

3001542720



March 3, 2015

NM OIL CONSERVATION
ARTESIA DISTRICT

MAY 18 2015

RECEIVED

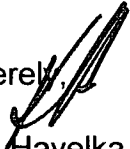
Concho Resources, Inc.
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701

Attn: Kanicia Castillo

RE: Wild Cap State 008H

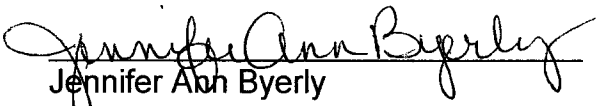
Please find enclosed a copy of the survey from 0' to 8703' ran on the above referenced well.

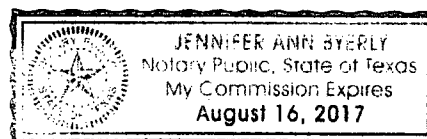
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 3 day of March,
A.D., 2015, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas





Company: CONCHO
Lease/Well: WILD CAP STATE /008H

Rig Name: PATRIOT 6
State/County: NEW MEXICO/EDDY
Latitude: 32.61, Longitude: -103.83
GRID North is 0.27 Degrees East of True North
VS-Azi: 0.00 Degrees



NM OIL CONSERVATION
ARTESIA DISTRICT
MAY 18 2015
RECEIVED

Depth Reference : RKB:18 FEET

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 3/3/2015 / 08:28

VES Survey International
West Texas
(432) 563-5444
Surveyor: Jordan Shelleby
Wild Cap State 008H / AAP1 30-015-42720

