



3001542578

March 27, 2015

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

NM OIL CONSERVATION
ARTESIA DISTRICT

JUN 22 2015

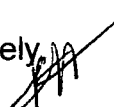
Attn: Kanicia Castillo

RECEIVED

RE: CTA State Com 5H

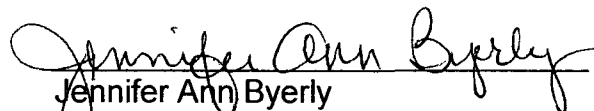
Please find enclosed a copy of the survey from 0' to 7650' ran on the above referenced well.

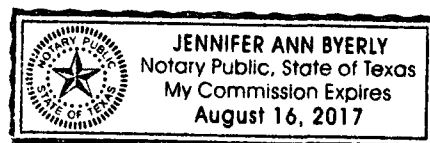
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 27 day of March,
A.D., 2015, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas





Company: Concho
Lease/Well: CTA State Com /5H

Location: Sec 32 T18S R30E

Rig Name: Patriot 6

State/County: New Mexico/Eddy

Latitude: 32.70, Longitude: -103.99

GRID North is 0.19 Degrees East of True North

VS-Azi: 0.00 Degrees



Depth Reference : RKB= 17 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: cta state com #5h-de_01.ut

Minimum Curvature Method

Report Date/Time: 3/27/2015 / 14:23

VES Survey International

West Texas

(432) 563-5444

Surveyor: Chris Bankson

CTA State Com 5H / API 30-015-42578

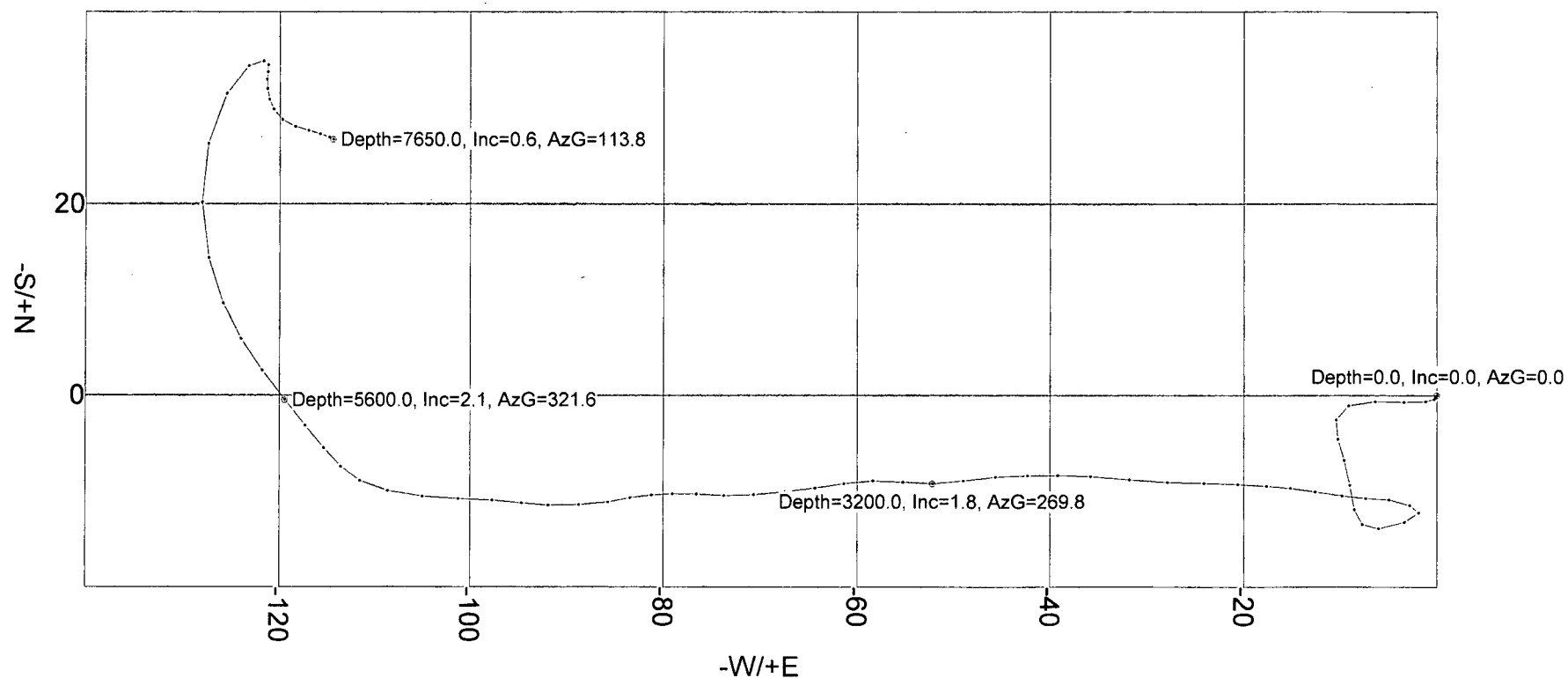
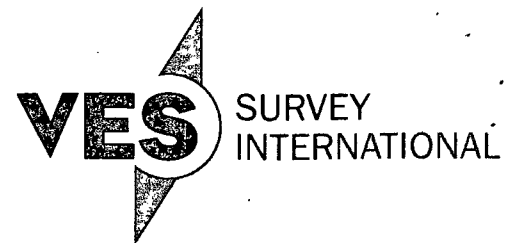
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.14	208.31	100.00	-0.11	-0.06	-0.11	0.12	208.31	0.14
200.00	0.24	223.37	200.00	-0.37	-0.26	-0.37	0.45	215.26	0.11
300.00	0.85	261.02	299.99	-0.64	-1.14	-0.64	1.31	240.71	0.67
400.00	1.71	271.74	399.97	-0.71	-3.36	-0.71	3.43	258.09	0.89
500.00	1.75	271.53	499.92	-0.62	-6.38	-0.62	6.41	264.43	0.04
600.00	1.53	248.52	599.88	-1.07	-9.15	-1.07	9.21	263.33	0.69
700.00	1.12	185.17	699.86	-2.53	-10.48	-2.53	10.78	256.41	1.43
800.00	1.24	165.26	799.84	-4.55	-10.29	-4.55	11.25	246.13	0.42
900.00	1.42	161.60	899.81	-6.77	-9.62	-6.77	11.77	234.87	0.20
1000.00	1.64	170.94	999.78	-9.36	-9.01	-9.36	12.99	223.91	0.34
1100.00	1.34	168.10	1099.74	-11.92	-8.54	-11.92	14.66	215.63	0.31
1200.00	0.77	124.12	1199.73	-13.44	-7.74	-13.44	15.51	209.94	0.95
1300.00	1.33	92.67	1299.71	-13.87	-6.02	-13.87	15.12	203.46	0.78
1400.00	1.94	65.15	1399.67	-13.22	-3.32	-13.22	13.63	194.10	0.98
1500.00	0.34	346.64	1499.65	-12.22	-1.85	-12.22	12.36	188.61	1.90
1600.00	1.12	297.97	1599.64	-11.47	-2.78	-11.47	11.80	193.64	0.93
1700.00	1.48	275.71	1699.62	-10.88	-4.93	-10.88	11.95	204.38	0.61
1800.00	1.32	271.16	1799.59	-10.73	-7.37	-10.73	13.02	214.46	0.20

