



September 25, 2014

NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 11 2015

RECEIVED

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

15 42240

Attn: Kanicia Castillo

RE: Burch Keely Unit 954H

Please find enclosed a copy of the survey from 0.00' to 4230.00' ran on the above referenced well.

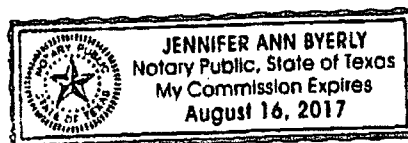
Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 25 day of September A.D., 2014, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas



Company: COG Operating, LLC (Concho)

Lease/Well: Burch Keely Unit /954H



Rig Name: United 43

State/County: New Mexico/Eddy

Latitude: 32.83, Longitude: -104.04

GRID North is 0.16 Degrees East of True North

VS-Azi: 0.00 Degrees



Depth Reference : RKB=14 feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut

Minimum Curvature Method

Report Date/Time: 9/25/2014 / 16:30

VES Survey International

West Texas

(432) 563-5444

Surveyor: Adam Gathright

Burch Keely Unit 954H / API 30-015-42240

NM OIL CONSERVATION

ARTESIA DISTRICT

JUN 11 2015

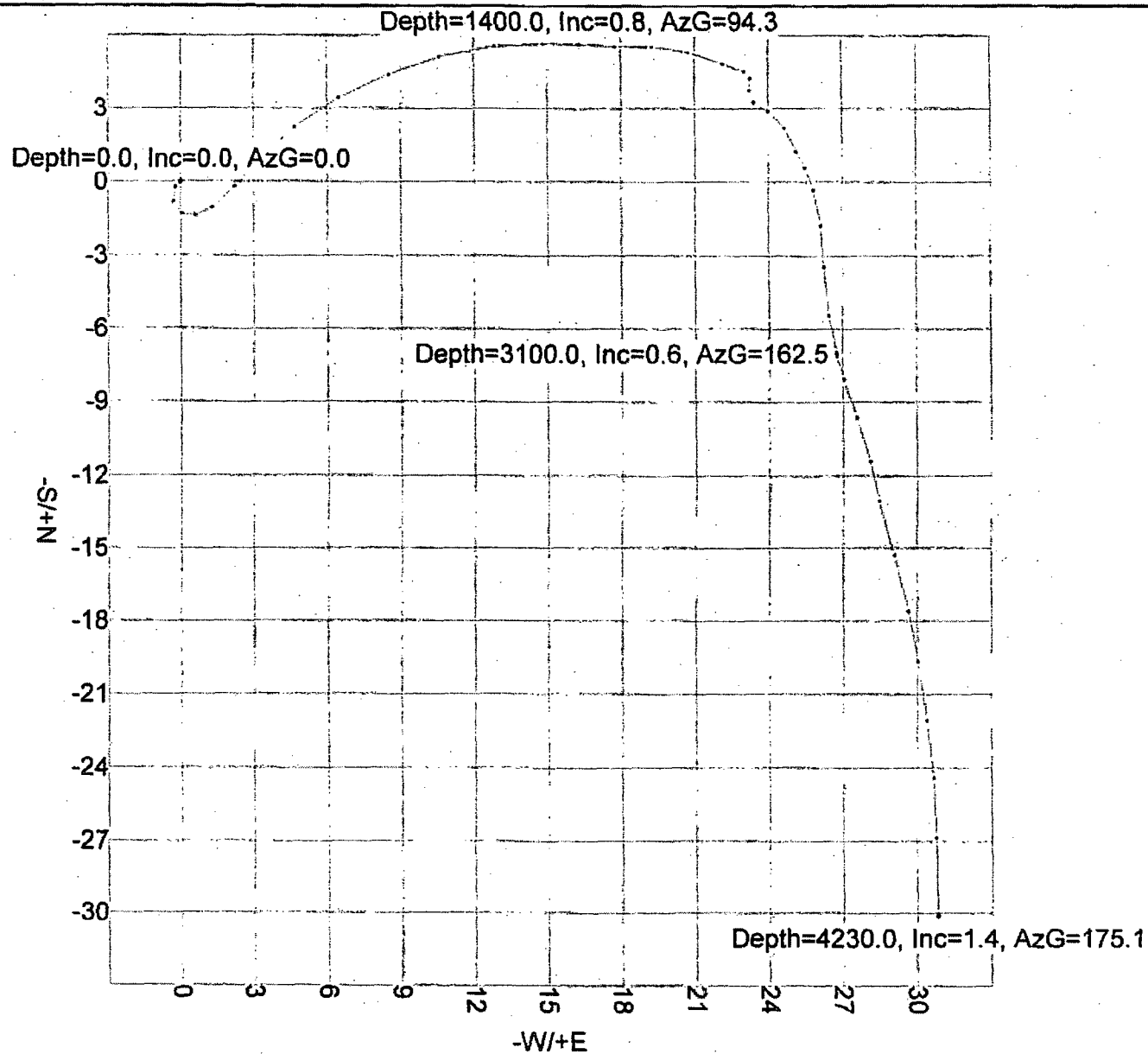
RECEIVED

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	0.38	223.22	100.00	-0.24	-0.23	-0.24	0.33	223.22	0.38
200.00	0.44	154.50	200.00	-0.83	-0.29	-0.83	0.88	199.42	0.46
300.00	0.28	127.74	300.00	-1.32	0.06	-1.32	1.32	177.27	0.23
400.00	0.41	75.56	399.99	-1.38	0.61	-1.38	1.51	156.32	0.33
500.00	0.49	58.36	499.99	-1.06	1.32	-1.06	1.70	128.89	0.15
600.00	0.97	41.55	599.98	-0.21	2.25	-0.21	2.26	95.26	0.52
700.00	0.94	43.07	699.97	1.03	3.37	1.03	3.52	73.06	0.04
800.00	1.11	51.22	799.95	2.23	4.68	2.23	5.19	64.52	0.22
900.00	1.38	59.88	899.93	3.44	6.48	3.44	7.34	62.02	0.33
1000.00	1.25	69.98	999.90	4.42	8.54	4.42	9.62	62.65	0.27
1100.00	1.25	72.45	1099.88	5.12	10.61	5.12	11.78	64.23	0.05
1200.00	1.40	84.96	1199.85	5.56	12.87	5.56	14.02	66.63	0.32
1300.00	0.88	89.22	1299.83	5.68	14.85	5.68	15.90	69.08	0.52