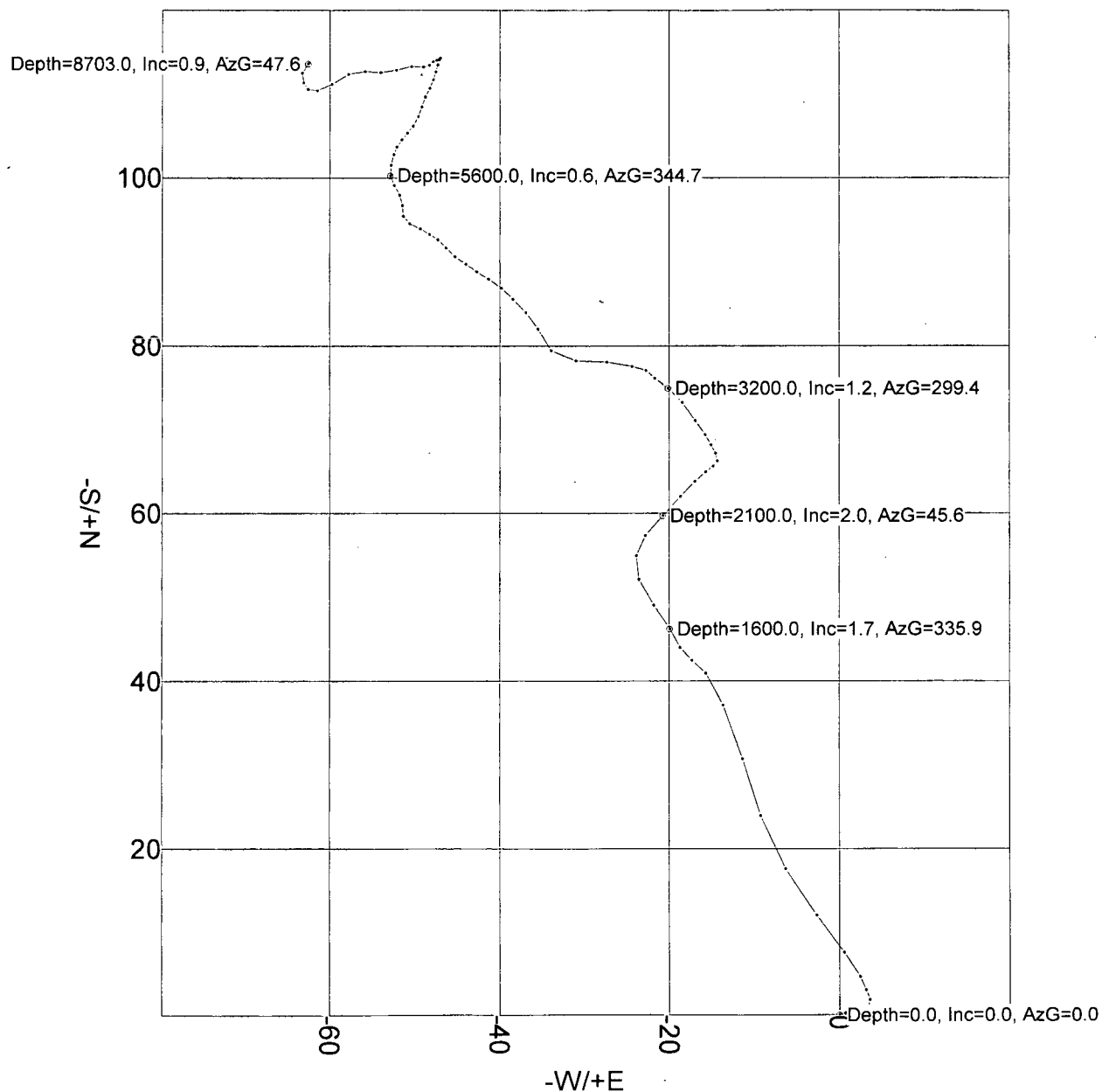
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.80	69.73	100.00	0.24	0.66	0.24	0.70	69.73	0.80
200.00	0.83	89.67	199.99	0.49	2.04	0.49	2.10	76.49	0.28
300.00	0.72	52.49	299.98	0.88	3.27	0.88	3.38	74.94	0.51
400.00	0.71	339.39	399.97	1.85	3.55	1.85	4.00	62.53	0.85
500.00	0.71	337.90	499.96	3.00	3.10	3.00	4.31	45.95	0.02
600.00	1.32	336.02	599.95	4.62	2.40	4.62	5.21	27.43	0.62
700.00	2.68	323.54	699.89	7.55	0.54	7.55	7.57	4.10	1.42
800.00	3.66	324.39	799.73	12.03	-2.71	12.03	12.33	347.32	0.98
900.00	3.98	329.10	899.51	17.60	-6.35	17.60	18.71	340.17	0.45
1000.00	4.06	341.26	999.27	23.93	-9.27	23.93	25.66	338.83	0.85
1100.00	4.10	343.17	1099.01	30.71	-11.44	30.71	32.77	339.57	0.14
1200.00	3.69	338.08	1198.78	37.11	-13.67	37.11	39.55	339.77	0.54
1300.00	1.37	315.28	1298.68	40.94	-15.71	40.94	43.85	339.00	2.49
1400.00	1.21	311.50	1398.65	42.49	-17.35	42.49	45.89	337.79	0.17
1500.00	1.16	324.88	1498.63	44.02	-18.72	44.02	47.83	336.96	0.28
1600.00	1.73	335.92	1598.60	46.22	-19.92	46.22	50.33	336.69	0.63
1700.00	2.17	318.34	1698.54	49.02	-21.80	49.02	53.65	336.03	0.74
1800.00	2.01	343.71	1798.48	52.12	-23.55	52.12	57.19	335.69	0.93

