VES SURVEY INTERNATIONAL

January 19, 2015

NM OIL CONSERVATION
ARTESIA DISTRICT
MAR 26 2015
RECEIVED

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

Attn: Kanicia Castillo

RE: **Myox 28 State Com 5H** 30-015-41607

Please find enclosed a copy of the survey from 0' to 6533' ran on the above referenced well.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
§
COUNTY OF NUECES §

This instrument was acknowledged before me on the 19 day of January, A.D., 2015, 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, TX 78426
T (361) 767-0602 F (361) 767-0612
www.vessurvey.com

Company: CONCHO
Lease/Well: MYOX 28 STATE COM/5H

Rig Name: PATTERSON 79
State/County: NEW MEXICO/EDDY
Latitude: 32.11, Longitude: -104.08
GRID North is 0.13 Degrees East of True North
VS-Azi: 0.00 Degrees

Depth Reference : RKB: 22 FEET

DRILLOG HA GYRO SURVEY CALCULATIONS
Filename: gyro suvery.ut
Minimum Curvature Method
Report Date/Time: 1/19/2015 / 12:43

VES Survey International
West Texas
(432) 563-5444
Surveyor: Jordan Shelleby
Myox 28 State Com 5H / API 30-015-41607

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	0.36	313.60	100.00	0.22	-0.23	0.22	0.31	313.60	0.36
200.00	1.44	311.73	199.99	1.27	-1.39	1.27	1.88	312.35	1.08
300.00	1.81	284.59	299.95	2.50	-3.85	2.50	4.60	302.98	0.84
400.00	1.99	259.50	399.89	2.58	-7.09	2.58	7.55	290.00	0.85
500.00	2.35	239.60	499.82	1.23	-10.57	1.23	10.64	276.63	0.83
600.00	3.20	229.98	599.71	-1.60	-14.47	-1.60	14.56	263.68	0.97
700.00	1.37	223.08	699.62	-4.27	-17.43	-4.27	17.94	256.23	1.84
800.00	1.32	197.03	799.60	-6.25	-18.58	-6.25	19.60	251.42	0.61
900.00	1.51	162.11	899.57	-8.60	-18.51	-8.60	20.41	245.08	0.87
1000.00	1.71	159.87	999.53	-11.26	-17.59	-11.26	20.89	237.39	0.21
1100.00	1.93	186.70	1099.48	-14.33	-17.28	-14.33	22.45	230.32	0.87
1200.00	1.86	182.47	1199.42	-17.63	-17.54	-17.63	24.87	224.86	0.16
1300.00	0.48	228.84	1299.40	-19.52	-17.93	-19.52	26.51	222.55	1.57
1400.00	0.48	288.18	1399.40	-19.67	-18.64	-19.67	27.09	223.46	0.47
1500.00	0.83	306.26	1499.39	-19.11	-19.62	-19.11	27.38	225.75	0.40
1600.00	1.07	313.48	1599.38	-18.04	-20.88	-18.04	27.59	229.17	0.27
1700.00	1.08	313.02	1699.36	-16.75	-22.25	-16.75	27.85	233.02	0.01
1800.00	0.99	339.07	1799.34	-15.30	-23.24	-15.30	27.83	236.64	0.48