1400.00	0.79	94.29	1399.82	5.64	16.31	5.64	17.26	70.94	0.12
1500.00	0.86	92.36	1499.81	5.55	17.76	5.55	18.61	72.64	0.07
1600.00	0.86	88.02	1599.80	5.55	19.26	5.55	20.04	73.93	0.07
1700.00	0.90	108.88	1699.79	5.32	20.75	5.32	21.42	75.62	0.32
1800.00	0.78	108.71	1799.78	4.85	22.14	4.85	22.66	77.65	0.11

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	0.29	112.48	1899.77	4.53	23.02	4.53	23.46	78.86	0.59
2000.00	0.21	176.65	1999.77	4.25	23.26	4.25	23.65	79.64	0.27
2100.00	0.36	183.70	2099.77	3.75	23.25	3.75	23.55	80.83	0.15
2200.00	0.28	136.70	2199.77	3.26	23.40	3.26	23.62	82.06	0.27
2300.00	0.53	113.17	2299.77	2.90	23.99	2.90	24.16	83.10	0.30
2400.00	0.65	154.21	2399.76	2.21	24.66	2.21	24.76	84.88	0.43
2500.00	0.58	153.60	2499.76	1.24	25.13	1.24	25.16	87.17	0.07
2600.00	0.27	147.96	2599.75	0.59	25.48	0.59	25.49	88.68	0.32
2700.00	0.85	162.96	2699.75	-0.32	25.82	-0.32	25.83	90.71	0.60
2800.00	0.89	174.61	2799.74	-1.80	26.12	-1.80	26.18	93.94	0.18
2900.00	1.03	177.23	2899.72	-3.47	26.23	-3.47	26.46	97.53	0.15
3000.00	1.26	171.39	2999.70	-5.45	26.44	-5.45	26.99	101.64	0.26
3100.00	0.59	162.46	3099.69	-7.02	26.76	-7.02	27.66	104.71	0.68
3200.00	0.66	167.10	3199.68	-8.07	27.04	-8.07	28.22	106.62	0.09
3300.00	1.24	158.51	3299.67	-9.64	27.56	-9.64	29.20	109.27	0.59
3400.00	0.90	169.26	3399.65	-11.41	28.11	-11.41	30.34	112.10	0.39
3500.00	1.00	165.84	3499.64	-13.03	28.47	-13.03	31.31	114.60	0.11
3600.00	1.69	164.39	3599.61	-15.30	29.08	-15.30	32.86	117.75	0.59
3700.00	1.03	169.53	3699.58	-17.61	29.64	-17.61	34.47	120.72	0.67
3800.00	1.35	168.32	3799.56	-19.65	30.04	-19.65	35.90	123.19	0.32
3900.00	1.43	174.94	3899.53	-22.06	30.39	-22.06	37.55	125.97	0.18
4000.00	1.29	171.96	3999.50	-24.42	30.66	-24.42	39.20	128.54	0.16
4100.00	1.51	182.38	4099.47	-26.86	30.76	-26.86	40.84	131.12	0.33
4230.00	1.37	175.09	4229.43	-30.11	30.82	-30.11	43.09	134.33	0.18



