
9,046.0	21.80	193.60	9,037.9	-104.9	139.5	105.1	10.63	10.63	-0.94
9,078.0	25.10	194.10	9,067.3	-117.2	136.5	117.5	10.33	10.31	1.56
9,110.0	28.10	195.30	9,095.9	-131.1	132.8	131.3	9.52	9.38	3.75
9,142.0	30.90	195.50	9,123.7	-146.3	128.6	146.5	8.76	8.75	0.63
9,172.0	34.30	195.70	9,149.0	-161.8	124.3	162.1	11.34	11.33	0.67
9,203.0	37.70	197.60	9,174.1	-179.3	119.1	179.5	11.54	10.97	6.13
9,235.0	40.50	199.00	9,198.9	-198.4	112.7	198.6	9.17	8.75	4.38
9,267.0	42.90	200.20	9,222.8	-218.5	105.6	218.7	7.90	7.50	3.75
9,299.0	45.20	199.90	9,245.8	-239.4	98.0	239.6	7.22	7.19	-0.94
9,331.0	48.00	197.90	9,267.8	-261.4	90.4	261.5	9.86	8.75	-6.25
9,363.0	51.80	196.50	9,288.4	-284.8	83.2	284.9	12.34	11.88	-4.38
9,395.0	56.00	196.40	9,307.3	-309.6	75.9	309.7	13.13	13.13	-0.31
9,427.0	61.20	195.70	9,323.9	-335.8	68.3	335.9	16.36	16.25	-2.19
9,459.0	65.80	193.70	9,338.2	-363.5	61.1	363.6	15.42	14.38	-6.25
9,490.0	70.40	192.00	9,349.8	-391.5	54.7	391.6	15.69	14.84	-5.48
9,522.0	74.80	190.00	9,359.3	-421.5	48.9	421.6	14.99	13.75	-6.25
9,554.0	79.20	187.90	9,366.5	-452.3	44.0	452.4	15.16	13.75	-6.56
9,585.0	83.80	187.10	9,371.1	-482.7	40.0	482.7	15.06	14.84	-2.58
9,615.0	86.70	186.00	9,373.6	-512.4	36.6	512.4	10.33	9.67	-3.67
9,646.0	88.70	184.80	9,374.8	-543.2	33.7	543.3	7.52	6.45	-3.87
9,678.0	89.00	184.40	9,375.5	-575.1	31.1	575.2	1.56	0.94	-1.25
9,774.0	90.90	182.70	9,375.6	-670.9	25.2	670.9	2.66	1.98	-1.77
9,806.0	91.20	182.80	9,375.0	-702.9	23.7	702.9	0.99	0.94	0.31
9,902.0	91.50	181.40	9,372.7	-798.8	20.2	798.8	1.49	0.31	-1.46
9,998.0	93.10	180.00	9,368.9	-894.7	19.0	894.7	2.21	1.67	-1.46
10,093.0	91.60	179.30	9,365.0	-989.6	19.6	989.6	1.74	-1.58	-0.74
10,189.0	88.20	179.70	9,365.1	-1,085.6	20.4	1,085.6	3.57	-3.54	0.42
10,285.0	87.00	178.80	9,369.1	-1,181.5	21.7	1,181.5	1.56	-1.25	-0.94
10,380.0	87.70	179.70	9,373.5	-1,276.4	22.9	1,276.4	1.20	0.74	0.95
10,476.0	88.40	180.40	9,376.8	-1,372.3	22.8	1,372.4	1.03	0.73	0.73

Company:	COG Operating, LLC	**Local Co-ordinate Reference:**	Well Monet Federal #9H
Project:	Lea County, NM	**TVD Reference:**	well @ 3480.0usft (McVay #7)
Site:	Sec 4, T25S, R33E	**MD Reference:**	well @ 3480.0usft (McVay #7)
Well:	Monet Federal #9H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM5002