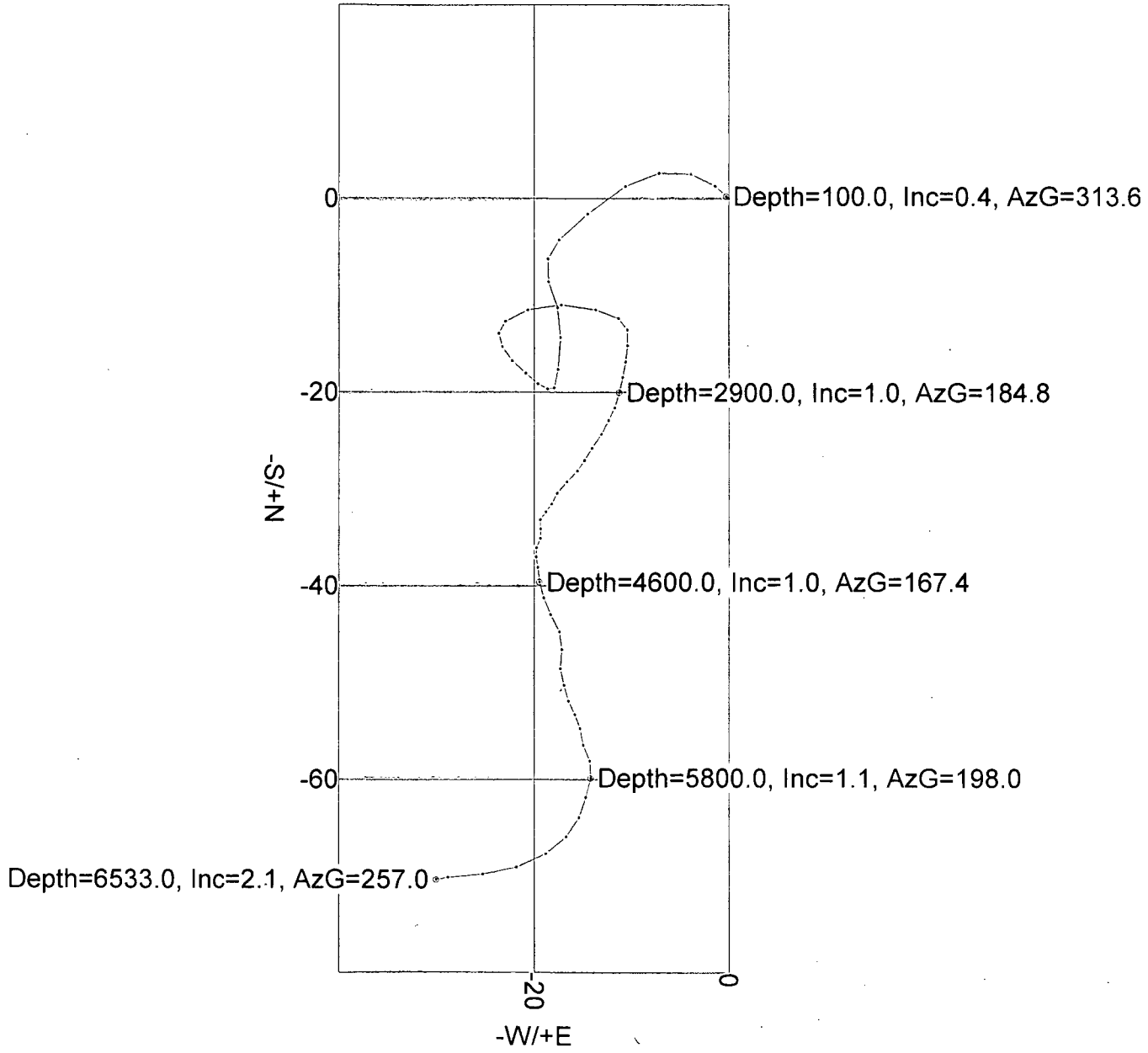
V.E.S. Survey Date: 1/10/2015

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
1900.00	0.68	352.29	1899.33	-13.91	-23.63	-13.91	27.42	239.51	0.36
2000.00	1.16	49.99	1999.32	-12.67	-22.93	-12.67	26.20	241.07	0.99
2100.00	1.81	71.14	2099.29	-11.51	-20.66	-11.51	23.65	240.88	0.84
2200.00	2.25	88.74	2199.23	-10.96	-17.20	-10.96	20.39	237.50	0.76
2300.00	1.94	109.27	2299.16	-11.47	-13.64	-11.47	17.82	229.94	0.81
2400.00	0.95	113.71	2399.13	-12.36	-11.28	-12.36	16.74	222.39	0.99
2500.00	1.00	170.02	2499.12	-13.55	-10.37	-13.55	17.07	217.42	0.92
2600.00	0.88	189.42	2599.10	-15.17	-10.35	-15.17	18.36	214.30	0.34
2700.00	1.07	183.61	2699.09	-16.86	-10.53	-16.86	19.87	212.00	0.21
2800.00	0.83	201.18	2799.08	-18.46	-10.85	-18.46	21.41	210.45	0.37
2900.00	1.01	184.83	2899.06	-20.01	-11.19	-20.01	22.93	209.21	0.31
3000.00	0.92	209.88	2999.05	-21.58	-11.66	-21.58	24.53	208.38	0.43
3100.00	0.78	202.26	3099.04	-22.91	-12.32	-22.91	26.01	208.27	0.18
3200.00	1.05	210.95	3199.02	-24.33	-13.05	-24.33	27.61	208.21	0.30
3300.00	0.95	218.05	3299.01	-25.78	-14.04	-25.78	29.35	208.57	0.16
3400.00	0.73	204.17	3399.00	-27.02	-14.81	-27.02	30.81	208.74	0.30
3500.00	0.81	223.12	3498.99	-28.11	-15.56	-28.11	32.13	208.96	0.26
3600.00	0.96	224.15	3598.98	-29.22	-16.62	-29.22	33.62	209.62	0.15
3700.00	0.84	216.83	3698.97	-30.41	-17.64	-30.41	35.16	210.11	0.16
3800.00	0.61	193.49	3798.96	-31.52	-18.20	-31.52	36.40	210.01	0.37
3900.00	0.64	234.10	3898.95	-32.36	-18.78	-32.36	37.42	210.12	0.43
4000.00	0.56	196.90	3998.95	-33.16	-19.37	-33.16	38.40	210.29	0.39
4100.00	0.58	159.48	4098.94	-34.10	-19.33	-34.10	39.20	209.55	0.37
4200.00	0.63	202.52	4198.94	-35.08	-19.36	-35.08	40.07	208.90	0.45
4300.00	0.60	199.86	4298.93	-36.08	-19.75	-36.08	41.13	208.70	0.04
4400.00	0.51	160.78	4398.93	-36.99	-19.79	-36.99	41.95	208.14	0.38
4500.00	0.78	179.13	4498.92	-38.09	-19.63	-38.09	42.85	207.26	0.34
4600.00	0.97	167.40	4598.91	-39.60	-19.44	-39.60	44.11	206.14	0.26
4700.00	0.97	162.96	4698.90	-41.23	-19.00	-41.23	45.40	204.75	0.08
4800.00	1.15	153.07	4798.88	-42.93	-18.30	-42.93	46.67	203.09	0.26
4900.00	1.16	152.69	4898.86	-44.72	-17.39	-44.72	47.98	201.24	0.01
5000.00	1.12	193.16	4998.84	-46.57	-17.15	-46.57	49.62	200.21	0.79
5100.00	1.15	176.30	5098.82	-48.52	-17.30	-48.52	51.51	199.63	0.33
5200.00	0.89	156.14	5198.81	-50.23	-16.92	-50.23	53.00	198.62	0.44
5300.00	1.09	170.84	5298.79	-51.87	-16.46	-51.87	54.42	197.61	0.32
5400.00	0.81	132.53	5398.78	-53.29	-15.79	-53.29	55.58	196.50	0.67
5500.00	1.08	179.69	5498.77	-54.71	-15.26	-54.71	56.79	195.58	0.79
5600.00	0.98	158.89	5598.75	-56.44	-14.94	-56.44	58.38	194.83	0.38
5700.00	1.06	155.06	5698.73	-58.07	-14.25	-58.07	59.79	193.79	0.11