VES Survey International
West Texas
(432) 563-5444
Surveyor: Adam Gathright
Burch Keely Unit 954H / API 30-015-42240



V.E.S. Survey Date: 09/07/2014

COG OPERATING, LLC
 Field: Eddy County, NM
 Site: Burch Keely Unit 954H
 Well: 954H
 Wellbore: Lateral
 Plan: Surveys

LEGEND

- 954H, Lateral, Plan #1 V0
- Surveys



Azimuths to Grid North
 True North: -0.16°
 Magnetic North: 7.29°

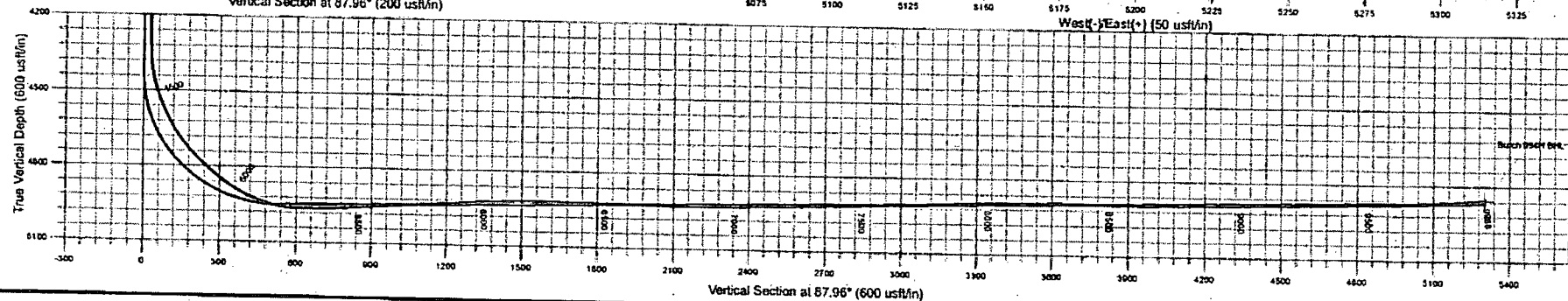
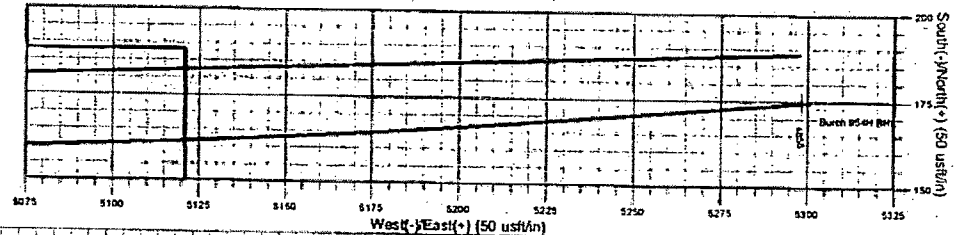
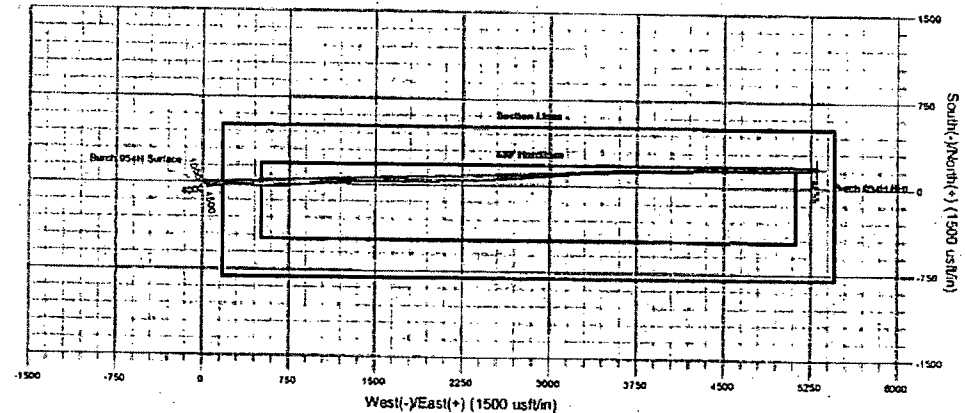
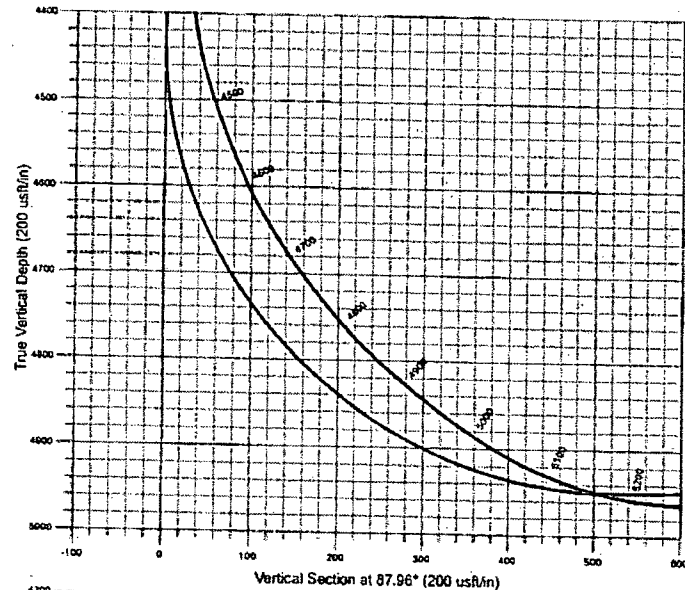
Magnetic Field
 Strength: 48603.0snT
 Dip Angle: 60.58°
 Date: 9/5/2014
 Model: IGRF2010



