

NM OIL CONSERVATION

ARTESIA DISTRICT

DEC 17 2014

RECEIVED



October 8, 2014

30-015-42608

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

Attn: Kanicia Castillo

RE: Flying Squirrel Federal No. 001H

Please find enclosed a copy of the survey from 0.00' to 8184.00' ran on the above referenced well.

Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §

§

COUNTY OF NUECES §

This instrument was acknowledged before me on the 8 day of October
A.D., 2014, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas



Company: COG Operating, LLC (Concho)
Lease/Well: Flying Squirrel Federal/No. 001H



Rig Name: Patriot #6
State/County: New Mexico/Eddy
Latitude: 32.72, Longitude: -103.90
GRID North is 0.23 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB= 17 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ...el federal #1h gyro survey.ut

Minimum Curvature Method

Report Date/Time: 10/2/2014 / 11:26

VES Survey International

Fort Worth, Texas

817-741-3610

Surveyor: Logan Henry

Flying Squirrel Federal No. 001H / API 30-015-42608

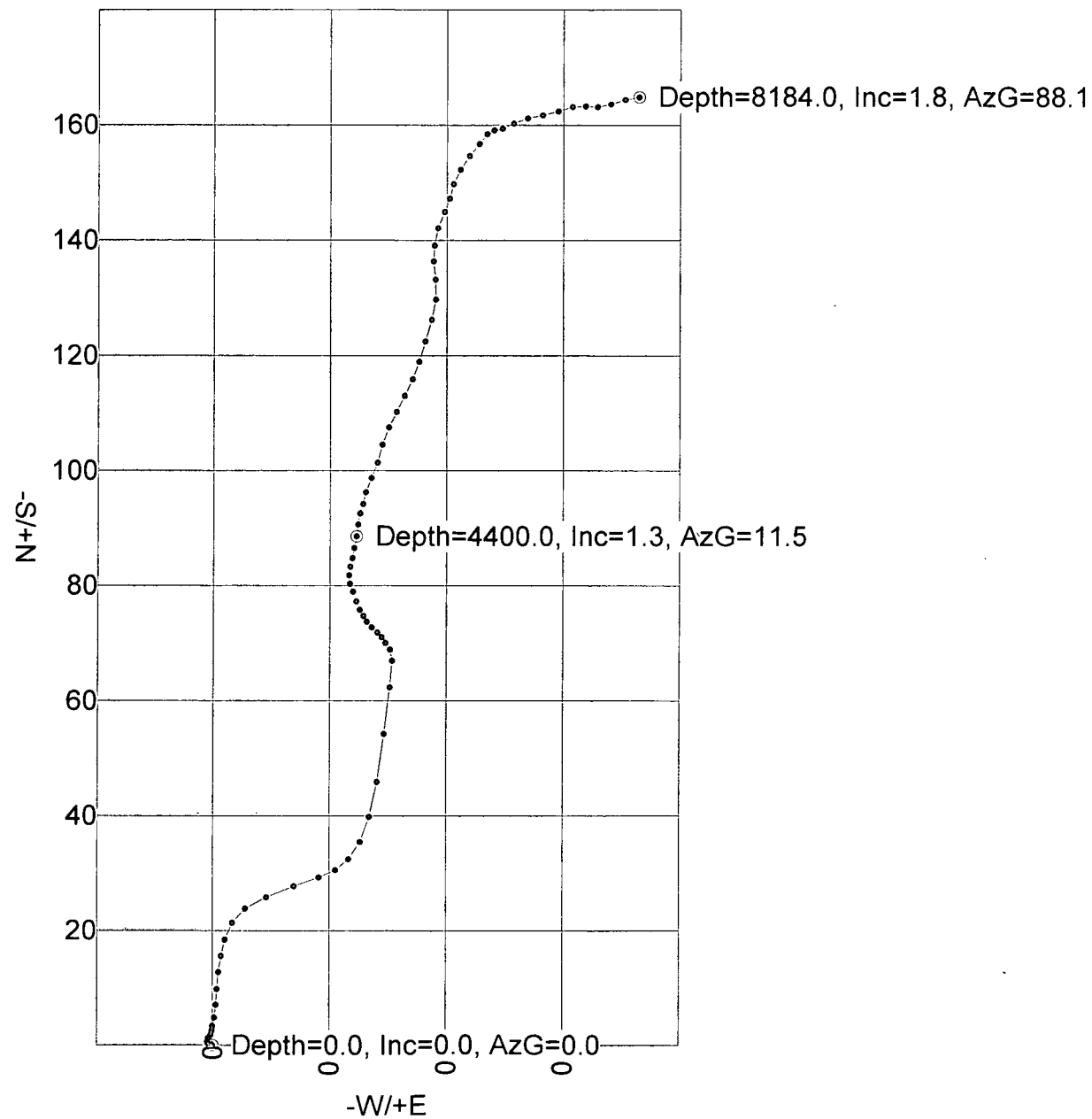
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.18	313.21	100.00	0.10	-0.11	0.10	0.15	313.21	0.18
200.00	0.29	253.18	200.00	0.14	-0.47	0.14	0.49	286.22	0.25
300.00	0.17	72.09	300.00	0.11	-0.57	0.11	0.58	280.86	0.47
400.00	0.24	272.12	400.00	0.16	-0.63	0.16	0.65	284.42	0.41
500.00	0.41	355.94	500.00	0.53	-0.87	0.53	1.02	301.37	0.46
600.00	0.41	31.68	599.99	1.20	-0.71	1.20	1.39	329.46	0.25
700.00	0.47	39.65	699.99	1.82	-0.26	1.82	1.84	351.96	0.08
800.00	0.47	345.86	799.99	2.53	-0.10	2.53	2.53	357.82	0.42
900.00	0.53	25.89	899.99	3.34	0.00	3.34	3.34	0.09	0.35
1000.00	1.19	6.08	999.97	4.79	0.32	4.79	4.80	3.78	0.72
1100.00	1.40	7.01	1099.95	7.03	0.57	7.03	7.05	4.67	0.21
1200.00	1.76	0.56	1199.91	9.77	0.74	9.77	9.80	4.32	0.40
1300.00	1.66	9.65	1299.87	12.73	1.00	12.73	12.77	4.47	0.29
1400.00	1.63	8.23	1399.82	15.57	1.44	15.57	15.64	5.29	0.05
1500.00	1.73	18.46	1499.78	18.42	2.13	18.42	18.54	6.59	0.32
1600.00	1.93	26.93	1599.73	21.35	3.37	21.35	21.62	8.96	0.33
1700.00	2.03	55.69	1699.67	23.85	5.60	23.85	24.50	13.20	0.99
1800.00	2.74	65.70	1799.59	25.84	9.24	25.84	27.44	19.68	0.82

