



PO Box 1370
Artesia, NM 88211-1370
(575) 748-1288

COG OPER, LLC

RECEIVED

DEC 09 2013

ARTESIA WEST

November 19, 2013

COG, LLC
One Concho Center
600 W. Illinois Ave.
Midland, TX 79701

30-015-41642



RE: MYOX 32 State #3H
190' FNL & 660' FWL
Sec. 32, T25S, R28E
Eddy County, New Mexico

Dear Sir,

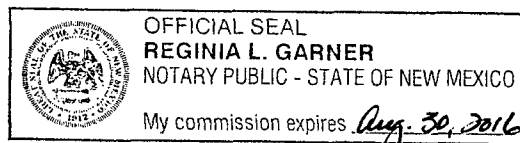
The attached is the Deviation Survey for the above captioned well.

Very truly yours,

Eddie LaRue
Operations Manager

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 19th day of November, 2013.

Notary Public

MYOX 32 State #3H

Date	Depth	Deviation	Direction	TVD	Horiz Disp
11/4/2013	117	0.20	0.00	0.00	0.00
11/4/2013	208	0.60	0.00	0.00	0.00
11/4/2013	320	0.80	0.00	0.00	0.00
11/6/2013	560	0.70	0.00	0.00	0.00
11/6/2013	804	0.20	0.00	0.00	0.00
11/6/2013	1048	0.10	0.00	0.00	0.00
11/6/2013	1293	0.60	0.00	0.00	0.00
11/7/2013	1538	0.90	0.00	0.00	0.00
11/7/2013	1782	0.20	0.00	0.00	0.00
11/7/2013	2024	0.10	0.00	0.00	0.00
11/8/2013	2393	0.40	0.00	0.00	0.00
11/8/2013	2645	0.00	0.00	0.00	0.00
11/9/2013	3087	1.40	0.00	0.00	0.00
11/9/2013	3524	0.50	0.00	0.00	0.00
11/9/2013	3963	0.60	0.00	0.00	0.00
11/9/2013	4401	0.70	0.00	0.00	0.00
11/9/2013	4839	1.20	0.00	0.00	0.00
11/9/2013	5281	1.00	0.00	0.00	0.00
11/10/2013	5722	0.70	0.00	0.00	0.00
11/10/2013	6162	0.40	0.00	0.00	0.00
11/11/2013	6605	1.10	0.00	0.00	0.00
11/11/2013	7040	1.30	0.00	0.00	0.00
11/11/2013	7274	0.90	0.00	0.00	0.00
11/12/2013	7303	1.20	337.60	7305.33	37.96
11/12/2013	7338	39.00	352.00	7227.32	37.40
11/12/2013	7370	3.40	143.30	7369.31	0.00
11/12/2013	7401	8.80	163.00	4400.13	0.00
11/13/2013	7496	24.60	167.40	7490.69	67.54
11/13/2013	7559	29.10	174.80	7547.04	95.36
11/13/2013	7622	35.00	178.50	7600.39	128.74
11/13/2013	7685	39.40	179.20	7650.00	166.00
11/13/2013	7838	55.00	171.40	7754.00	277.00
11/13/2013	7996	66.10	179.20	7828.00	416.00
11/13/2013	8028	69.40	180.10	7840.87	445.00
11/13/2013	8154	84.90	181.50	7870.14	567.00
11/13/2013	8345	90.20	180.60	7875.00	758.00
11/14/2013	8535	88.20	180.90	7876.92	948.73
11/14/2013	8818	89.60	181.80	7882.84	1231.64
11/14/2013	9007	89.60	180.60	7883.50	1420.57
11/14/2013	9101	89.20	179.90	7884.00	1514.00
11/14/2013	9291	90.00	179.70	7887.00	1704.00
11/14/2013	9482	89.30	178.30	7888.00	1895.00
11/14/2013	9577	90.50	79.50	7888.00	1990.00

Date	Depth	Deviation	Direction	TVD	Horiz Disp
11/14/2013	9766	90.60	178.50	7886.00	2179.00
11/14/2013	9952	90.60	180.40	7883.00	2365.00
11/15/2013	10046	87.80	182.50	7884.89	2459.24
11/15/2013	10235	88.90	182.30	7890.58	2648.04
11/15/2013	10423	90.90	182.70	7890.72	2836.95
11/15/2013	10515	89.40	180.90	7890.00	2927.00
11/15/2013	10609	90.30	181.50	7890.00	3021.00
11/15/2013	10799	90.10	180.40	7891.00	3211.00
11/15/2013	10894	88.90	179.90	7892.00	3306.00
11/15/2013	11084	89.10	179.20	7896.00	3496.00
11/15/2013	11361	90.20	177.80	7898.00	3773.00
11/16/2013	11456	90.90	177.80	7897.15	3868.56
11/16/2013	11740	89.30	180.10	7900.96	4152.40
11/16/2013	11834	90.30	180.80	7901.80	4246.40
11/16/2013	12023	91.50	180.40	7898.00	4435.00
11/16/2013	12118	89.50	179.90	7897.00	4530.00
11/16/2013	12207	89.80	179.00	7898.00	4619.00



A GYRO TECHNOLOGIES INC. COMPANY

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

November 21, 2013

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



Attn: Kanicia Castillo

RE: **Myox 32 State No. 003H**

Please find enclosed a copy of the survey from 0.00' to 7256.00' ran on the above referenced well.