TARGET DETAILS

Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape
Burch 954H Surface	0.00	0.00	0.00	664258.10	591058.00	32° 49' 32.81 N	104° 2' 12.88 W	Point
Burch 954H BHL	4854.93	174.53	5298.37	664432.63	596356.37	32° 49' 34.39 N	104° 1' 10.76 W	Point

Surveys for offset wells
 are inclination only surveys.
 Radius show possible displacement



Archer

ARCHER DIRECTIONAL DRILLING SERVICES
 12101 Cullen Rd. Houston, Texas 77066
 Phone: 281-301-2600 Fax: 281-301-2795

Design: Surveys (954H/Lateral)
 Created By: Ivonne Gonzalez
 Date: 7:56, September 16 2014

Archer Survey Report

Company:	COG OPERATING, LLC	Local Co-ordinate Reference:	Well 954H - Slot 954H
Project:	Eddy County, NM	TVD Reference:	3603'GL+12'KB @ 3615.00usft (United 43)
Site:	Burch Keely Unit 954H	MD Reference:	3603'GL+12'KB @ 3615.00usft (United 43)
Well:	954H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM R5000.1 MULTI

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: Burch Keely Unit 954H					
Site Position:		Northing:	664,258.10 usft	Latitude:	32° 49' 32.81 N
From:	Map	Easting:	591,058.00 usft	Longitude:	104° 2' 12.86 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.16 °

Well:	954H - Slot 954H					
Well Position	+N-S	0.00 usft	Northing:	664,258.10 usft	Latitude:	32° 49' 32.81 N
	+E-W	0.00 usft	Easting:	591,058.00 usft	Longitude:	104° 2' 12.86 W
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,603.00 usft	

Wellbore	Lateral				
Magnetics	Model Name	Sample Date	Declination (μ)	Dip Angle (μ)	Field Strength (nT)
	IGRF2010	9/5/2014	7.45	60.58	48,603