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	1.56	279.44	1899.56	-10.49	-9.86	-10.49	14.39	223.23	0.32
2000.00	1.68	278.69	1999.52	-10.04	-12.65	-10.04	16.15	231.56	0.12
2100.00	1.33	276.87	2099.48	-9.68	-15.25	-9.68	18.06	237.60	0.35
2200.00	1.47	273.10	2199.45	-9.47	-17.69	-9.47	20.07	241.84	0.17
2300.00	1.88	273.81	2299.41	-9.29	-20.61	-9.29	22.61	245.73	0.40
2400.00	2.13	271.18	2399.35	-9.15	-24.10	-9.15	25.78	249.22	0.27
2500.00	2.21	271.47	2499.28	-9.06	-27.89	-9.06	29.32	252.01	0.08
2600.00	2.32	276.35	2599.20	-8.78	-31.83	-8.78	33.02	254.57	0.22
2700.00	2.23	273.63	2699.12	-8.44	-35.79	-8.44	36.77	256.73	0.14
2800.00	1.67	269.51	2799.06	-8.33	-39.18	-8.33	40.06	258.00	0.58
2900.00	1.95	268.72	2899.01	-8.38	-42.34	-8.38	43.16	258.81	0.28
3000.00	1.90	266.53	2998.95	-8.52	-45.69	-8.52	46.48	259.44	0.09
3100.00	1.91	260.09	3098.90	-8.90	-48.99	-8.90	49.79	259.70	0.21
3200.00	1.76	269.80	3198.85	-9.20	-52.17	-9.20	52.97	260.00	0.34
3300.00	1.80	275.68	3298.80	-9.05	-55.27	-9.05	56.00	260.70	0.19
3400.00	1.77	268.99	3398.75	-8.92	-58.37	-8.92	59.05	261.31	0.21
3500.00	1.66	260.32	3498.71	-9.19	-61.35	-9.19	62.03	261.48	0.28
3600.00	1.79	262.06	3598.66	-9.65	-64.32	-9.65	65.04	261.47	0.14
3700.00	1.81	263.72	3698.61	-10.04	-67.44	-10.04	68.18	261.53	0.06
3800.00	1.91	265.52	3798.56	-10.34	-70.66	-10.34	71.41	261.68	0.12
3900.00	1.63	271.46	3898.51	-10.43	-73.74	-10.43	74.48	261.95	0.33
4000.00	1.63	275.02	3998.47	-10.27	-76.58	-10.27	77.27	262.36	0.10
4100.00	1.22	265.66	4098.44	-10.23	-79.06	-10.23	79.72	262.63	0.47
4200.00	1.26	267.07	4198.42	-10.36	-81.22	-10.36	81.88	262.73	0.05
4300.00	1.31	258.35	4298.39	-10.65	-83.44	-10.65	84.12	262.73	0.20
4400.00	1.41	259.72	4398.36	-11.10	-85.77	-11.10	86.48	262.63	0.10
4500.00	2.09	268.14	4498.32	-11.38	-88.80	-11.38	89.52	262.70	0.73
4600.00	1.52	270.98	4598.27	-11.42	-91.94	-11.42	92.65	262.92	0.57
4700.00	1.58	277.29	4698.23	-11.22	-94.64	-11.22	95.31	263.24	0.18
4800.00	1.93	273.97	4798.18	-10.93	-97.70	-10.93	98.30	263.62	0.37
4900.00	2.10	271.58	4898.12	-10.76	-101.21	-10.76	101.78	263.93	0.18
5000.00	2.20	276.08	4998.05	-10.50	-104.94	-10.50	105.47	264.28	0.20
5100.00	2.03	282.39	5097.98	-9.92	-108.58	-9.92	109.03	264.78	0.29
5200.00	1.57	299.33	5197.93	-8.87	-111.51	-8.87	111.86	265.45	0.70
5300.00	1.32	314.95	5297.90	-7.38	-113.52	-7.38	113.76	266.28	0.47
5400.00	1.71	318.01	5397.87	-5.46	-115.33	-5.46	115.46	267.29	0.40
5500.00	1.78	321.71	5497.82	-3.13	-117.29	-3.13	117.33	268.47	0.13
5600.00	2.14	321.57	5597.76	-0.45	-119.42	-0.45	119.42	269.78	0.37
5700.00	2.29	323.11	5697.69	2.61	-121.78	2.61	121.81	271.23	0.16