V.E.S. Survey Date: 1/10/2015

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
5800.00	1.11	198.05	5798.72	-59.83	-14.16	-59.83	61.48	193.32	0.79
5900.00	1.26	191.14	5898.70	-61.83	-14.67	-61.83	63.54	193.35	0.21
6000.00	1.28	205.50	5998.67	-63.92	-15.37	-63.92	65.74	193.52	0.32
6100.00	1.49	221.26	6098.64	-65.90	-16.71	-65.90	67.99	194.22	0.44
6200.00	1.72	237.72	6198.60	-67.69	-18.83	-67.69	70.26	195.55	0.51
6300.00	2.09	251.68	6298.55	-69.06	-21.84	-69.06	72.43	197.55	0.59
6400.00	1.98	265.60	6398.49	-69.77	-25.29	-69.77	74.21	199.92	0.51
6500.00	2.15	262.82	6498.42	-70.13	-28.87	-70.13	75.84	202.37	0.20
6533.00	2.12	257.03	6531.40	-70.35	-30.08	-70.35	76.51	203.15	0.66

VES Survey International
West Texas
(432) 563-5444
Surveyor: Jordan Shelleby
Myox 28 State Com 5H / API 30-015-41607



V.E.S. Survey Date: 1/10/2015

CONCHO

COG Operating, LLC

Eddy County, NM (NAD 27)
Sec 28 T25S, R28E
Myox 28 State Com #5H

Wellbore #1

Design: Wellbore #1

Survey Report - Geographic

26 January, 2015

RDC
The DIRECTIONAL DRILLING COMPANY

Company:	COG Operating, LLC	**Local Co-ordinate Reference:**	Well Myox 28 State Com #5H
Project:	Eddy County, NM (NAD 27)	**TVD Reference:**	well @ 2975.0usft (Patterson #79)
Site:	Sec 28 T25S, R28E	**MD Reference:**	well @ 2975.0usft (Patterson #79)
Well:	Myox 28 State Com #5H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Compass

Project Eddy County, NM (NAD 27)

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 28 T25S, R28E

Site Position:		**Northing:**	402,955.50 usft	**Latitude:**	32° 6' 27.347 N
From:	Map	**Easting:**	577,034.00 usft	**Longitude:**	104° 5' 4.350 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.13 °

Well Myox 28 State Com #5H

Well Position	**+N/-S**	0.0 usft	**Northing:**	402,955.50 usft	**Latitude:**	32° 6' 27.347 N
	+E/-W	0.0 usft	**Easting:**	577,034.00 usft	**Longitude:**	104° 5' 4.350 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	0.0 usft	**Ground Level:**	2,957.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/11/2015	7.37	59.90	48,137

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	178.80

Survey Program **Date** 1/21/2015

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	6,533.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro
6,533.0	12,739.0	MWD (Wellbore #1)	MWD default	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	402,955.50	577,034.00	32° 6' 27.347 N	104° 5' 4.350 W
100.0	0.36	313.60	100.0	0.2	-0.2	402,955.72	577,033.78	32° 6' 27.350 N	104° 5' 4.353 W
200.0	1.44	311.73	200.0	1.3	-1.4	402,956.77	577,032.61	32° 6' 27.360 N	104° 5' 4.366 W
300.0	1.81	284.59	299.9	2.5	-3.9	402,958.00	577,030.14	32° 6' 27.372 N	104° 5' 4.395 W
400.0	1.99	259.50	399.9	2.6	-7.1	402,958.08	577,026.91	32° 6' 27.373 N	104° 5' 4.432 W
500.0	2.35	239.60	499.8	1.2	-10.6	402,956.73	577,023.43	32° 6' 27.360 N	104° 5' 4.473 W
600.0	3.20	229.98	599.7	-1.6	-14.5	402,953.90	577,019.53	32° 6' 27.332 N	104° 5' 4.518 W
700.0	1.37	223.08	699.6	-4.3	-17.4	402,951.23	577,016.57	32° 6' 27.306 N	104° 5' 4.553 W
800.0	1.32	197.03	799.6	-6.2	-18.6	402,949.26	577,015.42	32° 6' 27.286 N	104° 5' 4.566 W
900.0	1.51	162.11	899.6	-8.6	-18.5	402,946.90	577,015.49	32° 6' 27.263 N	104° 5' 4.566 W
1,000.0	1.71	159.87	999.5	-11.3	-17.6	402,944.25	577,016.40	32° 6' 27.236 N	104° 5' 4.555 W