Design:	Surveys				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	87.86	

Survey Program		Date	9/18/2014		
From	To	Survey (Wellbore)	Tool Name	Description	
(usft)	(usft)				
100.00	4,230.00	Survey #1 (Lateral)	NS-GYRO-MS	Gyrocompass Gyro	
4,297.00	9,904.00	Survey #2 (Lateral)	MWD	MWD - Standard	
9,968.00	9,968.00	Survey #3 (Lateral)	Project	Projection	

Survey	Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Vertical	Dogleg	Build	Turn
	Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate
	(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	100.00	0.38	223.22	100.00	-0.24	-0.23	-0.24	0.38	0.38	0.00
	200.00	0.44	154.50	200.00	-0.83	-0.29	-0.32	0.47	0.06	-68.72
	300.00	0.28	127.74	300.00	-1.33	0.07	0.02	0.23	-0.16	-26.76
	400.00	0.41	75.56	399.99	-1.39	0.61	0.56	0.33	0.13	-52.18
	500.00	0.49	58.36	499.99	-1.07	1.32	1.28	0.16	0.08	-17.20
	600.00	0.97	41.55	599.98	-0.22	2.25	2.24	0.52	0.48	-16.81
	700.00	0.94	43.07	699.97	1.02	3.37	3.40	0.04	-0.03	1.52
	800.00	1.11	51.22	799.95	2.22	4.68	4.76	0.22	0.17	8.15

Archer Survey Report

Company:	COG OPERATING, LLC	Local Co-ordinate Reference:	Well 954H - Slot 954H
Project:	Eddy County, NM	TVD Reference:	3603'GL+12'KB @ 3615.00usft (United 43)
Site:	Burch Keely Unit 954H	MD Reference:	3603'GL+12'KB @ 3615.00usft (United 43)
Well:	954H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM R5000.1 MULTI

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)
900.00	1.38	59.88	899.93	3.43	6.48	6.60	0.33	0.27	8.66
1,000.00	1.25	69.98	999.90	4.41	8.55	8.70	0.27	-0.13	10.10
1,100.00	1.25	72.45	1,099.88	5.11	10.61	10.79	0.05	0.00	2.47
1,200.00	1.40	84.96	1,199.85	5.55	12.87	13.06	0.32	0.15	12.51
1,300.00	0.88	89.22	1,299.83	5.67	14.85	15.04	0.53	-0.52	4.26
1,400.00	0.79	94.29	1,399.82	5.63	16.31	16.50	0.12	-0.09	5.07
1,500.00	0.86	92.36	1,499.81	5.54	17.74	17.93	0.08	0.07	-1.93
1,600.00	0.86	88.02	1,599.80	5.54	19.24	19.43	0.07	0.00	-4.34
1,700.00	0.90	108.88	1,699.79	5.31	20.74	20.91	0.32	0.04	20.86
1,800.00	0.78	108.71	1,799.78	4.84	22.13	22.28	0.12	-0.12	-0.17
1,900.00	0.29	112.48	1,899.77	4.52	23.00	23.15	0.49	-0.49	3.77