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	3.13	69.27	1899.46	27.79	13.97	27.79	31.10	26.70	0.43
2000.00	2.06	72.12	1999.35	29.30	18.23	29.30	34.51	31.89	1.08
2100.00	1.52	55.86	2099.30	30.60	21.04	30.60	37.13	34.51	0.73
2200.00	1.85	45.51	2199.26	32.47	23.28	32.47	39.96	35.64	0.44
2300.00	2.32	23.25	2299.20	35.46	25.23	35.46	43.52	35.43	0.93
2400.00	3.00	16.48	2399.09	39.83	26.78	39.83	48.00	33.91	0.75
2500.00	4.15	9.09	2498.89	45.92	28.09	45.92	53.83	31.45	1.24
2600.00	5.49	7.22	2598.53	54.24	29.26	54.24	61.63	28.35	1.34
2700.00	3.83	6.73	2698.20	62.30	30.26	62.30	69.26	25.90	1.66
2800.00	1.49	0.30	2798.09	66.92	30.66	66.92	73.61	24.61	2.35
2900.00	0.84	328.84	2898.07	68.85	30.28	68.85	75.21	23.74	0.89
3000.00	0.78	322.56	2998.06	70.01	29.49	70.01	75.97	22.84	0.11
3100.00	0.59	329.74	3098.05	71.00	28.82	71.00	76.62	22.09	0.21
3200.00	0.72	310.59	3198.04	71.85	28.09	71.85	77.14	21.35	0.25
3300.00	0.76	316.91	3298.03	72.74	27.16	72.74	77.64	20.47	0.09
3400.00	0.72	320.29	3398.03	73.71	26.30	73.71	78.26	19.64	0.06
3500.00	0.64	338.99	3498.02	74.71	25.70	74.71	79.01	18.98	0.24
3600.00	0.81	322.77	3598.01	75.79	25.07	75.79	79.83	18.31	0.26
3700.00	1.03	350.87	3698.00	77.24	24.51	77.24	81.03	17.60	0.50
3800.00	1.05	333.20	3797.98	78.95	23.95	78.95	82.50	16.88	0.32
3900.00	0.67	347.26	3897.97	80.33	23.41	80.33	83.67	16.25	0.43
4000.00	1.01	0.60	3997.96	81.79	23.29	81.79	85.04	15.89	0.39
4100.00	0.76	15.65	4097.95	83.31	23.48	83.31	86.55	15.74	0.34
4200.00	0.97	10.75	4197.94	84.77	23.81	84.77	88.06	15.69	0.23
4300.00	1.10	9.56	4297.92	86.55	24.13	86.55	89.85	15.58	0.13
4400.00	1.28	11.54	4397.90	88.59	24.51	88.59	91.92	15.47	0.19
4500.00	1.11	1.15	4497.88	90.66	24.76	90.66	93.98	15.27	0.28
4600.00	1.13	19.82	4597.86	92.56	25.11	92.56	95.90	15.18	0.36
4700.00	0.84	13.20	4697.84	94.20	25.61	94.20	97.62	15.21	0.31
4800.00	1.58	13.31	4797.82	96.25	26.09	96.25	99.72	15.17	0.74
4900.00	1.48	29.87	4897.79	98.71	27.06	98.71	102.35	15.33	0.45
5000.00	1.84	14.56	4997.74	101.38	28.10	101.38	105.20	15.49	0.56
5100.00	1.88	14.24	5097.69	104.52	28.91	104.52	108.44	15.46	0.04
5200.00	1.76	27.59	5197.64	107.46	30.02	107.46	111.58	15.61	0.44
5300.00	1.76	25.67	5297.59	110.21	31.40	110.21	114.60	15.90	0.06
5400.00	1.79	25.75	5397.55	113.01	32.74	113.01	117.66	16.16	0.03
5500.00	1.85	25.42	5497.50	115.87	34.12	115.87	120.79	16.41	0.06
5600.00	1.89	15.31	5597.44	118.93	35.25	118.93	124.04	16.51	0.33
5700.00	2.35	17.14	5697.37	122.48	36.29	122.48	127.74	16.50	0.46