Company:	COG Operating, LLC	**Local Co-ordinate Reference:**	Well Myox 28 State Com #5H
Project:	Eddy County, NM (NAD 27)	**TVD Reference:**	well @ 2975.0usft (Patterson #79)
Site:	Sec 28 T25S, R28E	**MD Reference:**	well @ 2975.0usft (Patterson #79)
Well:	Myox 28 State Com #5H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Compass

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,100.0	1.93	186.70	1,099.5	-14.3	-17.3	402,941.17	577,016.72	32° 6' 27.206 N	104° 5' 4.551 W
1,200.0	1.86	182.47	1,199.4	-17.6	-17.5	402,937.88	577,016.46	32° 6' 27.173 N	104° 5' 4.555 W
1,300.0	0.48	228.84	1,299.4	-19.5	-17.9	402,935.98	577,016.07	32° 6' 27.155 N	104° 5' 4.559 W
1,400.0	0.48	288.18	1,399.4	-19.7	-18.6	402,935.84	577,015.36	32° 6' 27.153 N	104° 5' 4.567 W
1,500.0	0.83	306.26	1,499.4	-19.1	-19.6	402,936.40	577,014.37	32° 6' 27.159 N	104° 5' 4.579 W
1,600.0	1.07	313.48	1,599.4	-18.0	-20.9	402,937.47	577,013.11	32° 6' 27.169 N	104° 5' 4.593 W
1,700.0	1.08	313.02	1,699.4	-16.7	-22.3	402,938.75	577,011.75	32° 6' 27.182 N	104° 5' 4.609 W
1,800.0	0.99	339.07	1,799.3	-15.3	-23.3	402,940.20	577,010.75	32° 6' 27.197 N	104° 5' 4.621 W
1,900.0	0.68	352.29	1,899.3	-13.9	-23.6	402,941.60	577,010.36	32° 6' 27.210 N	104° 5' 4.625 W
2,000.0	1.16	49.99	1,999.3	-12.7	-22.9	402,942.84	577,011.06	32° 6' 27.223 N	104° 5' 4.617 W
2,100.0	1.81	71.14	2,099.3	-11.5	-20.7	402,944.00	577,013.33	32° 6' 27.234 N	104° 5' 4.591 W
2,200.0	2.25	88.74	2,199.2	-10.9	-17.2	402,944.55	577,016.78	32° 6' 27.239 N	104° 5' 4.551 W
2,300.0	1.94	109.27	2,299.2	-11.5	-13.7	402,944.03	577,020.34	32° 6' 27.234 N	104° 5' 4.509 W
2,400.0	0.95	113.71	2,399.1	-12.4	-11.3	402,943.14	577,022.70	32° 6' 27.225 N	104° 5' 4.482 W
2,500.0	1.00	170.02	2,499.1	-13.5	-10.4	402,941.95	577,023.61	32° 6' 27.214 N	104° 5' 4.471 W
2,600.0	0.88	189.42	2,599.1	-15.2	-10.4	402,940.33	577,023.64	32° 6' 27.198 N	104° 5' 4.471 W
2,700.0	1.07	183.61	2,699.1	-16.9	-10.6	402,938.64	577,023.45	32° 6' 27.181 N	104° 5' 4.473 W
2,800.0	0.83	201.18	2,799.1	-18.5	-10.9	402,937.04	577,023.13	32° 6' 27.165 N	104° 5' 4.477 W
2,900.0	1.01	184.83	2,899.1	-20.0	-11.2	402,935.48	577,022.80	32° 6' 27.150 N	104° 5' 4.481 W
3,000.0	0.92	209.88	2,999.0	-21.6	-11.7	402,933.91	577,022.32	32° 6' 27.134 N	104° 5' 4.486 W
3,100.0	0.78	202.26	3,099.0	-22.9	-12.3	402,932.58	577,021.66	32° 6' 27.121 N	104° 5' 4.494 W
3,200.0	1.05	210.95	3,199.0	-24.3	-13.1	402,931.17	577,020.93	32° 6' 27.107 N	104° 5' 4.503 W
3,300.0	0.95	218.05	3,299.0	-25.8	-14.1	402,929.73	577,019.95	32° 6' 27.093 N	104° 5' 4.514 W
3,400.0	0.73	204.17	3,399.0	-27.0	-14.8	402,928.49	577,019.18	32° 6' 27.080 N	104° 5' 4.523 W
3,500.0	0.81	223.12	3,499.0	-28.1	-15.6	402,927.40	577,018.44	32° 6' 27.070 N	104° 5' 4.532 W
3,600.0	0.96	224.15	3,599.0	-29.2	-16.6	402,926.28	577,017.37	32° 6' 27.059 N	104° 5' 4.544 W
3,700.0	0.84	216.83	3,699.0	-30.4	-17.7	402,925.09	577,016.35	32° 6' 27.047 N	104° 5' 4.556 W