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	1.37	9.45	1898.44	54.98	-23.84	54.98	59.92	336.55	0.98
2000.00	1.67	35.16	1998.40	57.35	-22.81	57.35	61.72	338.31	0.74
2100.00	1.98	45.58	2098.35	59.75	-20.73	59.75	63.24	340.86	0.45
2200.00	1.58	37.24	2198.30	62.05	-18.67	62.05	64.80	343.26	0.47
2300.00	1.21	51.88	2298.27	63.81	-17.00	63.81	66.03	345.08	0.51
2400.00	0.77	41.17	2398.26	64.96	-15.73	64.96	66.84	346.39	0.48
2500.00	0.57	68.19	2498.25	65.65	-14.83	65.65	67.30	347.27	0.37
2600.00	0.50	359.99	2598.25	66.27	-14.37	66.27	67.81	347.76	0.60
2700.00	0.58	335.83	2698.24	67.17	-14.58	67.17	68.73	347.75	0.24
2800.00	0.72	329.40	2798.24	68.17	-15.11	68.17	69.82	347.51	0.16
2900.00	0.89	332.28	2898.23	69.40	-15.79	69.40	71.17	347.18	0.18
3000.00	1.45	320.92	2998.21	71.07	-16.95	71.07	73.06	346.59	0.60
3100.00	1.57	328.82	3098.17	73.22	-18.45	73.22	75.51	345.85	0.24
3200.00	1.24	299.37	3198.14	74.93	-20.11	74.93	77.58	344.98	0.78
3300.00	1.03	317.61	3298.12	76.13	-21.66	76.13	79.15	344.12	0.42
3400.00	0.57	302.24	3398.11	77.06	-22.69	77.06	80.33	343.59	0.51
3500.00	1.45	280.42	3498.10	77.55	-24.35	77.55	81.28	342.57	0.94
3600.00	2.01	279.11	3598.05	78.05	-27.32	78.05	82.70	340.71	0.56
3700.00	2.23	265.99	3697.98	78.20	-30.99	78.20	84.11	338.38	0.53
3800.00	1.90	324.13	3797.93	79.40	-33.90	79.40	86.33	336.88	2.02
3900.00	1.61	334.39	3897.88	82.01	-35.47	82.01	89.35	336.61	0.42
4000.00	1.26	310.92	3997.85	84.00	-36.91	84.00	91.75	336.28	0.67
4100.00	1.23	321.54	4097.83	85.56	-38.41	85.56	93.78	335.82	0.23
4200.00	1.03	304.82	4197.81	86.91	-39.82	86.91	95.60	335.38	0.38
4300.00	1.09	304.45	4297.79	87.97	-41.35	87.97	97.20	334.83	0.06
4400.00	0.77	300.93	4397.78	88.85	-42.71	88.85	98.58	334.33	0.33
4500.00	1.02	306.92	4497.77	89.73	-43.99	89.73	99.93	333.88	0.27
4600.00	0.82	301.60	4597.75	90.64	-45.31	90.64	101.33	333.44	0.22
4700.00	0.93	326.91	4697.74	91.69	-46.36	91.69	102.74	333.18	0.40
4800.00	0.65	298.99	4797.73	92.64	-47.30	92.64	104.02	332.95	0.46
4900.00	0.70	306.50	4897.73	93.28	-48.29	93.28	105.04	332.63	0.10
5000.00	0.77	295.65	4997.72	93.94	-49.39	93.94	106.13	332.26	0.15
5100.00	0.81	297.30	5097.71	94.55	-50.63	94.55	107.25	331.83	0.04
5200.00	0.65	349.28	5197.70	95.43	-51.36	95.43	108.38	331.71	0.65
5300.00	0.84	0.08	5297.69	96.73	-51.46	96.73	109.56	331.99	0.24
5400.00	0.69	326.03	5397.68	97.96	-51.79	97.96	110.81	332.13	0.47
5500.00	0.83	334.50	5497.68	99.10	-52.44	99.10	112.12	332.11	0.18
5600.00	0.61	344.65	5597.67	100.27	-52.89	100.27	113.37	332.19	0.25
5700.00	0.87	16.07	5697.66	101.51	-52.82	101.51	114.44	332.51	0.47