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	2.27	328.87	5797.61	5.91	-124.00	5.91	124.14	272.73	0.23
5900.00	2.53	337.26	5897.52	9.64	-125.88	9.64	126.25	274.38	0.43
6000.00	3.17	346.26	5997.40	14.36	-127.39	14.36	128.20	276.43	0.78
6100.00	3.59	359.33	6097.22	20.18	-128.08	20.18	129.66	278.95	0.87
6200.00	3.47	12.99	6197.04	26.26	-127.44	26.26	130.12	281.64	0.85
6300.00	3.00	28.45	6296.88	31.51	-125.51	31.51	129.41	284.09	0.99
6400.00	1.37	61.39	6396.81	34.38	-123.22	34.38	127.92	285.59	1.99
6500.00	0.56	96.45	6496.79	34.89	-121.68	34.89	126.59	286.00	0.97
6600.00	0.40	179.65	6596.79	34.49	-121.19	34.49	126.00	285.88	0.65
6700.00	0.46	188.65	6696.79	33.74	-121.25	33.74	125.86	285.55	0.09
6800.00	0.40	182.11	6796.78	32.99	-121.32	32.99	125.73	285.21	0.08
6900.00	0.74	175.14	6896.78	32.00	-121.28	32.00	125.43	284.78	0.35
7000.00	0.55	162.44	6996.77	30.89	-121.08	30.89	124.96	284.31	0.24
7100.00	0.76	151.39	7096.77	29.85	-120.62	29.85	124.26	283.90	0.25
7200.00	0.86	131.23	7196.76	28.77	-119.73	28.77	123.14	283.51	0.30
7300.00	0.96	106.44	7296.74	28.04	-118.37	28.04	121.64	283.33	0.40
7400.00	0.71	106.36	7396.73	27.63	-116.97	27.63	120.19	283.29	0.25
7500.00	0.73	108.29	7496.72	27.26	-115.78	27.26	118.95	283.25	0.03
7600.00	0.48	113.57	7596.72	26.89	-114.79	26.89	117.90	283.18	0.25
7650.00	0.61	113.77	7646.72	26.70	-114.36	26.70	117.43	283.14	0.26



VES Survey International
West Texas
(432) 563-5444
Surveyor: Chris Bankson
CTA State Com 5H / API 30-015-42578



VES Survey Date: 3/21/2015



COG Operating LLC

Eddy County, NM

CTA State Com

#5H

OH

Survey: MWD #1

Survey Report - Geographic

30 March, 2015

NM OIL CONSERVATION
ARTESIA DISTRICT

JUN 22 2015

RECEIVED



Wellplanning
Survey Report - Geographic

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #5H
Project:	Eddy County, NM	TVD Reference:	WELL @ 3428.0usft (Original Well Elev)
Site:	CTA State Com	MD Reference:	WELL @ 3428.0usft (Original Well Elev)
Well:	#5H	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	CTA State Com			
Site Position:		Northing:	619,284.10 usft	Latitude: 32° 42' 7.301 N
From:	Map	Easting:	606,949.20 usft	Longitude: 103° 59' 8.361 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.19 °

Well	#5H			
Well Position	+N-S	0.0 usft	Northing:	619,284.10 usft
	+E-W	0.0 usft	Easting:	606,949.20 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level: 3,410.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/25/2015	7.36	60.47	48,489

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)	Direction (°)	
	0.0	0.0	0.0	269.90	