2,000.00	0.21	176.65	1,999.77	4.24	23.25	23.38	0.27	-0.08	64.17
2,100.00	0.36	183.70	2,099.77	3.75	23.24	23.36	0.15	0.15	7.05
2,200.00	0.28	136.70	2,199.77	3.26	23.39	23.49	0.27	-0.08	-47.00
2,300.00	0.53	113.17	2,299.77	2.90	23.98	24.07	0.30	0.25	-23.53
2,400.00	0.65	154.21	2,399.76	2.20	24.65	24.71	0.43	0.12	41.04
2,500.00	0.58	153.60	2,499.76	1.24	25.12	25.15	0.07	-0.07	-0.61
2,600.00	0.27	147.96	2,599.75	0.59	25.47	25.48	0.31	-0.31	-5.64
2,700.00	0.85	162.96	2,699.75	-0.32	25.81	25.79	0.59	0.58	15.00
2,800.00	0.89	174.61	2,799.74	-1.80	26.11	26.02	0.18	0.04	11.65
2,900.00	1.03	177.23	2,899.72	-3.48	26.22	26.08	0.15	0.14	2.62
3,000.00	1.26	171.39	2,999.70	-5.46	26.43	26.22	0.26	0.23	-5.84
3,100.00	0.59	162.46	3,099.69	-7.04	26.75	26.48	0.68	-0.67	-8.93
3,200.00	0.66	167.10	3,199.68	-8.09	27.03	26.73	0.09	0.07	4.64
3,300.00	1.24	158.51	3,299.67	-9.66	27.56	27.20	0.60	0.58	-8.59
3,400.00	0.90	169.26	3,399.65	-11.44	28.10	27.68	0.39	-0.34	10.75
3,500.00	1.00	165.84	3,499.64	-13.05	28.46	27.98	0.11	0.10	-3.42
3,600.00	1.69	164.39	3,599.61	-15.32	29.07	28.51	0.69	0.69	-1.45
3,700.00	1.03	169.53	3,699.58	-17.63	29.63	28.99	0.67	-0.66	5.14
3,800.00	1.35	168.32	3,799.56	-19.66	30.03	29.31	0.32	0.32	-1.21
3,900.00	1.43	174.94	3,899.53	-22.06	30.38	29.58	0.18	0.08	6.62
4,000.00	1.29	171.96	3,999.50	-24.42	30.65	29.76	0.16	-0.14	-2.98
4,100.00	1.51	182.38	4,099.47	-26.85	30.75	29.78	0.34	0.22	10.42
4,230.00	1.37	175.09	4,229.43	-30.11	30.81	29.72	0.18	-0.11	-5.61
4,297.00	1.60	168.90	4,296.41	-31.82	31.06	29.91	0.42	0.34	-9.24
4,329.00	1.50	171.10	4,328.40	-32.68	31.21	30.03	0.36	-0.31	6.88
4,360.00	2.20	124.70	4,359.38	-33.42	31.76	30.56	5.14	2.26	-149.68
4,392.00	5.50	96.30	4,391.31	-33.93	33.79	32.57	11.61	10.31	-88.75
4,423.00	9.60	86.00	4,422.03	-33.92	37.85	36.62	13.88	13.23	-33.23
4,455.00	13.70	80.00	4,453.37	-33.07	44.25	43.04	13.34	12.81	-18.75
4,487.00	17.00	78.40	4,484.22	-31.47	52.57	51.41	10.40	10.31	-5.00
4,518.00	19.40	80.20	4,513.67	-29.68	62.08	60.98	7.95	7.74	5.81
4,550.00	21.80	79.90	4,543.62	-27.74	73.17	72.13	7.51	7.50	-0.94