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	0.63	11.95	5797.65	102.78	-52.50	102.78	115.41	332.94	0.24
5900.00	0.54	34.03	5897.65	103.70	-52.12	103.70	116.07	333.31	0.24
6000.00	0.65	37.09	5997.64	104.55	-51.52	104.55	116.55	333.77	0.12
6100.00	0.51	39.87	6097.64	105.34	-50.89	105.34	116.99	334.21	0.15
6200.00	0.71	38.44	6197.63	106.17	-50.22	106.17	117.45	334.68	0.20
6300.00	0.78	18.86	6297.62	107.29	-49.62	107.29	118.21	335.18	0.26
6400.00	0.65	19.41	6397.61	108.47	-49.21	108.47	119.11	335.60	0.13
6500.00	0.78	20.10	6497.61	109.64	-48.79	109.64	120.00	336.01	0.13
6600.00	0.58	34.49	6597.60	110.70	-48.27	110.70	120.76	336.44	0.26
6700.00	0.66	13.69	6697.59	111.68	-47.84	111.68	121.50	336.81	0.24
6800.00	0.49	20.23	6797.59	112.64	-47.56	112.64	122.27	337.11	0.19
6900.00	0.47	11.89	6897.58	113.45	-47.32	113.45	122.92	337.36	0.07
7000.00	0.29	29.35	6997.58	114.07	-47.11	114.07	123.42	337.56	0.22
7100.00	0.03	232.25	7097.58	114.28	-47.01	114.28	123.57	337.64	0.32
7200.00	0.12	238.29	7197.58	114.20	-47.12	114.20	123.55	337.58	0.08
7300.00	0.29	240.07	7297.58	114.03	-47.43	114.03	123.50	337.42	0.17
7400.00	0.28	255.47	7397.58	113.84	-47.89	113.84	123.50	337.19	0.08
7500.00	0.46	210.11	7497.58	113.43	-48.33	113.43	123.29	336.92	0.33
7600.00	0.59	285.76	7597.57	113.22	-49.02	113.22	123.38	336.59	0.65
7700.00	1.00	263.95	7697.56	113.26	-50.39	113.26	123.97	336.02	0.51
7800.00	1.16	251.70	7797.55	112.85	-52.22	112.85	124.35	335.17	0.28
7900.00	0.97	271.39	7897.53	112.56	-54.03	112.56	124.85	334.36	0.41
8000.00	1.13	276.49	7997.51	112.69	-55.86	112.69	125.77	333.63	0.18
8100.00	1.27	245.62	8097.49	112.34	-57.84	112.34	126.36	332.76	0.65
8200.00	1.32	231.44	8197.47	111.16	-59.76	111.16	126.21	331.74	0.32
8300.00	0.97	266.99	8297.45	110.40	-61.50	110.40	126.37	330.88	0.78
8400.00	0.34	311.61	8397.44	110.55	-62.56	110.55	127.03	330.49	0.76
8500.00	0.76	332.28	8497.44	111.34	-63.09	111.34	127.97	330.46	0.46
8600.00	0.66	12.58	8597.43	112.49	-63.28	112.49	129.06	330.64	0.50
8703.00	0.87	47.60	8700.42	113.60	-62.57	113.60	129.69	331.15	0.49



VES Survey International
West Texas
(432) 563-5444
Surveyor: Jordan Shelleby
Wild Cap State 008H / AAPI 30-015-42720



V.E.S. Survey Date: 2/13/2015



COG Operating LLC

Eddy County, NM

Wild Cap State

#8H

OH

Survey: MWD #1

Survey Report - Geographic

25 February, 2015



Wellplanning
Survey Report - Geographic

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #8H
Project:	Eddy County, NM	TVD Reference:	WELL @ 3498.0usft (Original Well Elev)
Site:	Wild Cap State	MD Reference:	WELL @ 3498.0usft (Original Well Elev)
Well:	#8H	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	Wild Cap State		
Site Position:		Northing:	586,040.00 usft
From:	Map	Easting:	656,048.40 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 36' 36.382 N
		Longitude:	103° 49' 35.621 W
		Grid Convergence:	0.27 °

Well	#8H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 36' 36.382 N
		Longitude:	103° 49' 35.621 W
		Ground Level:	3,480.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	2/13/2015	7.28
			Dip Angle (°)
			60.41
			Field Strength (nT)
			48,454