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	2.11	15.17	5797.30	126.21	37.37	126.21	131.63	16.49	0.25
5900.00	2.01	6.57	5897.23	129.73	38.06	129.73	135.20	16.35	0.33
6000.00	1.98	350.69	5997.17	133.17	37.98	133.17	138.48	15.92	0.55
6100.00	1.69	359.42	6097.12	136.34	37.68	136.34	141.46	15.45	0.40
6200.00	1.49	7.87	6197.09	139.10	37.85	139.10	144.16	15.22	0.31
6300.00	2.04	13.52	6297.04	142.11	38.44	142.11	147.22	15.13	0.58
6400.00	1.46	33.49	6396.99	144.90	39.56	144.90	150.20	15.27	0.83
6500.00	1.45	7.71	6496.96	147.22	40.43	147.22	152.67	15.36	0.65
6600.00	1.55	21.25	6596.93	149.74	41.09	149.74	155.28	15.35	0.37
6700.00	1.62	28.06	6696.89	152.25	42.25	152.25	158.00	15.51	0.20
6800.00	1.65	38.92	6796.85	154.61	43.81	154.61	160.70	15.82	0.31
6900.00	1.44	38.99	6896.81	156.71	45.51	156.71	163.19	16.19	0.20
7000.00	1.04	36.54	6996.79	158.42	46.84	158.42	165.20	16.47	0.41
7100.00	0.77	95.20	7096.78	159.09	48.05	159.09	166.18	16.81	0.92
7200.00	0.93	65.69	7196.77	159.36	49.46	159.36	166.86	17.24	0.46
7300.00	1.49	64.46	7296.74	160.25	51.37	160.25	168.29	17.77	0.56
7400.00	1.49	74.15	7396.71	161.17	53.79	161.17	169.91	18.46	0.25
7500.00	1.58	82.24	7496.67	161.71	56.40	161.71	171.26	19.23	0.23
7600.00	1.57	70.16	7596.64	162.36	59.05	162.36	172.76	19.99	0.33
7700.00	1.40	74.01	7696.60	163.16	61.50	163.16	174.36	20.65	0.20
7800.00	1.30	101.63	7796.58	163.26	63.79	163.26	175.28	21.34	0.65
7900.00	1.12	82.63	7896.56	163.16	65.87	163.16	175.95	21.98	0.44
8000.00	1.51	74.66	7996.53	163.63	68.10	163.63	177.24	22.60	0.43
8100.00	1.49	70.53	8096.49	164.41	70.60	164.41	178.93	23.24	0.11
8184.00	1.82	88.12	8180.46	164.82	72.97	164.82	180.25	23.88	0.72