Survey Program	Date 3/30/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	7,650.0	GYRO (OH)	MWD	MWD - Standard
7,763.0	12,748.0	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	
7,650.0	0.61	113.77	7,646.7	26.7	-114.4	619,310.81	606,834.85	32° 42' 7.569 N	103° 59' 9.698 W	
7,763.0	0.90	153.20	7,759.7	25.7	-113.4	619,309.78	606,835.80	32° 42' 7.559 N	103° 59' 9.687 W	
7,795.0	0.70	189.90	7,791.7	25.3	-113.3	619,309.36	606,835.88	32° 42' 7.554 N	103° 59' 9.686 W	
7,826.0	2.00	240.00	7,822.7	24.8	-113.8	619,308.90	606,835.38	32° 42' 7.550 N	103° 59' 9.692 W	
7,858.0	5.10	252.20	7,854.6	24.1	-115.7	619,308.19	606,833.54	32° 42' 7.543 N	103° 59' 9.714 W	
7,890.0	8.90	260.20	7,886.4	23.2	-119.5	619,307.33	606,829.74	32° 42' 7.535 N	103° 59' 9.758 W	
7,921.0	12.50	266.70	7,916.8	22.6	-125.2	619,306.73	606,824.03	32° 42' 7.529 N	103° 59' 9.825 W	
7,953.0	15.90	270.40	7,947.9	22.5	-133.0	619,306.56	606,816.18	32° 42' 7.527 N	103° 59' 9.917 W	
7,985.0	19.20	271.20	7,978.4	22.6	-142.7	619,306.70	606,806.54	32° 42' 7.529 N	103° 59' 10.030 W	
8,016.0	22.30	270.90	8,007.4	22.8	-153.6	619,306.90	606,795.56	32° 42' 7.531 N	103° 59' 10.158 W	
8,048.0	25.80	268.10	8,036.6	22.7	-166.7	619,306.77	606,782.52	32° 42' 7.530 N	103° 59' 10.311 W	