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
			Direction (°)
			359.25

Survey Program	Date 2/25/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.0	8,703.0	GYRO (OH)	NS-GYRO-SS
8,751.0	13,705.0	MWD #1 (OH)	MWD
			Description
			NS Gyro single shots
			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
8,703.0	0.87	47.60	8,700.4	113.6	-62.6	586,153.62	655,985.83	32° 36' 37.509 N	103° 49' 36.346 W
8,751.0	1.20	84.00	8,748.4	113.9	-61.8	586,153.92	655,986.60	32° 36' 37.512 N	103° 49' 36.337 W
8,783.0	1.20	31.60	8,780.4	114.2	-61.3	586,154.24	655,987.10	32° 36' 37.515 N	103° 49' 36.331 W
8,815.0	6.20	345.90	8,812.3	116.2	-61.5	586,156.20	655,986.86	32° 36' 37.534 N	103° 49' 36.334 W
8,846.0	12.00	351.50	8,842.9	121.0	-62.4	586,161.02	655,985.97	32° 36' 37.582 N	103° 49' 36.344 W
8,878.0	16.40	357.90	8,873.9	128.8	-63.1	586,168.83	655,985.32	32° 36' 37.659 N	103° 49' 36.351 W
8,910.0	19.70	0.30	8,904.4	138.7	-63.2	586,178.74	655,985.18	32° 36' 37.757 N	103° 49' 36.352 W
8,941.0	23.00	0.30	8,933.2	150.0	-63.2	586,190.02	655,985.24	32° 36' 37.869 N	103° 49' 36.351 W
8,974.0	26.50	0.80	8,963.2	163.8	-63.0	586,203.83	655,985.38	32° 36' 38.006 N	103° 49' 36.348 W
9,006.0	28.60	1.60	8,991.6	178.6	-62.7	586,218.63	655,985.69	32° 36' 38.152 N	103° 49' 36.344 W
9,037.0	30.40	1.60	9,018.6	193.9	-62.3	586,233.89	655,986.11	32° 36' 38.303 N	103° 49' 36.338 W