3,800.0	0.61	193.49	3,799.0	-31.5	-18.2	402,923.99	577,015.78	32° 6' 27.036 N	104° 5' 4.563 W
3,900.0	0.64	234.10	3,899.0	-32.4	-18.8	402,923.14	577,015.21	32° 6' 27.028 N	104° 5' 4.569 W
4,000.0	0.56	196.90	3,998.9	-33.2	-19.4	402,922.35	577,014.61	32° 6' 27.020 N	104° 5' 4.576 W
4,100.0	0.58	159.48	4,098.9	-34.1	-19.4	402,921.41	577,014.65	32° 6' 27.010 N	104° 5' 4.576 W
4,200.0	0.63	202.52	4,198.9	-35.1	-19.4	402,920.42	577,014.61	32° 6' 27.001 N	104° 5' 4.576 W
4,300.0	0.60	199.86	4,298.9	-36.1	-19.8	402,919.42	577,014.23	32° 6' 26.991 N	104° 5' 4.581 W
4,400.0	0.51	160.78	4,398.9	-37.0	-19.8	402,918.51	577,014.19	32° 6' 26.982 N	104° 5' 4.581 W
4,500.0	0.78	179.13	4,498.9	-38.1	-19.7	402,917.41	577,014.35	32° 6' 26.971 N	104° 5' 4.580 W
4,600.0	0.97	167.40	4,598.9	-39.6	-19.5	402,915.90	577,014.55	32° 6' 26.956 N	104° 5' 4.577 W
4,700.0	0.97	162.96	4,698.9	-41.2	-19.0	402,914.27	577,014.98	32° 6' 26.940 N	104° 5' 4.572 W
4,800.0	1.15	153.07	4,798.9	-42.9	-18.3	402,912.56	577,015.68	32° 6' 26.923 N	104° 5' 4.564 W
4,900.0	1.16	152.69	4,898.9	-44.7	-17.4	402,910.77	577,016.60	32° 6' 26.905 N	104° 5' 4.554 W
5,000.0	1.12	193.16	4,998.8	-46.6	-17.2	402,908.92	577,016.84	32° 6' 26.887 N	104° 5' 4.551 W
5,100.0	1.15	176.30	5,098.8	-48.5	-17.3	402,906.97	577,016.68	32° 6' 26.867 N	104° 5' 4.553 W
5,200.0	0.89	156.14	5,198.8	-50.2	-16.9	402,905.25	577,017.06	32° 6' 26.851 N	104° 5' 4.548 W
5,300.0	1.09	170.84	5,298.8	-51.9	-16.5	402,903.61	577,017.53	32° 6' 26.834 N	104° 5' 4.543 W
5,400.0	0.81	132.53	5,398.8	-53.3	-15.8	402,902.19	577,018.20	32° 6' 26.820 N	104° 5' 4.535 W
5,500.0	1.08	179.69	5,498.8	-54.7	-15.3	402,900.77	577,018.73	32° 6' 26.806 N	104° 5' 4.529 W
5,600.0	0.98	158.89	5,598.7	-56.5	-15.0	402,899.03	577,019.04	32° 6' 26.789 N	104° 5' 4.526 W
5,700.0	1.06	155.06	5,698.7	-58.1	-14.3	402,897.39	577,019.74	32° 6' 26.773 N	104° 5' 4.517 W
5,800.0	1.11	198.05	5,798.7	-59.9	-14.2	402,895.63	577,019.83	32° 6' 26.755 N	104° 5' 4.516 W
5,900.0	1.26	191.14	5,898.7	-61.9	-14.7	402,893.63	577,019.32	32° 6' 26.735 N	104° 5' 4.522 W
6,000.0	1.28	205.50	5,998.7	-64.0	-15.4	402,891.55	577,018.62	32° 6' 26.715 N	104° 5' 4.531 W
6,100.0	1.49	221.26	6,098.6	-65.9	-16.7	402,889.56	577,017.28	32° 6' 26.695 N	104° 5' 4.546 W
6,200.0	1.72	237.72	6,198.6	-67.7	-18.8	402,887.78	577,015.16	32° 6' 26.678 N	104° 5' 4.571 W
6,300.0	2.09	251.68	6,298.5	-69.1	-21.8	402,886.41	577,012.16	32° 6' 26.664 N	104° 5' 4.606 W
6,400.0	1.98	265.60	6,398.5	-69.8	-25.3	402,885.70	577,008.71	32° 6' 26.657 N	104° 5' 4.646 W
6,500.0	2.15	262.82	6,498.4	-70.2	-28.9	402,885.33	577,005.12	32° 6' 26.654 N	104° 5' 4.688 W

Company:	COG Operating, LLC	**Local Co-ordinate Reference:**	Well Myox 28 State Com #5H
Project:	Eddy County, NM (NAD 27)	**TVD Reference:**	well @ 2975.0usft (Patterson #79)
Site:	Sec 28 T25S, R28E	**MD Reference:**	well @ 2975.0usft (Patterson #79)
Well:	Myox 28 State Com #5H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Compass