Archer Survey Report

Company:	COG OPERATING, LLC	Local Co-ordinate Reference:	Well 954H - Slot 954H
Project:	Eddy County, NM	TVD Reference:	3603'GL+12'KB @ 3615.00usft (United 43)
Site:	Burch Keely Unit 954H	MD Reference:	3603'GL+12'KB @ 3615.00usft (United 43)
Well:	954H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM R5000.1 MULTI

Measured (Depth (usft))	Inclination (°)	Azimuth (°)	Vertical (Depth (usft))	+N-S (usft)	+E-W (usft)	Vertical (Section) (usft)	Dogleg Rate (°/100usft)	Built Rate (°/100usft)	Turn Rate (°/100usft)
4,581.00	23.10	80.00	4,572.27	-25.67	84.82	83.86	4.20	4.19	0.32
4,613.00	25.70	83.10	4,601.41	-23.75	97.90	96.99	9.05	8.13	9.69
4,644.00	29.30	83.80	4,628.91	-22.12	112.12	111.26	11.66	11.61	2.26
4,676.00	32.60	84.40	4,656.35	-20.43	128.48	127.68	10.36	10.31	1.88
4,708.00	34.40	87.40	4,683.03	-19.18	146.10	145.32	7.64	5.63	9.38
4,739.00	36.90	88.30	4,708.22	-18.51	164.15	163.39	8.24	8.06	2.90
4,771.00	39.30	88.50	4,733.40	-17.96	183.89	183.13	7.51	7.50	0.63
4,802.00	42.40	88.20	4,756.85	-17.37	204.15	203.40	10.02	10.00	-0.97
4,834.00	45.60	86.70	4,779.86	-16.38	226.35	225.63	10.52	10.00	-4.69
4,866.00	47.60	87.40	4,801.85	-15.18	249.57	248.87	6.45	6.25	2.19
4,897.00	50.00	88.90	4,822.27	-14.43	272.88	272.20	8.55	7.74	4.84
4,929.00	52.30	90.70	4,842.34	-14.35	297.80	297.10	8.42	7.19	5.63
4,960.00	54.10	91.40	4,860.91	-14.81	322.62	321.89	6.08	5.81	2.28
4,992.00	56.20	91.20	4,879.19	-15.41	348.87	348.10	6.58	6.56	-0.63
5,024.00	59.50	91.00	4,896.22	-15.92	375.95	375.15	10.33	10.31	-0.63
5,055.00	62.80	91.20	4,911.18	-16.45	403.10	402.26	10.66	10.65	0.65
5,087.00	66.30	91.80	4,924.92	-17.20	431.98	431.09	11.07	10.94	1.88
5,118.00	70.00	92.30	4,936.46	-18.24	460.73	459.79	12.03	11.94	1.61
5,150.00	73.90	92.50	4,946.37	-19.51	491.12	490.11	12.20	12.19	0.63
5,181.00	78.10	92.10	4,953.87	-20.72	521.17	520.10	13.61	13.55	-1.29
5,213.00	82.30	91.50	4,959.32	-21.70	552.68	551.56	13.25	13.13	-1.88
5,241.00	86.00	90.40	4,962.17	-22.17	580.52	579.37	13.78	13.21	-3.93
5,273.00	89.10	88.30	4,963.54	-21.80	612.49	611.32	11.70	9.89	-6.56
5,305.00	89.20	86.70	4,964.01	-20.41	644.45	643.32	5.01	0.31	-5.00
5,337.00	89.30	86.70	4,964.43	-18.57	676.39	675.31	0.31	0.31	0.00
5,431.00	95.10	85.30	4,960.82	-12.02	770.05	769.14	6.35	6.17	-1.49
5,525.00	93.70	85.90	4,953.61	-4.83	863.50	862.78	1.62	-1.49	0.64
5,620.00	93.40	85.70	4,947.73	2.12	958.06	957.53	0.38	-0.32	-0.21
5,715.00	93.10	85.60	4,942.35	9.31	1,052.64	1,052.30	0.33	-0.32	-0.11
5,809.00	93.10	85.50	4,937.26	16.59	1,146.21	1,146.08	0.11	0.00	-0.11
5,904.00	92.80	85.20	4,932.37	24.28	1,240.78	1,240.86	0.45	-0.32	-0.32
5,998.00	93.90	87.70	4,926.88	30.10	1,334.43	1,334.65	2.90	1.17	2.66
6,093.00	91.60	88.40	4,922.32	33.32	1,429.26	1,429.54	2.53	-2.42	0.74
6,188.00	90.60	89.80	4,920.50	34.81	1,524.22	1,524.50	1.81	-1.05	1.47
6,282.00	89.60	90.60	4,920.33	34.49	1,618.22	1,618.42	1.36	-1.06	0.85
6,376.00	88.60	90.30	4,921.81	33.75	1,712.20	1,712.32	1.11	-1.06	-0.32
6,471.00	88.90	89.60	4,923.88	33.83	1,807.18	1,807.24	0.80	0.32	-0.74
6,566.00	89.60	89.10	4,925.13	34.91	1,902.17	1,902.20	0.91	0.74	-0.53
6,660.00	89.40	89.00	4,925.95	36.47	1,996.15	1,996.18	0.24	-0.21	-0.11
6,755.00	89.30	88.90	4,927.02	38.21	2,091.13	2,091.16	0.15	-0.11	-0.11
6,850.00	89.50	88.50	4,928.02	40.36	2,186.10	2,186.15	0.47	0.21	-0.42
6,945.00	91.50	87.50	4,927.19	43.68	2,281.03	2,281.14	2.35	2.11	-1.05
7,040.00	90.90	86.90	4,925.20	48.32	2,375.89	2,376.11	0.89	-0.63	-0.63

Archer Survey Report

Company:	COG OPERATING LLC	Local Co-ordinate Reference:	Well 954H - Slot 954H
Project:	Eddy County, NM	TVD Reference:	3603 GL+12'KB @ 3615.00usft (United 43)
Site:	Burch Keely Unit 954H	MD Reference:	3603 GL+12'KB @ 3615.00usft (United 43)
Well:	954H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM R5000.1 MULTI