VES Survey International
Fort Worth, Texas
817-741-3610
Surveyor: Logan Henry
Flying Squirrel Federal No. 001H / API 30-015-42608



V.E.S. Survey Date: 09/27/2014



NM OIL CONSERVATION

ARTESIA DISTRICT

DEC 17 2014

RECEIVED

COG Operating LLC

Eddy County, NM

Flying Squirrel Federal

#1H

OH

Survey: MWD #1

Survey Report - Geographic

08 October, 2014



Wellplanning Survey Report - Geographic

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County, NM	TVD Reference:	WELL @ 3618.0usft (Original Well Elev)
Site:	Flying Squirrel Federal	MD Reference:	WELL @ 3618.0usft (Original Well Elev)
Well:	#1H	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	Flying Squirrel Federal		
Site Position:		Northing:	624,658.00 usft
From:	Map	Easting:	632,913.60 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 42' 59.533 N
		Longitude:	103° 54' 4.247 W
		Grid Convergence:	0.23 °

Well	#1H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 42' 59.533 N
		Longitude:	103° 54' 4.247 W
		Ground Level:	3,600.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	9/28/2014	7.37
			Dip Angle
			(°)
			60.50
			Field Strength
			(nT)
			48,546

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			86.89

Survey Program	Date 10/8/2014		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
100.0	8,184.0	GYRO (OH)	MWD
8,256.0	13,897.0	MWD #1 (OH)	MWD
			Description
			MWD - Standard
			MWD - Standard

Survey											
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Map	Map				
Depth	(°)	(°)	Depth	(usft)	(usft)	Northing	Easting	Latitude	Longitude		
(usft)			(usft)			(usft)	(usft)				
8,184.0	1.82	88.12	8,180.5	164.9	73.0	624,822.87	632,986.58	32° 43' 1.161 N	103° 54' 3.385 W		
8,256.0	1.80	86.20	8,252.4	165.0	75.3	624,822.98	632,988.86	32° 43' 1.162 N	103° 54' 3.358 W		
8,287.0	3.90	74.90	8,283.4	165.3	76.8	624,823.29	632,990.36	32° 43' 1.165 N	103° 54' 3.341 W		
8,319.0	7.10	77.70	8,315.2	166.0	79.7	624,824.00	632,993.34	32° 43' 1.172 N	103° 54' 3.306 W		
8,351.0	9.10	86.40	8,346.9	166.6	84.2	624,824.58	632,997.80	32° 43' 1.178 N	103° 54' 3.254 W		
8,382.0	12.20	80.20	8,377.4	167.3	89.9	624,825.29	633,003.48	32° 43' 1.184 N	103° 54' 3.187 W		
8,414.0	15.70	77.40	8,408.4	168.8	97.4	624,826.81	633,011.04	32° 43' 1.199 N	103° 54' 3.099 W		
8,446.0	19.40	80.00	8,438.9	170.7	106.9	624,828.68	633,020.50	32° 43' 1.217 N	103° 54' 2.988 W		
8,477.0	23.20	82.80	8,467.8	172.3	118.0	624,830.34	633,031.63	32° 43' 1.233 N	103° 54' 2.857 W		
8,509.0	26.40	84.40	8,496.9	173.8	131.4	624,831.82	633,044.97	32° 43' 1.247 N	103° 54' 2.701 W		
8,541.0	28.80	86.90	8,525.2	174.9	146.1	624,832.93	633,059.75	32° 43' 1.258 N	103° 54' 2.528 W		