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,533.0	2.12	257.03	6,531.4	-70.4	-30.1	402,885.12	577,003.91	32° 6' 26.652 N	104° 5' 4.702 W
Tie In @ 6533' MD / 6531' TVD									
6,678.0	1.70	236.80	6,676.3	-72.2	-34.5	402,883.34	576,999.50	32° 6' 26.634 N	104° 5' 4.753 W
6,773.0	1.80	240.70	6,771.3	-73.7	-37.0	402,881.84	576,997.02	32° 6' 26.619 N	104° 5' 4.782 W
6,868.0	1.90	250.90	6,866.2	-74.9	-39.8	402,880.59	576,994.23	32° 6' 26.607 N	104° 5' 4.814 W
6,963.0	0.70	257.40	6,961.2	-75.5	-41.8	402,879.95	576,992.18	32° 6' 26.601 N	104° 5' 4.838 W
7,058.0	0.90	264.20	7,056.2	-75.8	-43.1	402,879.75	576,990.87	32° 6' 26.599 N	104° 5' 4.854 W
7,153.0	0.80	264.10	7,151.2	-75.9	-44.5	402,879.60	576,989.46	32° 6' 26.597 N	104° 5' 4.870 W
7,248.0	1.00	259.50	7,246.2	-76.1	-46.0	402,879.39	576,987.99	32° 6' 26.595 N	104° 5' 4.887 W
7,343.0	1.20	256.90	7,341.2	-76.5	-47.8	402,879.01	576,986.21	32° 6' 26.591 N	104° 5' 4.908 W
7,437.0	1.30	263.70	7,435.1	-76.8	-49.8	402,878.67	576,984.19	32° 6' 26.588 N	104° 5' 4.931 W
7,532.0	1.80	271.50	7,530.1	-76.9	-52.4	402,878.59	576,981.62	32° 6' 26.587 N	104° 5' 4.961 W
7,580.0	1.90	259.90	7,578.1	-77.0	-53.9	402,878.47	576,980.09	32° 6' 26.586 N	104° 5' 4.979 W
7,628.0	1.60	235.90	7,626.0	-77.5	-55.3	402,877.95	576,978.75	32° 6' 26.581 N	104° 5' 4.995 W
7,659.0	4.80	166.30	7,657.0	-79.0	-55.3	402,876.45	576,978.70	32° 6' 26.566 N	104° 5' 4.995 W
7,691.0	9.50	163.20	7,688.7	-82.9	-54.2	402,872.62	576,979.78	32° 6' 26.528 N	104° 5' 4.983 W
7,723.0	14.30	162.10	7,720.0	-89.2	-52.2	402,866.33	576,981.76	32° 6' 26.466 N	104° 5' 4.960 W
7,754.0	17.90	165.10	7,749.8	-97.4	-49.8	402,858.08	576,984.16	32° 6' 26.384 N	104° 5' 4.932 W
7,786.0	21.30	168.60	7,780.0	-107.9	-47.4	402,847.62	576,986.57	32° 6' 26.281 N	104° 5' 4.904 W
7,818.0	24.00	170.60	7,809.5	-120.0	-45.2	402,835.50	576,988.79	32° 6' 26.161 N	104° 5' 4.879 W
7,849.0	26.60	172.50	7,837.5	-133.1	-43.3	402,822.40	576,990.72	32° 6' 26.031 N	104° 5' 4.857 W
7,865.5	27.94	173.52	7,852.2	-140.6	-42.4	402,814.90	576,991.64	32° 6' 25.957 N	104° 5' 4.846 W
FTP / 330' Hard Line @ 7866' MD / 7852' TVD									
7,881.0	29.20	174.40	7,865.8	-148.0	-41.6	402,807.53	576,992.42	32° 6' 25.884 N	104° 5' 4.837 W
7,912.0	31.60	173.50	7,892.5	-163.6	-39.9	402,791.93	576,994.08	32° 6' 25.730 N	104° 5' 4.819 W
7,944.0	34.20	172.10	7,919.4	-180.8	-37.7	402,774.69	576,996.26	32° 6' 25.559 N	104° 5' 4.794 W
7,976.0	36.50	170.20	7,945.5	-199.1	-34.9	402,756.40	576,999.12	32° 6' 25.378 N	104° 5' 4.761 W
8,007.0	38.70	170.60	7,970.1	-217.7	-31.7	402,737.75	577,002.27	32° 6' 25.193 N	104° 5' 4.725 W