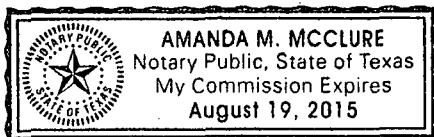
Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 25 day of November, A.D., 2013, by Keith Havelka.

Amanda McClure
Amanda McClure
Notary Public, State of Texas



Company: COG Operating, LLC (Concho)

Lease/Well: Myox 32 State/No. 003H



Rig Name: Silveroak 7

State/County: New Mexico/Eddy

Latitude: 32.09, Longitude: -104.12

GRID North is 0.12 Degrees East of True North

VS-Azi: 0.00 Degrees



Depth Reference : RKB = 18 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: myox 32 state 3h_gyro survey.ut

Minimum Curvature Method

Report Date/Time: 11/21/2013 / 13:57

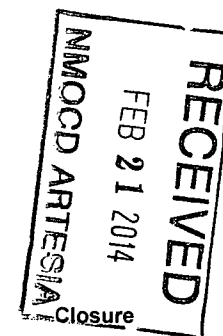
Vaughn Energy Services

Midland, Texas

432-563-5444

Surveyor: Gene Heiss

Myox 32 State No. 003H / API 30-015-41642



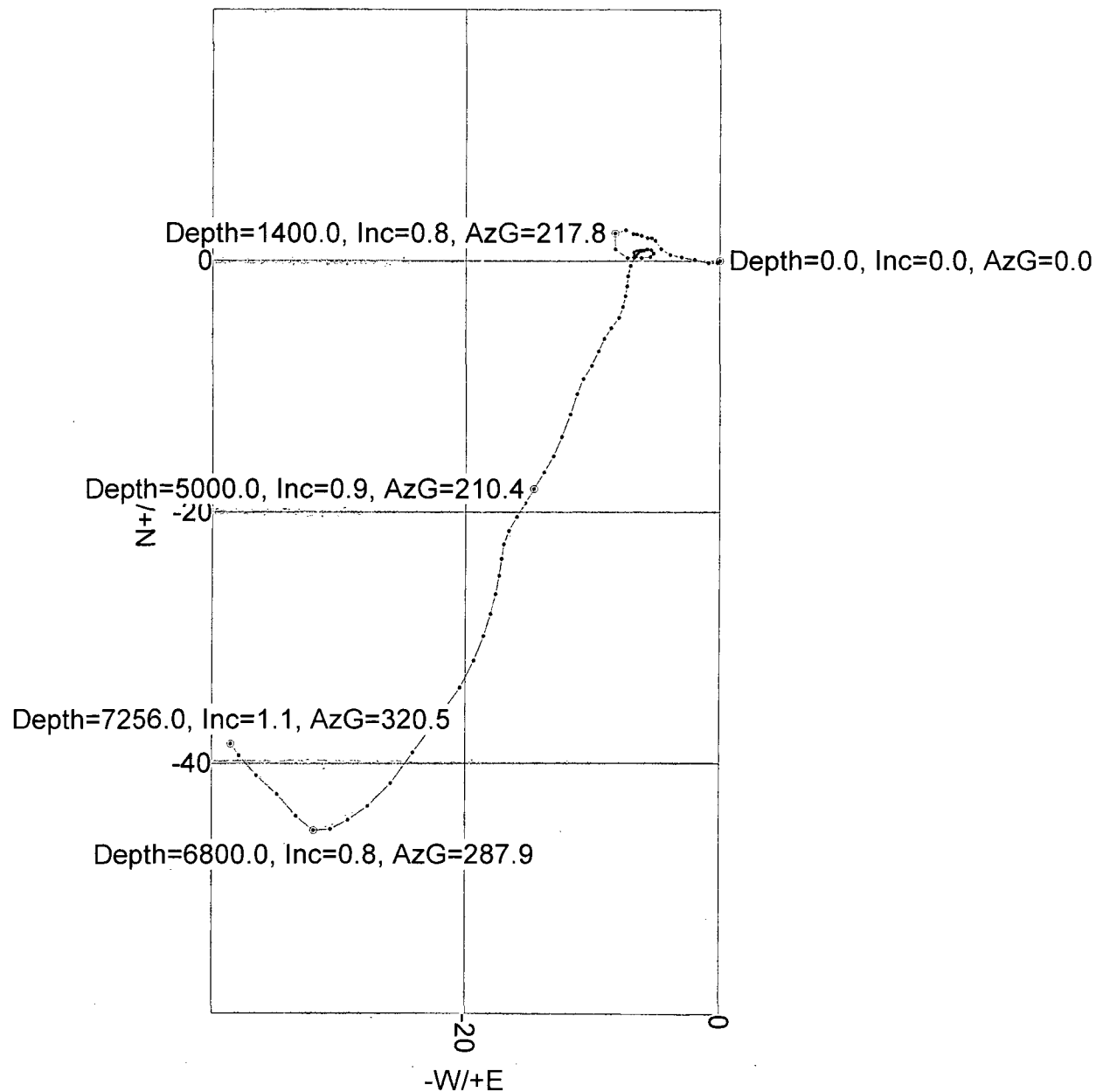
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.28	234.30	100.00	-0.14	-0.20	-0.14	0.24	234.30	0.28
200.00	0.60	285.52	200.00	-0.14	-0.90	-0.14	0.91	260.94	0.48
300.00	0.68	279.85	299.99	0.10	-1.99	0.10	1.99	272.81	0.10
400.00	0.53	282.21	399.99	0.30	-3.02	0.30	3.04	275.61	0.14
500.00	0.53	279.66	499.98	0.47	-3.94	0.47	3.97	276.86	0.02
600.00	0.55	327.26	599.98	0.95	-4.65	0.95	4.75	281.57	0.44
700.00	0.36	321.11	699.97	1.60	-5.11	1.60	5.35	287.37	0.19
800.00	0.12	259.62	799.97	1.82	-5.41	1.82	5.71	288.63	0.32
900.00	0.26	277.96	899.97	1.84	-5.74	1.84	6.03	287.74	0.15
1000.00	0.31	300.99	999.97	2.01	-6.19	2.01	6.51	287.95	0.12
1100.00	0.17	261.23	1099.97	2.12	-6.57	2.12	6.90	287.91	0.21
1200.00	0.16	289.35	1199.97	2.15	-6.84	2.15	7.17	287.42	0.08
1300.00	0.60	300.65	1299.97	2.46	-7.42	2.46	7.82	288.33	0.44
1400.00	0.75	217.84	1399.96	2.20	-8.27	2.20	8.56	284.92	0.90
1500.00	0.98	150.45	1499.95	0.94	-8.25	0.94	8.31	276.51	0.98
1600.00	0.62	85.98	1599.95	0.24	-7.29	0.24	7.29	271.86	0.91
1700.00	0.16	39.43	1699.94	0.38	-6.66	0.38	6.67	273.26	0.53
1800.00	0.11	4.88	1799.94	0.58	-6.57	0.58	6.60	275.03	0.09