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,572.0	89.20	180.90	9,378.8	-1,468.3	21.7	1,468.3	0.98	0.83	0.52
10,668.0	89.70	180.00	9,379.7	-1,564.3	21.0	1,564.3	1.07	0.52	-0.94
10,763.0	90.30	179.50	9,379.7	-1,659.3	21.4	1,659.3	0.82	0.63	-0.53
10,859.0	90.70	178.40	9,378.9	-1,755.3	23.1	1,755.3	1.22	0.42	-1.15
10,955.0	91.70	177.60	9,376.9	-1,851.2	26.5	1,851.2	1.33	1.04	-0.83
11,050.0	91.30	178.60	9,374.4	-1,946.1	29.6	1,946.1	1.13	-0.42	1.05
11,146.0	91.60	178.40	9,372.0	-2,042.0	32.2	2,042.1	0.38	0.31	-0.21
11,241.0	87.40	178.60	9,372.8	-2,137.0	34.6	2,137.0	4.43	-4.42	0.21
11,369.0	87.50	178.80	9,378.5	-2,264.8	37.5	2,264.9	0.17	0.08	0.16
11,432.0	88.70	179.00	9,380.6	-2,327.8	38.7	2,327.8	1.93	1.90	0.32
11,527.0	89.90	179.50	9,381.7	-2,422.7	40.0	2,422.8	1.37	1.26	0.53
11,622.0	90.50	179.50	9,381.4	-2,517.7	40.8	2,517.8	0.63	0.63	0.00
11,717.0	91.50	179.30	9,379.8	-2,612.7	41.8	2,612.8	1.07	1.05	-0.21
11,812.0	90.80	179.10	9,377.8	-2,707.7	43.1	2,707.8	0.77	-0.74	-0.21
11,907.0	89.30	180.40	9,377.8	-2,802.7	43.6	2,802.8	2.09	-1.58	1.37
12,002.0	89.20	180.00	9,379.0	-2,897.7	43.2	2,897.7	0.43	-0.11	-0.42
12,097.0	90.30	180.00	9,379.4	-2,992.7	43.2	2,992.7	1.16	1.16	0.00
12,192.0	89.30	181.90	9,379.8	-3,087.7	41.6	3,087.7	2.26	-1.05	2.00
12,287.0	89.90	182.30	9,380.4	-3,182.6	38.2	3,182.6	0.76	0.63	0.42
12,382.0	89.50	181.90	9,380.9	-3,277.5	34.7	3,277.6	0.60	-0.42	-0.42
12,477.0	90.30	181.30	9,381.1	-3,372.5	32.0	3,372.5	1.05	0.84	-0.63
12,569.0	88.60	182.10	9,382.0	-3,464.4	29.3	3,464.5	2.04	-1.85	0.87
12,664.0	90.00	181.60	9,383.1	-3,559.4	26.2	3,559.4	1.56	1.47	-0.53
12,759.0	88.90	181.10	9,384.0	-3,654.3	24.0	3,654.4	1.27	-1.16	-0.53
12,853.0	89.80	180.90	9,385.1	-3,748.3	22.4	3,748.4	0.98	0.96	-0.21
12,948.0	92.00	180.00	9,383.6	-3,843.3	21.6	3,843.3	2.50	2.32	-0.95
13,043.0	88.60	179.70	9,383.1	-3,938.3	21.9	3,938.3	3.59	-3.58	-0.32
13,138.0	89.70	178.40	9,384.5	-4,033.3	23.4	4,033.3	1.79	1.16	-1.37
13,232.0	88.50	179.80	9,386.0	-4,127.2	24.9	4,127.3	1.96	-1.28	1.49
13,327.0	89.40	179.70	9,387.7	-4,222.2	25.3	4,222.2	0.95	0.95	-0.11
13,422.0	91.40	179.80	9,387.1	-4,317.2	25.7	4,317.2	2.11	2.11	0.11
13,517.0	89.40	180.00	9,386.4	-4,412.2	25.9	4,412.2	2.12	-2.11	0.21
13,612.0	89.50	180.00	9,387.3	-4,507.2	25.9	4,507.2	0.11	0.11	0.00
13,707.0	87.40	180.40	9,389.9	-4,602.1	25.6	4,602.2	2.25	-2.21	0.42
13,805.0	89.10	180.90	9,392.9	-4,700.1	24.5	4,700.1	1.81	1.73	0.51
TD @ 13855' MD / 9393' TVD									
13,855.0	89.10	180.90	9,393.7	-4,750.1	23.7	4,750.1	0.00	0.00	0.00

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Well:	Monet Federal #9H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM5002

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
7,400.0	7,397.3	-40.5	140.0	Tie In @ 7400' MD / 7397' TVD
13,855.0	9,393.7	-4,750.1	23.7	TD @ 13855' MD / 9393' TVD

Checked By: _____ Approved By: _____ Date: _____