8,039.0	40.70	173.50	7,994.7	-238.0	-28.9	402,717.51	577,005.09	32° 6' 24.993 N	104° 5' 4.693 W
8,071.0	43.10	174.60	8,018.5	-259.2	-26.7	402,696.26	577,007.30	32° 6' 24.782 N	104° 5' 4.667 W
8,102.0	44.80	174.90	8,040.8	-280.7	-24.7	402,674.83	577,009.27	32° 6' 24.570 N	104° 5' 4.645 W
8,134.0	47.30	176.00	8,063.0	-303.6	-22.9	402,651.87	577,011.09	32° 6' 24.343 N	104° 5' 4.625 W
8,166.0	51.70	178.60	8,083.8	-327.9	-21.8	402,627.57	577,012.22	32° 6' 24.103 N	104° 5' 4.612 W
8,197.0	55.90	180.80	8,102.1	-352.9	-21.7	402,602.57	577,012.33	32° 6' 23.855 N	104° 5' 4.611 W
8,229.0	59.40	181.10	8,119.2	-380.0	-22.1	402,575.54	577,011.88	32° 6' 23.588 N	104° 5' 4.617 W
8,261.0	62.60	180.20	8,134.7	-407.9	-22.4	402,547.56	577,011.57	32° 6' 23.311 N	104° 5' 4.622 W
8,292.0	65.50	179.50	8,148.3	-435.8	-22.4	402,519.69	577,011.65	32° 6' 23.035 N	104° 5' 4.622 W
8,324.0	68.40	178.50	8,160.8	-465.2	-21.8	402,490.25	577,012.16	32° 6' 22.744 N	104° 5' 4.616 W
8,362.0	71.20	178.50	8,174.0	-500.9	-20.9	402,454.60	577,013.10	32° 6' 22.391 N	104° 5' 4.607 W
8,393.0	74.00	178.10	8,183.2	-530.5	-20.0	402,425.04	577,013.97	32° 6' 22.098 N	104° 5' 4.597 W
8,425.0	75.80	178.10	8,191.6	-561.3	-19.0	402,394.16	577,015.00	32° 6' 21.793 N	104° 5' 4.586 W
8,457.0	78.50	180.60	8,198.7	-592.5	-18.7	402,362.97	577,015.35	32° 6' 21.484 N	104° 5' 4.583 W
8,488.0	81.40	180.20	8,204.1	-623.1	-18.9	402,332.45	577,015.14	32° 6' 21.182 N	104° 5' 4.586 W
8,520.0	84.40	182.00	8,208.0	-654.8	-19.5	402,300.71	577,014.52	32° 6' 20.868 N	104° 5' 4.594 W
8,551.0	86.90	180.90	8,210.4	-685.7	-20.3	402,269.81	577,013.74	32° 6' 20.562 N	104° 5' 4.604 W
8,583.0	88.50	181.40	8,211.7	-717.7	-20.9	402,237.84	577,013.10	32° 6' 20.246 N	104° 5' 4.612 W
8,615.0	89.20	182.90	8,212.3	-749.6	-22.1	402,205.87	577,011.90	32° 6' 19.929 N	104° 5' 4.627 W
8,647.0	91.10	180.40	8,212.2	-781.6	-23.0	402,173.89	577,010.98	32° 6' 19.613 N	104° 5' 4.639 W
8,710.0	92.00	182.00	8,210.5	-844.6	-24.3	402,110.93	577,009.66	32° 6' 18.990 N	104° 5' 4.656 W
8,804.0	93.00	181.10	8,206.4	-938.4	-26.9	402,017.05	577,007.12	32° 6' 18.061 N	104° 5' 4.688 W
8,899.0	92.00	181.30	8,202.3	-1,033.3	-28.9	401,922.17	577,005.13	32° 6' 17.122 N	104° 5' 4.713 W
8,993.0	90.70	179.50	8,200.1	-1,127.3	-29.5	401,828.20	577,004.48	32° 6' 16.192 N	104° 5' 4.724 W
9,087.0	91.50	179.30	8,198.3	-1,221.3	-28.5	401,734.22	577,005.46	32° 6' 15.262 N	104° 5' 4.715 W
9,182.0	93.00	179.30	8,194.5	-1,316.2	-27.4	401,639.31	577,006.62	32° 6' 14.322 N	104° 5' 4.704 W
9,276.0	91.50	179.50	8,190.8	-1,410.1	-26.4	401,545.39	577,007.60	32° 6' 13.393 N	104° 5' 4.695 W