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	0.07	176.00	1899.94	0.61	-6.56	0.61	6.59	275.31	0.18
2000.00	0.13	13.18	1999.94	0.66	-6.53	0.66	6.56	275.76	0.20
2100.00	0.10	270.86	2099.94	0.77	-6.58	0.77	6.63	276.69	0.18
2200.00	0.15	227.21	2199.94	0.68	-6.77	0.68	6.80	275.76	0.11
2300.00	0.26	140.53	2299.94	0.42	-6.72	0.42	6.73	273.56	0.29
2400.00	0.44	91.44	2399.94	0.23	-6.19	0.23	6.19	272.17	0.34
2500.00	0.34	72.42	2499.94	0.31	-5.52	0.31	5.53	273.26	0.16
2600.00	0.21	357.89	2599.94	0.59	-5.24	0.59	5.27	276.42	0.35
2700.00	0.23	297.68	2699.94	0.87	-5.43	0.87	5.50	279.10	0.22
2800.00	0.17	256.32	2799.94	0.93	-5.75	0.93	5.82	279.18	0.15
2900.00	0.16	244.17	2899.93	0.83	-6.02	0.83	6.08	277.87	0.04
3000.00	0.07	316.34	2999.93	0.82	-6.19	0.82	6.25	277.50	0.16
3100.00	0.10	243.74	3099.93	0.82	-6.32	0.82	6.37	277.42	0.10
3200.00	0.20	219.85	3199.93	0.65	-6.50	0.65	6.54	275.73	0.11
3300.00	0.35	212.52	3299.93	0.26	-6.78	0.26	6.78	272.23	0.15
3400.00	0.46	195.92	3399.93	-0.38	-7.05	-0.38	7.06	266.91	0.16
3500.00	0.51	190.21	3499.93	-1.21	-7.24	-1.21	7.34	260.55	0.06
3600.00	0.42	178.26	3599.92	-2.01	-7.31	-2.01	7.58	254.66	0.13
3700.00	0.50	200.18	3699.92	-2.78	-7.45	-2.78	7.95	249.54	0.19
3800.00	0.52	185.52	3799.92	-3.64	-7.64	-3.64	8.46	244.52	0.13
3900.00	0.56	212.46	3899.91	-4.51	-7.95	-4.51	9.14	240.43	0.25
4000.00	0.63	220.65	3999.91	-5.34	-8.57	-5.34	10.10	238.07	0.11
4100.00	0.54	203.58	4099.90	-6.19	-9.12	-6.19	11.02	235.83	0.20
4200.00	0.70	204.02	4199.90	-7.17	-9.55	-7.17	11.95	233.09	0.16
4300.00	0.79	209.21	4299.89	-8.33	-10.14	-8.33	13.12	230.58	0.11
4400.00	0.62	217.05	4399.88	-9.36	-10.80	-9.36	14.29	229.07	0.20
4500.00	0.92	192.67	4499.87	-10.58	-11.30	-10.58	15.47	226.89	0.44
4600.00	1.05	201.79	4599.86	-12.21	-11.81	-12.21	16.99	224.06	0.20
4700.00	1.13	199.08	4699.84	-13.99	-12.47	-13.99	18.74	221.72	0.10
4800.00	0.77	209.57	4799.82	-15.51	-13.13	-15.51	20.32	220.25	0.40
4900.00	0.92	209.91	4899.81	-16.80	-13.87	-16.80	21.78	219.54	0.15
5000.00	0.85	210.41	4999.80	-18.14	-14.65	-18.14	23.31	218.92	0.07
5100.00	0.66	210.80	5099.79	-19.28	-15.32	-19.28	24.62	218.47	0.19
5200.00	0.77	210.63	5199.78	-20.36	-15.96	-20.36	25.87	218.09	0.11
5300.00	0.70	208.61	5299.78	-21.47	-16.60	-21.47	27.14	217.70	0.07
5400.00	0.62	190.19	5399.77	-22.55	-16.98	-22.55	28.23	216.99	0.23
5500.00	0.72	186.60	5499.76	-23.71	-17.15	-23.71	29.26	215.89	0.11
5600.00	0.83	188.71	5599.75	-25.05	-17.34	-25.05	30.46	214.69	0.11
5700.00	0.89	193.01	5699.74	-26.52	-17.62	-26.52	31.84	213.60	0.09