Wellplanning
Survey Report - Geographic

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County, NM	TVD Reference:	WELL @ 3618.0usft (Original Well Elev)
Site:	Flying Squirrel Federal	MD Reference:	WELL @ 3618.0usft (Original Well Elev)
Well:	#1H	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
8,572.0	31.80	89.90	8,552.0	175.3	161.8	624,833.35	633,075.38	32° 43' 1.261 N	103° 54' 2.345 W
8,614.0	34.70	93.40	8,587.1	174.7	184.8	624,832.66	633,098.38	32° 43' 1.254 N	103° 54' 2.076 W
8,646.0	36.00	95.50	8,613.2	173.2	203.2	624,831.22	633,116.84	32° 43' 1.239 N	103° 54' 1.860 W
8,677.0	39.80	93.60	8,637.7	171.7	222.2	624,829.72	633,135.82	32° 43' 1.223 N	103° 54' 1.638 W
8,709.0	43.60	90.20	8,661.6	171.0	243.5	624,829.04	633,157.08	32° 43' 1.215 N	103° 54' 1.389 W
8,741.0	48.00	89.20	8,683.9	171.2	266.4	624,829.17	633,180.02	32° 43' 1.216 N	103° 54' 1.121 W
8,772.0	52.70	87.40	8,703.6	171.9	290.3	624,829.89	633,203.87	32° 43' 1.222 N	103° 54' 0.841 W
8,804.0	57.30	86.70	8,722.0	173.2	316.4	624,831.24	633,230.04	32° 43' 1.234 N	103° 54' 0.535 W
8,821.0	60.10	87.40	8,730.8	174.0	330.9	624,831.99	633,244.54	32° 43' 1.241 N	103° 54' 0.365 W
8,853.0	64.50	88.10	8,745.7	175.1	359.2	624,833.10	633,272.85	32° 43' 1.251 N	103° 54' 0.034 W
8,885.0	67.30	88.10	8,758.7	176.1	388.4	624,834.06	633,302.04	32° 43' 1.259 N	103° 53' 59.692 W
8,916.0	69.90	87.40	8,770.1	177.2	417.3	624,835.20	633,330.88	32° 43' 1.269 N	103° 53' 59.355 W
8,948.0	73.30	86.50	8,780.2	178.8	447.6	624,836.82	633,361.19	32° 43' 1.284 N	103° 53' 59.000 W
8,980.0	76.70	86.20	8,788.4	180.8	478.4	624,838.78	633,392.03	32° 43' 1.302 N	103° 53' 58.639 W
9,011.0	79.70	85.70	8,794.8	182.9	508.7	624,840.93	633,422.30	32° 43' 1.322 N	103° 53' 58.284 W
9,043.0	80.10	84.90	8,800.4	185.5	540.1	624,843.51	633,453.70	32° 43' 1.347 N	103° 53' 57.917 W
9,075.0	79.60	84.90	8,806.0	188.3	571.5	624,846.31	633,485.07	32° 43' 1.373 N	103° 53' 57.549 W
9,107.0	79.70	85.70	8,811.8	190.9	602.8	624,848.89	633,516.45	32° 43' 1.397 N	103° 53' 57.182 W
9,138.0	82.10	87.40	8,816.7	192.7	633.4	624,850.73	633,547.00	32° 43' 1.414 N	103° 53' 56.824 W
9,170.0	85.00	89.30	8,820.3	193.6	665.2	624,851.64	633,578.78	32° 43' 1.422 N	103° 53' 56.452 W
9,202.0	88.30	90.60	8,822.1	193.7	697.1	624,851.67	633,610.72	32° 43' 1.421 N	103° 53' 56.078 W
9,297.0	89.40	90.60	8,824.1	192.7	792.1	624,850.68	633,705.69	32° 43' 1.407 N	103° 53' 54.967 W
9,328.0	88.90	90.80	8,824.5	192.3	823.1	624,850.30	633,736.68	32° 43' 1.402 N	103° 53' 54.604 W
9,423.0	90.20	89.00	8,825.3	192.5	918.1	624,850.46	633,831.68	32° 43' 1.400 N	103° 53' 53.492 W
9,455.0	90.60	89.30	8,825.0	192.9	950.1	624,850.94	633,863.67	32° 43' 1.403 N	103° 53' 53.118 W
9,550.0	88.10	89.20	8,826.1	194.2	1,045.0	624,852.18	633,958.65	32° 43' 1.412 N	103° 53' 52.006 W