Company:	COG Operating, LLC	**Local Co-ordinate Reference:**	Well Myox 28 State Com #5H
Project:	Eddy County, NM (NAD 27)	**TVD Reference:**	well @ 2975.0usft (Patterson #79)
Site:	Sec 28 T25S, R28E	**MD Reference:**	well @ 2975.0usft (Patterson #79)
Well:	Myox 28 State Com #5H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Compass

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,370.0	90.70	177.60	8,189.0	-1,504.1	-24.0	401,451.44	577,009.98	32° 6' 12.463 N	104° 5' 4.670 W
9,465.0	91.80	179.20	8,187.0	-1,599.0	-21.4	401,356.50	577,012.63	32° 6' 11.523 N	104° 5' 4.641 W
9,560.0	90.90	177.10	8,184.7	-1,693.9	-18.3	401,261.59	577,015.70	32° 6' 10.584 N	104° 5' 4.608 W
9,655.0	92.20	178.50	8,182.2	-1,788.8	-14.7	401,166.70	577,019.35	32° 6' 9.645 N	104° 5' 4.568 W
9,749.0	90.90	177.80	8,179.6	-1,882.7	-11.6	401,072.78	577,022.38	32° 6' 8.715 N	104° 5' 4.536 W
9,844.0	91.80	177.10	8,177.4	-1,977.6	-7.4	400,977.90	577,026.61	32° 6' 7.776 N	104° 5' 4.489 W
9,939.0	90.40	176.90	8,175.6	-2,072.4	-2.4	400,883.05	577,031.58	32° 6' 6.838 N	104° 5' 4.434 W
10,033.0	92.00	177.60	8,173.6	-2,166.3	2.1	400,789.19	577,036.09	32° 6' 5.908 N	104° 5' 4.384 W
10,128.0	90.10	175.80	8,171.9	-2,261.1	7.6	400,694.37	577,041.55	32° 6' 4.970 N	104° 5' 4.323 W
10,222.0	90.80	176.50	8,171.1	-2,354.9	13.9	400,600.58	577,047.86	32° 6' 4.042 N	104° 5' 4.252 W
10,316.0	92.30	176.70	8,168.6	-2,448.7	19.4	400,506.79	577,053.44	32° 6' 3.113 N	104° 5' 4.190 W
10,411.0	91.10	176.90	8,165.8	-2,543.5	24.7	400,411.98	577,058.74	32° 6' 2.175 N	104° 5' 4.131 W
10,505.0	89.70	177.60	8,165.1	-2,637.4	29.2	400,318.09	577,063.25	32° 6' 1.246 N	104° 5' 4.081 W
10,600.0	90.80	178.10	8,164.7	-2,732.3	32.8	400,223.16	577,066.81	32° 6' 0.306 N	104° 5' 4.042 W
10,695.0	89.40	177.10	8,164.5	-2,827.3	36.8	400,128.25	577,070.79	32° 5' 59.367 N	104° 5' 3.998 W
10,790.0	90.00	177.40	8,165.0	-2,922.1	41.3	400,033.36	577,075.35	32° 5' 58.428 N	104° 5' 3.948 W
10,885.0	91.10	177.40	8,164.1	-3,017.0	45.7	399,938.46	577,079.66	32° 5' 57.488 N	104° 5' 3.900 W
10,980.0	88.90	178.30	8,164.1	-3,112.0	49.2	399,843.54	577,083.22	32° 5' 56.549 N	104° 5' 3.861 W
11,075.0	87.50	178.10	8,167.1	-3,206.9	52.2	399,748.63	577,086.20	32° 5' 55.609 N	104° 5' 3.829 W
11,169.0	88.80	178.50	8,170.1	-3,300.8	55.0	399,654.72	577,088.99	32° 5' 54.680 N	104° 5' 3.799 W
11,265.0	90.80	177.90	8,170.5	-3,396.7	58.0	399,558.78	577,092.00	32° 5' 53.730 N	104° 5' 3.767 W
11,358.0	92.80	178.50	8,167.5	-3,489.6	60.9	399,465.88	577,094.92	32° 5' 52.811 N	104° 5' 3.735 W
11,452.0	92.50	176.70	8,163.2	-3,583.4	64.9	399,372.06	577,098.86	32° 5' 51.882 N	104° 5' 3.692 W
11,547.0	93.50	176.90	8,158.2	-3,678.2	70.1	399,277.34	577,104.15	32° 5' 50.945 N	104° 5' 3.633 W
11,641.0	94.30	176.00	8,151.8	-3,771.8	76.0	399,183.74	577,109.96	32° 5' 50.019 N	104° 5' 3.568 W
11,736.0	92.90	176.90	8,145.9	-3,866.4	81.8	399,089.11	577,115.83	32° 5' 49.082 N	104° 5' 3.503 W
11,831.0	91.20	178.10	8,142.5	-3,961.2	86.0	398,994.27	577,119.97	32° 5' 48.143 N	104° 5' 3.457 W
11,926.0	92.60	176.20	8,139.3	-4,056.1	90.7	398,899.45	577,124.69	32° 5' 47.205 N	104° 5' 3.405 W
12,021.0	91.40	177.80	8,136.0	-4,150.9	95.7	398,804.64	577,129.66	32° 5' 46.266 N	104° 5' 3.349 W
12,116.0	89.30	176.90	8,135.4	-4,245.8	100.0	398,709.75	577,134.05	32° 5' 45.327 N	104° 5' 3.301 W
12,211.0	90.80	177.40	8,135.3	-4,340.6	104.8	398,614.87	577,138.77	32° 5' 44.388 N	104° 5' 3.249 W
12,305.0	92.10	177.90	8,132.9	-4,434.5	108.6	398,520.98	577,142.63	32° 5' 43.459 N	104° 5' 3.206 W
12,399.0	93.50	176.40	8,128.4	-4,528.3	113.3	398,427.21	577,147.29	32° 5' 42.531 N	104° 5' 3.155 W
12,494.0	92.20	175.80	8,123.6	-4,622.9	119.7	398,332.55	577,153.75	32° 5' 41.594 N	104° 5' 3.082 W
12,588.0	90.80	176.50	8,121.2	-4,716.7	126.1	398,238.80	577,160.06	32° 5' 40.666 N	104° 5' 3.011 W
12,682.0	90.50	179.50	8,120.1	-4,810.6	129.3	398,144.87	577,163.34	32° 5' 39.736 N	104° 5' 2.976 W
12,739.0	90.50	179.50	8,119.6	-4,867.6	129.8	398,087.88	577,163.83	32° 5' 39.172 N	104° 5' 2.971 W
TD @ 12739' MD / 8120' TVD									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
6,533.0	6,531.4	-70.4	-30.1	Tie In @ 6533' MD / 6531' TVD
7,865.5	7,852.2	-140.6	-42.4	FTP / 330' Hard Line @ 7866' MD / 7852' TVD
12,739.0	8,119.6	-4,867.6	129.8	TD @ 12739' MD / 8120' TVD

Checked By: _____ Approved By: _____ Date: _____