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	0.96	194.31	5799.73	-28.08	-18.00	-28.08	33.35	212.66	0.07
5900.00	1.15	199.84	5899.71	-29.83	-18.55	-29.83	35.12	211.87	0.22
6000.00	1.28	203.48	5999.69	-31.80	-19.33	-31.80	37.21	211.30	0.15
6100.00	1.49	209.52	6099.66	-33.95	-20.41	-33.95	39.62	211.02	0.25
6200.00	2.01	219.49	6199.61	-36.43	-22.17	-36.43	42.64	211.32	0.60
6300.00	1.81	211.84	6299.56	-39.12	-24.11	-39.12	45.96	211.65	0.32
6400.00	1.65	219.41	6399.51	-41.58	-25.87	-41.58	48.97	211.88	0.28
6500.00	1.28	230.67	6499.48	-43.41	-27.65	-43.41	51.46	212.49	0.47
6600.00	0.93	238.75	6599.46	-44.54	-29.20	-44.54	53.26	213.25	0.39
6700.00	0.87	245.43	6699.45	-45.27	-30.58	-45.27	54.63	214.04	0.12
6800.00	0.81	287.90	6799.44	-45.36	-31.94	-45.36	55.48	215.15	0.61
6900.00	1.36	322.05	6899.42	-44.21	-33.35	-44.21	55.38	217.03	0.83
7000.00	1.29	315.40	6999.40	-42.47	-34.87	-42.47	54.95	219.38	0.17
7100.00	1.26	310.52	7099.37	-40.95	-36.49	-40.95	54.86	221.70	0.11
7200.00	1.18	329.01	7199.35	-39.36	-37.86	-39.36	54.61	223.89	0.40
7256.00	1.11	320.52	7255.34	-38.44	-38.50	-38.44	54.41	225.04	0.32



Vaughn Energy Services
Midland, Texas
432-563-5444
Surveyor: Gene Heiss
Myox 32 State No. 003H / API 30-015-41642



VES Survey Date: 11/11/2013



Concho Oil and Gas

Eddy County, NM

Myox 32 State #3H

Myox 32 State #3H

OH

Design: OH

Standard Survey Report

18 November, 2013





Stryker Directional Survey Report



Company:	Concho Oil and Gas	Local Co-ordinate Reference:	Well Myox 32 State #3H
Project:	Eddy County, NM	TVD Reference:	GL 2989.7 + 18 @ 3007.7usft (Silver Oak #7)
Site:	Myox 32 State #3H	MD Reference:	GL 2989.7 + 18 @ 3007.7usft (Silver Oak #7)
Well:	Myox 32 State #3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Project	Eddy 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	Myox 32 State #3H		
------	-------------------	--	--

Site Position:		Northing:	397,472.90 usft	Latitude:	32° 5' 33.292 N
From:	Map	Easting:	567,549.10 usft	Longitude:	104° 6' 54.756 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.12 °

Well	Myox 32 State #3H					
Well Position	+N/-S	0.0 usft	Northing:	397,472.90 usft	Latitude:	32° 5' 33.292 N
	+E/-W	0.0 usft	Easting:	567,549.10 usft	Longitude:	104° 6' 54.756 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	2,989.7 usft

Wellbore	OH				
----------	----	--	--	--	--

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/6/2013	7.55	59.92	48,258

Survey Program	Date 11/18/2013				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	7,256.0	VES GyroSurvey #1 (OH)	GyroFlex		
7,306.0	12,262.0	MWD Survey #2 (OH)	MWD	MWD - Standard	