Wellplanning
Survey Report - Geographic

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #5H
Project:	Eddy County, NM	TVD Reference:	WELL @ 3428.0usft (Original Well Elev)
Site:	CTA State Com	MD Reference:	WELL @ 3428.0usft (Original Well Elev)
Well:	#5H	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
8,080.0	29.20	267.10	8,065.0	22.0	-181.4	619,306.14	606,767.76	32° 42' 7.525 N	103° 59' 10.484 W
8,111.0	33.00	267.80	8,091.5	21.3	-197.4	619,305.44	606,751.77	32° 42' 7.518 N	103° 59' 10.671 W
8,143.0	37.30	269.50	8,117.7	20.9	-215.8	619,305.02	606,733.36	32° 42' 7.515 N	103° 59' 10.886 W
8,175.0	41.80	270.70	8,142.3	21.0	-236.2	619,305.06	606,712.99	32° 42' 7.516 N	103° 59' 11.125 W
8,206.0	46.10	271.20	8,164.6	21.3	-257.7	619,305.42	606,691.48	32° 42' 7.520 N	103° 59' 11.376 W
8,238.0	49.20	271.50	8,186.2	21.9	-281.4	619,305.98	606,667.84	32° 42' 7.526 N	103° 59' 11.653 W
8,270.0	52.10	271.90	8,206.5	22.6	-306.1	619,306.72	606,643.11	32° 42' 7.534 N	103° 59' 11.942 W
8,301.0	54.70	272.20	8,225.0	23.5	-331.0	619,307.61	606,618.24	32° 42' 7.544 N	103° 59' 12.233 W
8,332.0	57.10	273.20	8,242.3	24.7	-356.6	619,308.82	606,592.60	32° 42' 7.557 N	103° 59' 12.533 W
8,364.0	59.20	273.50	8,259.2	26.3	-383.7	619,310.41	606,565.47	32° 42' 7.573 N	103° 59' 12.851 W
8,396.0	61.00	273.00	8,275.2	27.9	-411.4	619,311.98	606,537.77	32° 42' 7.590 N	103° 59' 13.175 W
8,428.0	63.70	272.90	8,290.0	29.3	-439.7	619,313.44	606,509.47	32° 42' 7.605 N	103° 59' 13.506 W
8,459.0	67.40	271.30	8,302.9	30.4	-467.9	619,314.47	606,481.27	32° 42' 7.616 N	103° 59' 13.836 W
8,491.0	71.60	270.90	8,314.1	30.9	-497.9	619,315.04	606,451.31	32° 42' 7.623 N	103° 59' 14.187 W
8,523.0	75.10	270.60	8,323.2	31.3	-528.5	619,315.44	606,420.66	32° 42' 7.628 N	103° 59' 14.545 W
8,554.0	77.60	271.00	8,330.5	31.8	-558.7	619,315.86	606,390.54	32° 42' 7.633 N	103° 59' 14.898 W
8,586.0	79.90	271.70	8,336.8	32.5	-590.0	619,316.60	606,359.17	32° 42' 7.641 N	103° 59' 15.265 W
8,618.0	82.60	271.80	8,341.6	33.5	-621.6	619,317.57	606,327.56	32° 42' 7.652 N	103° 59' 15.635 W
8,713.0	90.50	271.30	8,347.4	36.0	-716.4	619,320.13	606,232.84	32° 42' 7.680 N	103° 59' 16.743 W
8,808.0	92.70	271.50	8,344.7	38.3	-811.3	619,322.45	606,137.91	32° 42' 7.706 N	103° 59' 17.854 W
8,935.0	90.30	269.40	8,341.4	39.3	-938.2	619,323.45	606,010.97	32° 42' 7.720 N	103° 59' 19.340 W
9,030.0	89.80	270.00	8,341.3	38.8	-1,033.2	619,322.95	605,915.98	32° 42' 7.719 N	103° 59' 20.451 W
9,125.0	92.00	269.90	8,339.8	38.8	-1,128.2	619,322.87	605,820.99	32° 42' 7.721 N	103° 59' 21.563 W
9,218.0	91.50	269.60	8,337.0	38.4	-1,221.2	619,322.46	605,728.04	32° 42' 7.720 N	103° 59' 22.651 W
9,313.0	91.60	269.20	8,334.4	37.4	-1,316.1	619,321.47	605,633.08	32° 42' 7.713 N	103° 59' 23.762 W
9,440.0	89.90	270.10	8,332.7	36.6	-1,443.1	619,320.69	605,506.10	32° 42' 7.709 N	103° 59' 25.248 W