Wellplanning
Survey Report - Geographic

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #8H
Project:	Eddy County, NM	TVD Reference:	WELL @ 3498.0usft (Original Well Elev)
Site:	Wild Cap State	MD Reference:	WELL @ 3498.0usft (Original Well Elev)
Well:	#8H	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
9,069.0	32.60	1.30	9,045.8	210.6	-61.9	586,250.60	655,986.54	32° 36' 38.469 N	103° 49' 36.332 W
9,101.0	35.50	1.70	9,072.3	228.5	-61.4	586,268.51	655,987.01	32° 36' 38.646 N	103° 49' 36.326 W
9,132.0	38.90	2.30	9,097.0	247.2	-60.7	586,287.24	655,987.67	32° 36' 38.831 N	103° 49' 36.317 W
9,164.0	42.60	2.50	9,121.3	268.1	-59.9	586,308.11	655,988.54	32° 36' 39.037 N	103° 49' 36.306 W
9,196.0	45.80	2.50	9,144.2	290.4	-58.9	586,330.39	655,989.51	32° 36' 39.258 N	103° 49' 36.293 W
9,227.0	48.30	2.50	9,165.3	313.1	-57.9	586,353.06	655,990.50	32° 36' 39.482 N	103° 49' 36.280 W
9,259.0	50.90	2.40	9,186.1	337.4	-56.9	586,377.40	655,991.55	32° 36' 39.723 N	103° 49' 36.267 W
9,291.0	52.80	1.70	9,205.8	362.5	-56.0	586,402.55	655,992.44	32° 36' 39.972 N	103° 49' 36.255 W
9,322.0	55.50	1.20	9,224.0	387.7	-55.3	586,427.67	655,993.08	32° 36' 40.220 N	103° 49' 36.246 W
9,354.0	59.10	0.60	9,241.3	414.6	-54.9	586,454.59	655,993.50	32° 36' 40.487 N	103° 49' 36.240 W
9,385.0	62.50	0.10	9,256.4	441.6	-54.7	586,481.64	655,993.66	32° 36' 40.754 N	103° 49' 36.236 W
9,417.0	65.10	359.50	9,270.5	470.3	-54.8	586,510.35	655,993.56	32° 36' 41.039 N	103° 49' 36.236 W
9,449.0	66.60	359.40	9,283.6	499.5	-55.1	586,539.55	655,993.28	32° 36' 41.327 N	103° 49' 36.237 W
9,481.0	69.20	359.10	9,295.7	529.2	-55.5	586,569.19	655,992.89	32° 36' 41.621 N	103° 49' 36.240 W
9,512.0	72.70	359.30	9,305.8	558.5	-55.9	586,598.49	655,992.48	32° 36' 41.911 N	103° 49' 36.243 W
9,544.0	76.70	359.40	9,314.2	589.3	-56.3	586,629.35	655,992.13	32° 36' 42.216 N	103° 49' 36.246 W
9,576.0	79.50	0.00	9,320.8	620.7	-56.4	586,660.65	655,991.97	32° 36' 42.526 N	103° 49' 36.246 W
9,599.0	82.50	359.40	9,324.4	643.4	-56.6	586,683.37	655,991.85	32° 36' 42.751 N	103° 49' 36.246 W
9,630.0	86.70	359.50	9,327.3	674.2	-56.9	586,714.22	655,991.55	32° 36' 43.056 N	103° 49' 36.248 W
9,662.0	89.10	359.20	9,328.5	706.2	-57.2	586,746.20	655,991.19	32° 36' 43.372 N	103° 49' 36.250 W
9,757.0	91.00	358.40	9,328.4	801.2	-59.2	586,841.17	655,989.20	32° 36' 44.312 N	103° 49' 36.268 W
9,852.0	93.00	358.10	9,325.1	896.1	-62.1	586,936.06	655,986.30	32° 36' 45.251 N	103° 49' 36.297 W
9,947.0	92.70	358.80	9,320.4	990.9	-64.7	587,030.91	655,983.74	32° 36' 46.190 N	103° 49' 36.322 W
10,042.0	89.80	359.50	9,318.3	1,085.9	-66.1	587,125.87	655,982.33	32° 36' 47.130 N	103° 49' 36.333 W
10,137.0	91.60	359.30	9,317.1	1,180.8	-67.1	587,220.85	655,981.33	32° 36' 48.070 N	103° 49' 36.339 W
10,232.0	90.30	0.20	9,315.6	1,275.8	-67.5	587,315.83	655,980.92	32° 36' 49.010 N	103° 49' 36.339 W
10,327.0	89.30	0.40	9,315.9	1,370.8	-67.0	587,410.83	655,981.42	32° 36' 49.950 N	103° 49' 36.327 W
10,422.0	88.90	0.40	9,317.4	1,465.8	-66.3	587,505.82	655,982.08	32° 36' 50.890 N	103° 49' 36.314 W
10,517.0	89.50	0.70	9,318.7	1,560.8	-65.4	587,600.80	655,982.99	32° 36' 51.829 N	103° 49' 36.298 W
10,612.0	90.20	0.60	9,319.0	1,655.8	-64.3	587,695.79	655,984.07	32° 36' 52.769 N	103° 49' 36.281 W
10,707.0	89.70	1.10	9,319.0	1,750.8	-62.9	587,790.78	655,985.48	32° 36' 53.709 N	103° 49' 36.259 W
10,802.0	92.40	0.50	9,317.3	1,845.7	-61.6	587,885.75	655,986.80	32° 36' 54.649 N	103° 49' 36.238 W
10,897.0	90.90	0.20	9,314.6	1,940.7	-61.0	587,980.70	655,987.38	32° 36' 55.589 N	103° 49' 36.226 W
10,960.0	91.30	359.70	9,313.4	2,003.7	-61.1	588,043.69	655,987.33	32° 36' 56.212 N	103° 49' 36.223 W
11,024.0	92.20	359.50	9,311.4	2,067.7	-61.5	588,107.66	655,986.88	32° 36' 56.845 N	103° 49' 36.225 W
11,119.0	90.70	0.50	9,309.0	2,162.6	-61.5	588,202.63	655,986.88	32° 36' 57.785 N	103° 49' 36.219 W
11,214.0	91.50	0.10	9,307.2	2,257.6	-61.0	588,297.61	655,987.38	32° 36' 58.724 N	103° 49' 36.208 W
11,309.0	89.80	0.30	9,306.1	2,352.6	-60.7	588,392.60	655,987.71	32° 36' 59.664 N	103° 49' 36.199 W
11,404.0	90.70	0.30	9,305.7	2,447.6	-60.2	588,487.59	655,988.21	32° 37' 0.604 N	103° 49' 36.188 W
11,498.0	90.10	0.70	9,305.0	2,541.6	-59.4	588,581.59	655,989.03	32° 37' 1.534 N	103° 49' 36.173 W
11,562.0	90.90	0.30	9,304.5	2,605.6	-58.8	588,645.58	655,989.59	32° 37' 2.168 N	103° 49' 36.163 W
11,657.0	88.70	359.70	9,304.8	2,700.6	-58.8	588,740.57	655,989.59	32° 37' 3.108 N	103° 49' 36.158 W
11,752.0	89.70	359.50	9,306.1	2,795.6	-59.5	588,835.56	655,988.92	32° 37' 4.048 N	103° 49' 36.160 W
11,847.0	89.90	359.20	9,306.5	2,890.6	-60.6	588,930.55	655,987.85	32° 37' 4.988 N	103° 49' 36.168 W
11,942.0	90.90	358.80	9,305.8	2,985.5	-62.2	589,025.54	655,986.19	32° 37' 5.928 N	103° 49' 36.182 W
12,037.0	89.40	358.00	9,305.6	3,080.5	-64.9	589,120.50	655,983.54	32° 37' 6.867 N	103° 49' 36.207 W
12,132.0	90.30	357.30	9,305.8	3,175.4	-68.8	589,215.41	655,979.64	32° 37' 7.807 N	103° 49' 36.248 W
12,227.0	90.90	356.30	9,304.8	3,270.3	-74.1	589,310.26	655,974.34	32° 37' 8.746 N	103° 49' 36.304 W
12,322.0	90.00	356.90	9,304.1	3,365.1	-79.7	589,405.09	655,968.70	32° 37' 9.684 N	103° 49' 36.365 W
12,417.0	89.00	359.30	9,304.9	3,460.0	-82.8	589,500.02	655,965.55	32° 37' 10.624 N	103° 49' 36.397 W
12,513.0	89.80	0.50	9,305.9	3,556.0	-83.0	589,596.02	655,965.39	32° 37' 11.574 N	103° 49' 36.393 W
12,608.0	90.50	0.20	9,305.6	3,651.0	-82.4	589,691.01	655,965.97	32° 37' 12.514 N	103° 49' 36.381 W
12,702.0	90.50	359.50	9,304.8	3,745.0	-82.7	589,785.01	655,965.72	32° 37' 13.444 N	103° 49' 36.379 W
12,797.0	90.40	1.10	9,304.1	3,840.0	-82.2	589,880.00	655,966.22	32° 37' 14.384 N	103° 49' 36.368 W
12,892.0	90.80	0.50	9,303.1	3,935.0	-80.9	589,974.99	655,967.55	32° 37' 15.324 N	103° 49' 36.347 W