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.28	234.30	100.0	-0.1	-0.2	0.1	0.28	0.28	0.00
200.0	0.60	285.52	200.0	-0.1	-0.9	0.2	0.48	0.32	51.22
300.0	0.68	279.85	300.0	0.1	-2.0	-0.1	0.10	0.08	-5.67
400.0	0.53	282.21	400.0	0.3	-3.0	-0.3	0.15	-0.15	2.36
500.0	0.53	279.66	500.0	0.5	-3.9	-0.4	0.02	0.00	-2.55
600.0	0.55	327.26	600.0	1.0	-4.7	-0.9	0.44	0.02	47.60
700.0	0.36	321.11	700.0	1.6	-5.1	-1.6	0.20	-0.19	-6.15
800.0	0.12	259.62	800.0	1.8	-5.4	-1.8	0.32	-0.24	-61.49
900.0	0.26	277.96	900.0	1.8	-5.7	-1.8	0.15	0.14	18.34
1,000.0	0.31	300.99	1,000.0	2.0	-6.2	-1.9	0.12	0.05	23.03
1,100.0	0.17	261.23	1,100.0	2.1	-6.6	-2.1	0.21	-0.14	-39.76
1,200.0	0.16	289.35	1,200.0	2.2	-6.8	-2.1	0.08	-0.01	28.12
1,300.0	0.60	300.65	1,300.0	2.5	-7.4	-2.4	0.44	0.44	11.30
1,400.0	0.75	217.84	1,400.0	2.2	-8.3	-2.1	0.90	0.15	-82.81
1,500.0	0.98	150.45	1,500.0	1.0	-8.3	-0.9	0.98	0.23	-67.39



Stryker Directional Survey Report



Company:	Concho Oil and Gas	Local Co-ordinate Reference:	Well Myox 32 State #3H
Project:	Eddy County, NM	TVD Reference:	GL 2989.7 + 18 @ 3007.7usft (Silver Oak #7)
Site:	Myox 32 State #3H	MD Reference:	GL 2989.7 + 18 @ 3007.7usft (Silver Oak #7)
Well:	Myox 32 State #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)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,600.0	0.62	85.98	1,599.9	0.2	-7.3	-0.2	0.91	-0.36	-64.47
1,700.0	0.16	39.43	1,699.9	0.4	-6.7	-0.3	0.52	-0.46	-46.55
1,800.0	0.11	4.88	1,799.9	0.6	-6.6	-0.5	0.09	-0.05	-34.55
1,900.0	0.07	176.00	1,899.9	0.6	-6.6	-0.6	0.18	-0.04	171.12
2,000.0	0.13	13.18	1,999.9	0.7	-6.5	-0.6	0.20	0.06	-162.82
2,100.0	0.10	270.86	2,099.9	0.8	-6.6	-0.7	0.18	-0.03	-102.32
2,200.0	0.15	227.21	2,199.9	0.7	-6.8	-0.6	0.10	0.05	-43.65
2,300.0	0.26	140.53	2,299.9	0.4	-6.7	-0.4	0.29	0.11	-86.68
2,400.0	0.44	91.44	2,399.9	0.3	-6.2	-0.2	0.33	0.18	-49.09
2,500.0	0.34	72.42	2,499.9	0.3	-5.5	-0.3	0.16	-0.10	-19.02
2,600.0	0.21	357.89	2,599.9	0.6	-5.3	-0.6	0.35	-0.13	-74.53
2,700.0	0.23	297.68	2,699.9	0.9	-5.4	-0.8	0.22	0.02	-60.21
2,800.0	0.17	256.32	2,799.9	0.9	-5.8	-0.9	0.15	-0.06	-41.36
2,900.0	0.16	244.17	2,899.9	0.8	-6.0	-0.8	0.04	-0.01	-12.15
3,000.0	0.07	316.34	2,999.9	0.8	-6.2	-0.8	0.15	-0.09	72.17
3,100.0	0.10	243.74	3,099.9	0.8	-6.3	-0.8	0.10	0.03	-72.60
3,200.0	0.20	219.85	3,199.9	0.7	-6.5	-0.6	0.12	0.10	-23.89
3,300.0	0.35	212.52	3,299.9	0.3	-6.8	-0.2	0.15	0.15	-7.33
3,400.0	0.46	195.92	3,399.9	-0.4	-7.1	0.4	0.16	0.11	-16.60
3,500.0	0.51	190.21	3,499.9	-1.2	-7.3	1.3	0.07	0.05	-5.71
3,600.0	0.42	178.26	3,599.9	-2.0	-7.3	2.1	0.13	-0.09	-11.95
3,700.0	0.50	200.18	3,699.9	-2.8	-7.5	2.8	0.19	0.08	21.92
3,800.0	0.52	185.52	3,799.9	-3.6	-7.7	3.7	0.13	0.02	-14.66
3,900.0	0.56	212.46	3,899.9	-4.5	-8.0	4.6	0.25	0.04	26.94
4,000.0	0.63	220.65	3,999.9	-5.3	-8.6	5.4	0.11	0.07	8.19
4,100.0	0.54	203.58	4,099.9	-6.2	-9.1	6.3	0.20	-0.09	-17.07
4,200.0	0.70	204.02	4,199.9	-7.2	-9.6	7.3	0.16	0.16	0.44
4,300.0	0.79	209.21	4,299.9	-8.3	-10.1	8.4	0.11	0.09	5.19
4,400.0	0.62	217.05	4,399.9	-9.4	-10.8	9.5	0.20	-0.17	7.84
4,500.0	0.92	192.67	4,499.9	-10.6	-11.3	10.7	0.44	0.30	-24.38
4,600.0	1.05	201.79	4,599.9	-12.2	-11.8	12.3	0.20	0.13	9.12
4,700.0	1.13	199.08	4,699.8	-14.0	-12.5	14.1	0.10	0.08	-2.71
4,800.0	0.77	209.57	4,799.8	-15.5	-13.1	15.6	0.40	-0.36	10.49
4,900.0	0.92	209.91	4,899.8	-16.8	-13.9	16.9	0.15	0.15	0.34
5,000.0	0.85	210.41	4,999.8	-18.1	-14.7	18.3	0.07	-0.07	0.50
5,100.0	0.66	210.80	5,099.8	-19.3	-15.3	19.4	0.19	-0.19	0.39
5,200.0	0.77	210.63	5,199.8	-20.3	-16.0	20.5	0.11	0.11	-0.17
5,300.0	0.70	208.61	5,299.8	-21.4	-16.6	21.6	0.07	-0.07	-2.02
5,400.0	0.62	190.19	5,399.8	-22.5	-17.0	22.7	0.23	-0.08	-18.42
5,500.0	0.72	186.60	5,499.8	-23.7	-17.2	23.8	0.11	0.10	-3.59
5,600.0	0.83	188.71	5,599.8	-25.0	-17.3	25.2	0.11	0.11	2.11
5,700.0	0.89	193.01	5,699.7	-26.5	-17.6	26.7	0.09	0.06	4.30
5,800.0	0.96	194.31	5,799.7	-28.1	-18.0	28.2	0.07	0.07	1.30
5,900.0	1.15	199.84	5,899.7	-29.8	-18.5	30.0	0.22	0.19	5.53