9,567.0	89.90	272.20	8,333.0	39.1	-1,570.1	619,323.24	605,379.13	32° 42' 7.739 N	103° 59' 26.734 W
9,662.0	89.40	272.20	8,333.5	42.8	-1,665.0	619,326.89	605,284.20	32° 42' 7.778 N	103° 59' 27.845 W
9,725.0	90.50	272.20	8,333.6	45.2	-1,728.0	619,329.30	605,221.25	32° 42' 7.804 N	103° 59' 28.582 W
9,820.0	89.90	271.80	8,333.3	48.5	-1,822.9	619,332.62	605,126.31	32° 42' 7.839 N	103° 59' 29.693 W
9,915.0	92.50	272.20	8,331.3	51.8	-1,917.8	619,335.93	605,031.40	32° 42' 7.875 N	103° 59' 30.803 W
10,041.0	90.40	272.80	8,328.1	57.3	-2,043.6	619,341.43	604,905.56	32° 42' 7.934 N	103° 59' 32.276 W
10,137.0	90.30	273.00	8,327.5	62.2	-2,139.5	619,346.28	604,809.69	32° 42' 7.985 N	103° 59' 33.397 W
10,232.0	91.80	273.00	8,325.8	67.2	-2,234.4	619,351.26	604,714.84	32° 42' 8.037 N	103° 59' 34.507 W
10,327.0	93.50	273.40	8,321.4	72.4	-2,329.1	619,356.55	604,620.09	32° 42' 8.092 N	103° 59' 35.616 W
10,454.0	91.70	273.00	8,315.6	79.5	-2,455.8	619,363.63	604,493.42	32° 42' 8.167 N	103° 59' 37.098 W
10,549.0	90.80	274.00	8,313.5	85.3	-2,550.6	619,369.43	604,398.63	32° 42' 8.227 N	103° 59' 38.207 W
10,612.0	91.60	274.40	8,312.2	89.9	-2,613.4	619,374.04	604,335.81	32° 42' 8.275 N	103° 59' 38.942 W
10,707.0	91.20	274.70	8,309.9	97.5	-2,708.1	619,381.58	604,241.14	32° 42' 8.352 N	103° 59' 40.050 W
10,802.0	91.50	273.50	8,307.7	104.3	-2,802.8	619,388.37	604,146.41	32° 42' 8.422 N	103° 59' 41.158 W
10,866.0	92.80	273.40	8,305.3	108.1	-2,866.6	619,392.22	604,082.57	32° 42' 8.462 N	103° 59' 41.905 W
10,961.0	92.30	273.40	8,301.0	113.7	-2,961.4	619,397.85	603,987.83	32° 42' 8.521 N	103° 59' 43.014 W
11,056.0	91.30	273.00	8,298.0	119.0	-3,056.2	619,403.15	603,893.03	32° 42' 8.576 N	103° 59' 44.123 W
11,151.0	90.20	273.40	8,296.8	124.3	-3,151.0	619,408.45	603,798.19	32° 42' 8.632 N	103° 59' 45.233 W
11,246.0	91.90	273.70	8,295.1	130.2	-3,245.8	619,414.33	603,703.39	32° 42' 8.693 N	103° 59' 46.342 W
11,341.0	92.00	273.30	8,291.8	136.0	-3,340.6	619,420.13	603,608.62	32° 42' 8.753 N	103° 59' 47.451 W
11,436.0	91.30	273.00	8,289.1	141.2	-3,435.4	619,425.34	603,513.81	32° 42' 8.808 N	103° 59' 48.560 W
11,530.0	91.30	272.70	8,287.0	145.9	-3,529.3	619,430.02	603,419.95	32° 42' 8.857 N	103° 59' 49.658 W
11,594.0	92.40	272.50	8,284.9	148.8	-3,593.2	619,432.92	603,356.05	32° 42' 8.888 N	103° 59' 50.406 W
11,657.0	93.60	272.50	8,281.6	151.6	-3,656.0	619,435.66	603,293.19	32° 42' 8.917 N	103° 59' 51.142 W
11,784.0	92.00	273.00	8,275.4	157.6	-3,782.7	619,441.75	603,166.50	32° 42' 8.981 N	103° 59' 52.624 W
11,879.0	91.30	272.10	8,272.7	161.9	-3,877.6	619,445.97	603,071.63	32° 42' 9.026 N	103° 59' 53.734 W
11,974.0	90.90	272.10	8,270.8	165.4	-3,972.5	619,449.45	602,976.71	32° 42' 9.063 N	103° 59' 54.845 W
12,069.0	90.80	273.00	8,269.4	169.6	-4,067.4	619,453.68	602,881.82	32° 42' 9.108 N	103° 59' 55.955 W
12,164.0	92.60	273.00	8,266.6	174.5	-4,162.2	619,458.65	602,786.99	32° 42' 9.160 N	103° 59' 57.065 W