Wellplanning
Survey Report - Geographic

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #8H
Project:	Eddy County, NM	TVD Reference:	WELL @ 3498.0usft (Original Well Elev)
Site:	Wild Cap State	MD Reference:	WELL @ 3498.0usft (Original Well Elev)
Well:	#8H	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
12,987.0	89.70	0.20	9,302.7	4,030.0	-80.3	590,069.98	655,968.13	32° 37' 16.264 N	103° 49' 36.335 W
13,082.0	90.00	359.60	9,302.9	4,125.0	-80.4	590,164.98	655,967.96	32° 37' 17.204 N	103° 49' 36.331 W
13,177.0	91.50	359.20	9,301.7	4,220.0	-81.4	590,259.96	655,966.97	32° 37' 18.144 N	103° 49' 36.338 W
13,272.0	92.40	358.90	9,298.4	4,314.9	-83.0	590,354.90	655,965.39	32° 37' 19.083 N	103° 49' 36.351 W
13,367.0	92.40	359.70	9,294.5	4,409.8	-84.2	590,449.80	655,964.23	32° 37' 20.022 N	103° 49' 36.359 W
13,462.0	86.80	0.00	9,295.1	4,504.8	-84.4	590,544.76	655,963.98	32° 37' 20.962 N	103° 49' 36.357 W
13,557.0	86.40	359.30	9,300.8	4,599.6	-85.0	590,639.59	655,963.40	32° 37' 21.900 N	103° 49' 36.358 W
13,620.0	87.30	358.80	9,304.2	4,662.5	-86.0	590,702.49	655,962.36	32° 37' 22.523 N	103° 49' 36.367 W
13,705.0	87.30	358.80	9,308.2	4,747.4	-87.8	590,787.38	655,960.58	32° 37' 23.363 N	103° 49' 36.383 W
PBHL(WCS#8H)									

Checked By: _____ Approved By: _____ Date: _____