Stryker Directional Survey Report



Company:	Concho Oil and Gas	Local Co-ordinate Reference:	Well Myox 32 State #3H
Project:	Eddy County, NM	TVD Reference:	GL 2989.7 + 18 @ 3007.7usft (Silver Oak #7)
Site:	Myox 32 State #3H	MD Reference:	GL 2989.7 + 18 @ 3007.7usft (Silver Oak #7)
Well:	Myox 32 State #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)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,000.0	1.28	203.48	5,999.7	-31.8	-19.3	32.0	0.15	0.13	3.64
6,100.0	1.49	209.52	6,099.7	-33.9	-20.4	34.1	0.26	0.21	6.04
6,200.0	2.01	219.49	6,199.6	-36.4	-22.2	36.6	0.60	0.52	9.97
6,300.0	1.81	211.84	6,299.6	-39.1	-24.1	39.3	0.32	-0.20	-7.65
6,400.0	1.65	219.41	6,399.5	-41.6	-25.9	41.8	0.28	-0.16	7.57
6,500.0	1.28	230.67	6,499.5	-43.4	-27.6	43.7	0.47	-0.37	11.26
6,600.0	0.93	238.75	6,599.5	-44.5	-29.2	44.8	0.38	-0.35	8.08
6,700.0	0.87	245.43	6,699.4	-45.3	-30.6	45.6	0.12	-0.06	6.68
6,800.0	0.81	287.90	6,799.4	-45.4	-32.0	45.7	0.61	-0.06	42.47
6,900.0	1.36	322.05	6,899.4	-44.2	-33.4	44.5	0.83	0.55	34.15
7,000.0	1.29	315.40	6,999.4	-42.5	-34.9	42.8	0.17	-0.07	-6.65
7,100.0	1.26	310.52	7,099.4	-40.9	-36.5	41.3	0.11	-0.03	-4.88
7,200.0	1.18	329.01	7,199.3	-39.4	-37.9	39.7	0.40	-0.08	18.49
7,256.0	1.11	320.52	7,255.3	-38.4	-38.5	38.8	0.33	-0.13	-15.16
7256' MD VES Gyro Survey									
7,306.0	1.20	337.60	7,305.3	-37.6	-39.0	38.0	0.71	0.18	34.16
7,338.0	0.90	352.00	7,337.3	-37.0	-39.2	37.4	1.24	-0.94	45.00
7,370.0	3.40	143.30	7,369.3	-37.5	-38.6	37.9	13.16	7.81	472.81
7,401.0	8.80	163.00	7,400.1	-40.5	-37.4	40.9	18.43	17.42	63.55
7,432.0	14.20	164.80	7,430.5	-46.5	-35.7	46.8	17.46	17.42	5.81
7,463.0	19.70	164.20	7,460.1	-55.2	-33.3	55.5	17.75	17.74	-1.94
7,496.0	24.60	167.40	7,490.7	-67.2	-30.3	67.5	15.29	14.85	9.70
7,527.0	26.20	173.00	7,518.7	-80.3	-28.0	80.6	9.31	5.16	18.06
7,559.0	29.10	174.80	7,547.0	-95.1	-26.5	95.4	9.43	9.06	5.63
7,591.0	32.20	176.40	7,574.6	-111.4	-25.2	111.6	10.02	9.69	5.00
7,622.0	35.00	178.50	7,600.4	-128.5	-24.5	128.7	9.78	9.03	6.77
7,653.0	37.50	178.30	7,625.4	-146.8	-24.0	147.1	8.07	8.06	-0.65
7,685.0	39.40	179.20	7,650.4	-166.7	-23.5	166.9	6.19	5.94	2.81
7,717.0	42.80	177.20	7,674.6	-187.7	-22.9	188.0	11.39	10.63	-6.25
7,746.0	45.40	177.20	7,695.4	-207.9	-21.9	208.1	8.97	8.97	0.00
7,776.0	48.40	174.40	7,715.9	-229.7	-20.3	229.9	12.10	10.00	-9.33
7,808.0	51.50	171.40	7,736.5	-254.0	-17.2	254.2	12.05	9.69	-9.38
7,838.0	55.00	171.40	7,754.4	-277.8	-13.6	277.9	11.67	11.67	0.00
7,869.0	58.60	172.30	7,771.4	-303.5	-9.9	303.5	11.86	11.61	2.90
7,901.0	61.40	174.40	7,787.4	-331.0	-6.7	331.0	10.43	8.75	6.56
7,933.0	63.70	176.20	7,802.1	-359.3	-4.4	359.3	8.75	7.19	5.63
7,964.0	65.10	177.60	7,815.5	-387.2	-2.9	387.2	6.08	4.52	4.52
7,996.0	66.10	179.20	7,828.7	-416.3	-2.1	416.3	5.52	3.13	5.00
8,028.0	69.40	180.10	7,840.9	-445.9	-1.9	445.9	10.64	10.31	2.81
8,060.0	72.00	181.10	7,851.4	-476.1	-2.2	476.1	8.64	8.13	3.13
8,092.0	75.70	181.30	7,860.3	-506.9	-2.9	506.9	11.58	11.56	0.63
8,123.0	80.00	181.30	7,866.9	-537.2	-3.6	537.2	13.87	13.87	0.00
8,154.0	84.90	181.50	7,870.9	-567.9	-4.3	567.9	15.82	15.81	0.65