9,613.0	88.10	88.50	8,828.2	195.4	1,108.0	624,853.44	634,021.60	32° 43' 1.422 N	103° 53' 51.269 W
9,708.0	87.70	87.90	8,831.7	198.4	1,202.9	624,856.43	634,116.49	32° 43' 1.447 N	103° 53' 50.158 W
9,803.0	87.80	89.70	8,835.4	200.4	1,297.8	624,858.41	634,211.39	32° 43' 1.463 N	103° 53' 49.047 W
9,914.0	89.20	88.80	8,838.3	201.9	1,408.7	624,859.87	634,322.34	32° 43' 1.473 N	103° 53' 47.749 W
10,009.0	89.30	88.80	8,839.6	203.9	1,503.7	624,861.86	634,417.31	32° 43' 1.489 N	103° 53' 46.637 W
10,104.0	91.00	89.30	8,839.3	205.4	1,598.7	624,863.43	634,512.29	32° 43' 1.501 N	103° 53' 45.525 W
10,199.0	90.20	89.70	8,838.3	206.3	1,693.7	624,864.26	634,607.29	32° 43' 1.505 N	103° 53' 44.413 W
10,294.0	91.50	89.00	8,836.9	207.3	1,788.7	624,865.34	634,702.27	32° 43' 1.512 N	103° 53' 43.301 W
10,389.0	91.40	88.80	8,834.5	209.2	1,883.6	624,867.16	634,797.22	32° 43' 1.526 N	103° 53' 42.190 W
10,483.0	91.40	87.10	8,832.2	212.5	1,977.5	624,870.52	634,891.13	32° 43' 1.555 N	103° 53' 41.091 W
10,578.0	92.20	86.40	8,829.2	217.9	2,072.3	624,875.91	634,985.93	32° 43' 1.605 N	103° 53' 39.981 W
10,673.0	92.90	86.00	8,825.0	224.2	2,167.0	624,882.19	635,080.62	32° 43' 1.663 N	103° 53' 38.872 W
10,768.0	91.40	86.50	8,821.4	230.4	2,261.7	624,888.40	635,175.35	32° 43' 1.721 N	103° 53' 37.763 W
10,863.0	90.70	86.70	8,819.7	236.0	2,356.6	624,894.04	635,270.16	32° 43' 1.772 N	103° 53' 36.653 W
10,958.0	89.60	87.10	8,819.4	241.2	2,451.4	624,899.17	635,365.02	32° 43' 1.819 N	103° 53' 35.542 W
11,053.0	90.40	86.90	8,819.4	246.1	2,546.3	624,904.15	635,459.89	32° 43' 1.865 N	103° 53' 34.432 W
11,148.0	89.00	87.80	8,819.9	250.5	2,641.2	624,908.54	635,554.79	32° 43' 1.904 N	103° 53' 33.321 W
11,243.0	89.30	89.00	8,821.4	253.2	2,736.1	624,911.19	635,649.74	32° 43' 1.927 N	103° 53' 32.209 W
11,338.0	89.40	88.80	8,822.4	255.0	2,831.1	624,913.01	635,744.71	32° 43' 1.941 N	103° 53' 31.097 W
11,433.0	89.10	89.20	8,823.7	256.7	2,926.1	624,914.67	635,839.69	32° 43' 1.953 N	103° 53' 29.986 W
11,528.0	89.60	89.70	8,824.7	257.6	3,021.1	624,915.58	635,934.68	32° 43' 1.958 N	103° 53' 28.874 W
11,623.0	92.20	89.50	8,823.3	258.2	3,116.1	624,916.25	636,029.66	32° 43' 1.961 N	103° 53' 27.762 W
11,718.0	93.10	89.00	8,818.9	259.5	3,210.9	624,917.49	636,124.55	32° 43' 1.969 N	103° 53' 26.651 W
11,813.0	92.20	88.30	8,814.5	261.7	3,305.8	624,919.72	636,219.42	32° 43' 1.987 N	103° 53' 25.541 W
11,939.0	91.50	87.60	8,810.4	266.2	3,431.7	624,924.23	636,345.27	32° 43' 2.027 N	103° 53' 24.068 W
12,066.0	89.20	88.10	8,809.6	271.0	3,558.6	624,928.99	636,472.17	32° 43' 2.069 N	103° 53' 22.582 W
12,193.0	87.00	90.20	8,813.8	272.9	3,685.5	624,930.88	636,599.07	32° 43' 2.082 N	103° 53' 21.097 W
12,288.0	87.10	90.80	8,818.7	272.0	3,780.3	624,930.05	636,693.94	32° 43' 2.070 N	103° 53' 19.986 W
12,383.0	87.20	91.80	8,823.5	269.9	3,875.2	624,927.90	636,788.80	32° 43' 2.045 N	103° 53' 18.876 W