Wellplanning
Survey Report - Geographic

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #5H
Project:	Eddy County, NM	TVD Reference:	WELL @ 3428.0usft (Original Well Elev)
Site:	CTA State Com	MD Reference:	WELL @ 3428.0usft (Original Well Elev)
Well:	#5H	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
12,290.0	91.00	273.60	8,262.6	181.8	-4,287.9	619,465.90	602,661.27	32° 42' 9.236 N	103° 59' 58.536 W
12,385.0	90.60	273.60	8,261.3	187.8	-4,382.7	619,471.86	602,566.47	32° 42' 9.298 N	103° 59' 59.645 W
12,418.4	90.95	273.53	8,260.9	189.8	-4,416.1	619,473.94	602,533.15	32° 42' 9.320 N	104° 0' 0.035 W
CTA State Com #2H									
12,480.0	91.60	273.40	8,259.5	193.6	-4,477.5	619,477.66	602,471.66	32° 42' 9.358 N	104° 0' 0.754 W
12,575.0	93.10	272.20	8,255.6	198.2	-4,572.3	619,482.30	602,376.86	32° 42' 9.407 N	104° 0' 1.864 W
12,748.0	93.10	272.20	8,246.2	204.8	-4,745.0	619,488.93	602,204.24	32° 42' 9.478 N	104° 0' 3.884 W
PBHL(CTA#5H)									

Checked By: _____ Approved By: _____ Date: _____