Stryker Directional Survey Report



Company:	Concho Oil and Gas	Local Co-ordinate Reference:	Well Myox 32 State #3H
Project:	Eddy County, NM	TVD Reference:	GL 2989.7 + 18 @ 3007.7usft (Silver Oak #7)
Site:	Myox 32 State #3H	MD Reference:	GL 2989.7 + 18 @ 3007.7usft (Silver Oak #7)
Well:	Myox 32 State #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)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,186.0	87.10	181.10	7,873.2	-599.8	-5.1	599.8	6.99	6.88	-1.25
8,249.0	88.80	180.60	7,875.4	-662.7	-6.0	662.8	2.81	2.70	-0.79
8,345.0	90.60	180.60	7,875.9	-758.7	-7.0	758.8	1.88	1.88	0.00
8,440.0	90.00	181.30	7,875.4	-853.7	-8.6	853.7	0.97	-0.63	0.74
8,535.0	88.20	180.90	7,876.9	-948.7	-10.4	948.7	1.94	-1.89	-0.42
8,628.0	88.50	180.90	7,879.6	-1,041.6	-11.8	1,041.7	0.32	0.32	0.00
8,724.0	89.00	181.10	7,881.7	-1,137.6	-13.5	1,137.7	0.56	0.52	0.21
8,818.0	89.60	181.80	7,882.8	-1,231.5	-15.9	1,231.6	0.98	0.64	0.74
8,913.0	90.00	182.90	7,883.2	-1,326.5	-19.8	1,326.6	1.23	0.42	1.16
9,007.0	89.60	180.60	7,883.5	-1,420.4	-22.7	1,420.6	2.48	-0.43	-2.45
9,101.0	89.20	179.90	7,884.5	-1,514.4	-23.1	1,514.6	0.86	-0.43	-0.74
9,197.0	88.50	180.10	7,886.4	-1,610.4	-23.1	1,610.5	0.76	-0.73	0.21
9,291.0	90.00	179.70	7,887.6	-1,704.4	-22.9	1,704.5	1.65	1.60	-0.43
9,386.0	89.90	179.90	7,887.7	-1,799.4	-22.6	1,799.5	0.24	-0.11	0.21
9,482.0	89.30	178.30	7,888.4	-1,895.4	-21.1	1,895.5	1.78	-0.63	-1.67
9,577.0	90.50	179.50	7,888.6	-1,990.3	-19.3	1,990.4	1.79	1.26	1.26
9,672.0	90.60	179.70	7,887.6	-2,085.3	-18.6	2,085.4	0.24	0.11	0.21
9,766.0	90.60	178.50	7,886.7	-2,179.3	-17.1	2,179.4	1.28	0.00	-1.28
9,859.0	91.30	178.80	7,885.1	-2,272.3	-14.9	2,272.3	0.82	0.75	0.32
9,952.0	90.60	180.40	7,883.6	-2,365.2	-14.3	2,365.3	1.88	-0.75	1.72
10,046.0	87.80	182.50	7,884.9	-2,459.2	-16.6	2,459.2	3.72	-2.98	2.23
10,140.0	88.20	182.70	7,888.2	-2,553.0	-20.9	2,553.1	0.48	0.43	0.21
10,235.0	88.90	182.30	7,890.6	-2,647.9	-25.1	2,648.0	0.85	0.74	-0.42
10,328.0	90.00	182.00	7,891.5	-2,740.8	-28.5	2,741.0	1.23	1.18	-0.32
10,423.0	90.90	182.70	7,890.7	-2,835.8	-32.4	2,835.9	1.20	0.95	0.74
10,515.0	89.40	180.90	7,890.5	-2,927.7	-35.3	2,927.9	2.55	-1.63	-1.96
10,609.0	90.30	181.50	7,890.7	-3,021.7	-37.3	3,021.9	1.15	0.96	0.64
10,704.0	89.50	180.20	7,890.9	-3,116.7	-38.7	3,116.9	1.61	-0.84	-1.37
10,799.0	90.10	180.40	7,891.2	-3,211.7	-39.2	3,211.9	0.67	0.63	0.21
10,894.0	88.90	179.90	7,892.1	-3,306.7	-39.5	3,306.9	1.37	-1.26	-0.53