Wellplanning
Survey Report - Geographic

Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County, NM	TVD Reference:	WELL @ 3618.0usft (Original Well Elev)
Site:	Flying Squirrel Federal	MD Reference:	WELL @ 3618.0usft (Original Well Elev)
Well:	#1H	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
12,510.0	88.60	91.80	8,828.1	265.9	4,002.0	624,923.91	636,915.65	32° 43' 2.000 N	103° 53' 17.391 W
12,604.0	90.00	92.70	8,829.3	262.2	4,096.0	624,920.22	637,009.56	32° 43' 1.960 N	103° 53' 16.292 W
12,699.0	90.60	92.70	8,828.8	257.7	4,190.9	624,915.75	637,104.46	32° 43' 1.911 N	103° 53' 15.182 W
12,794.0	91.00	92.70	8,827.4	253.3	4,285.7	624,911.27	637,199.34	32° 43' 1.863 N	103° 53' 14.071 W
12,889.0	92.00	92.90	8,824.9	248.6	4,380.6	624,906.63	637,294.19	32° 43' 1.813 N	103° 53' 12.961 W
12,984.0	91.50	93.00	8,822.0	243.7	4,475.4	624,901.75	637,389.02	32° 43' 1.761 N	103° 53' 11.852 W
13,142.0	90.40	92.50	8,819.4	236.2	4,633.2	624,894.17	637,546.82	32° 43' 1.679 N	103° 53' 10.005 W
13,268.0	90.40	91.30	8,818.5	232.0	4,759.1	624,889.99	637,672.74	32° 43' 1.633 N	103° 53' 8.531 W
13,363.0	90.70	92.50	8,817.6	228.8	4,854.1	624,886.84	637,767.68	32° 43' 1.598 N	103° 53' 7.420 W
13,522.0	90.80	92.20	8,815.6	222.3	5,012.9	624,880.32	637,926.54	32° 43' 1.527 N	103° 53' 5.561 W
13,617.0	90.30	91.30	8,814.6	219.4	5,107.9	624,877.42	638,021.49	32° 43' 1.494 N	103° 53' 4.450 W
13,743.0	91.20	91.50	8,813.0	216.3	5,233.8	624,874.34	638,147.44	32° 43' 1.458 N	103° 53' 2.976 W
13,897.0	91.20	91.50	8,809.8	212.3	5,387.7	624,870.31	638,301.35	32° 43' 1.412 N	103° 53' 1.175 W
PBHL(FSF#1)									

Checked By: _____ Approved By: _____ Date: _____