10,990.0	88.60	178.80	7,894.1	-3,402.6	-38.4	3,402.8	1.19	-0.31	-1.15
11,084.0	89.10	179.20	7,896.0	-3,496.6	-36.7	3,496.8	0.68	0.53	0.43
11,176.0	89.40	179.40	7,897.2	-3,588.6	-35.6	3,588.8	0.39	0.33	0.22
11,270.0	89.70	179.00	7,898.0	-3,682.6	-34.3	3,682.7	0.53	0.32	-0.43
11,361.0	90.20	177.80	7,898.1	-3,773.5	-31.7	3,773.7	1.43	0.55	-1.32
11,456.0	90.90	177.80	7,897.1	-3,868.5	-28.1	3,868.6	0.74	0.74	0.00
11,550.0	88.70	179.40	7,897.5	-3,962.4	-25.8	3,962.5	2.89	-2.34	1.70
11,645.0	88.90	178.70	7,899.5	-4,057.4	-24.2	4,057.4	0.77	0.21	-0.74
11,740.0	89.30	180.10	7,901.0	-4,152.4	-23.2	4,152.4	1.53	0.42	1.47
11,834.0	90.30	180.80	7,901.3	-4,246.4	-24.0	4,246.4	1.30	1.06	0.74
11,929.0	90.80	180.60	7,900.4	-4,341.4	-25.1	4,341.4	0.57	0.53	-0.21
12,023.0	91.50	180.40	7,898.5	-4,435.3	-26.0	4,435.4	0.77	0.74	-0.21
12,118.0	89.50	179.90	7,897.7	-4,530.3	-26.2	4,530.4	2.17	-2.11	-0.53



Stryker Directional Survey Report



Company:	Concho Oil and Gas	Local Co-ordinate Reference:	Well Myox 32 State #3H
Project:	Eddy County, NM	TVD Reference:	GL 2989.7 + 18 @ 3007.7usft (Silver Oak #7)
Site:	Myox 32 State #3H	MD Reference:	GL 2989.7 + 18 @ 3007.7usft (Silver Oak #7)
Well:	Myox 32 State #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)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,207.0	89.80	179.00	7,898.2	-4,619.3	-25.3	4,619.3	1.07	0.34	-1.01
12,262.0	89.80	179.00	7,898.4	-4,674.3	-24.4	4,674.3	0.00	0.00	0.00
12262.0' MD Projected to Bit									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,256.0	7,255.3	-38.4	-38.5	7256' MD VES Gyro Survey
12,262.0	7,898.4	-4,674.3	-24.4	12262.0' MD Projected to Bit



COMPANY: Concho Oil and Gas
WELL: Myox 32 State #3H
COUNTY: Eddy County, NM
DATUM: NAD 1927 (NADCON CONUS)
RIG: Silver Oak #7



GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.44°

OFFICE: 936.582.7296

GEODETIC ZONE: New Mexico East 3001							Slot
GL 2989.7 + 18 @ 3007.7usft (Silver Oak #7)							
GROUND ELEVATION: 2989.7							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude		
0.0	0.0	397472.90	567549.10	32° 5' 33.292 N	104° 6' 54.756 W		

PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	7256.0	1.11	320.52	7255.3	-38.4	-38.5	0.00	0.00	38.8	
2	7396.1	1.11	320.52	7395.4	-36.3	-40.2	0.00	0.00	36.7	
3	8150.9	89.73	179.99	7880.0	-511.5	-46.1	12.00	-140.53	511.9	
4	12323.3	89.73	179.99	7900.0	-4683.8	-45.4	0.00	0.00	4684.0	PBHL myox 32 State #3H