Survey										
Measured			Vertical			Vertical	Dogleg	Build	Turn	
Depth	Inclination	Azimuth	Depth	+N-S	+E-W	Section	Rate	Rate	Rate	
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	
7,134.00	91.20	86.80	4,923.48	53.48	2,469.74	2,470.08	0.34	0.32	-0.11	
7,229.00	91.80	86.60	4,920.99	58.95	2,564.55	2,565.02	0.67	0.63	-0.21	
7,324.00	91.60	86.00	4,918.17	65.08	2,659.31	2,659.94	0.67	-0.21	-0.63	
7,419.00	91.80	85.30	4,915.35	72.28	2,753.99	2,754.82	0.77	0.21	-0.74	
7,513.00	91.90	84.70	4,912.32	80.47	2,847.58	2,848.64	0.65	0.11	-0.64	
7,608.00	91.80	85.20	4,909.25	88.83	2,942.16	2,943.46	0.54	-0.11	0.53	
7,702.00	91.80	84.70	4,906.30	97.10	3,035.75	3,037.29	0.53	0.00	-0.53	
7,797.00	91.80	84.50	4,903.32	106.03	3,130.29	3,132.08	0.21	0.00	-0.21	
7,891.00	92.00	84.50	4,900.20	115.04	3,223.80	3,225.85	0.21	0.21	0.00	
7,986.00	92.00	86.30	4,896.88	122.65	3,318.43	3,320.70	1.89	0.00	1.89	
8,080.00	90.70	86.60	4,894.67	128.47	3,412.22	3,414.64	1.42	-1.38	0.32	
8,175.00	90.70	88.20	4,893.51	132.78	3,507.12	3,509.62	1.68	0.00	1.68	
8,270.00	90.80	88.10	4,892.26	135.84	3,602.06	3,604.61	0.15	0.11	-0.11	
8,364.00	89.00	88.60	4,892.43	138.55	3,698.02	3,698.61	1.99	-1.91	0.53	
8,459.00	89.10	88.60	4,894.00	140.87	3,790.97	3,793.59	0.11	0.11	0.00	
8,553.00	90.10	89.60	4,894.66	142.35	3,884.96	3,887.56	1.50	1.06	1.06	
8,647.00	90.60	89.40	4,894.09	143.17	3,978.95	3,981.53	0.57	0.53	-0.21	
8,742.00	90.30	89.20	4,893.34	144.33	4,073.94	4,076.50	0.38	-0.32	-0.21	
8,837.00	90.20	88.90	4,892.93	145.90	4,168.93	4,171.48	0.33	-0.11	-0.32	
8,932.00	91.50	89.90	4,891.52	146.90	4,263.91	4,266.44	1.73	1.37	1.05	
9,027.00	91.30	89.80	4,889.20	147.15	4,358.88	4,361.36	0.24	-0.21	-0.11	
9,122.00	91.30	89.90	4,887.04	147.40	4,453.86	4,456.28	0.11	0.00	0.11	
9,216.00	91.30	89.50	4,884.91	147.89	4,547.83	4,550.21	0.43	0.00	-0.43	
9,311.00	91.10	89.10	4,882.92	149.05	4,642.80	4,645.17	0.47	-0.21	-0.42	
9,406.00	91.30	89.00	4,880.93	150.62	4,737.77	4,740.13	0.24	0.21	-0.11	
9,500.00	91.30	88.90	4,878.80	152.35	4,831.73	4,834.09	0.11	0.00	-0.11	
9,595.00	91.50	88.40	4,876.47	154.58	4,926.67	4,929.05	0.57	0.21	-0.53	
9,689.00	92.20	88.10	4,873.44	157.45	5,020.58	5,023.00	0.81	0.74	-0.32	
9,784.00	93.60	87.40	4,868.63	161.18	5,115.38	5,117.88	1.65	1.47	-0.74	
9,878.00	94.50	85.40	4,861.99	167.06	5,208.96	5,211.60	2.33	0.96	-2.13	
9,904.00	94.50	85.20	4,859.95	169.19	5,234.79	5,237.49	0.77	0.00	-0.77	
9,968.00	94.50	85.20	4,854.93	174.53	5,298.37	5,301.22	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle	Dip Dir.	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	
hit/mis target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
Shape										
Burch 954H Surface	0.00	0.00	0.00	0.00	0.00	664,258.10	591,058.00	32° 49' 32.81 N	104° 2' 12.85 W	
- actual wellpath hits target center										
- Point										
Burch 954H BHL	0.00	0.00	4,854.93	174.53	5,298.37	664,432.63	596,356.37	32° 49' 34.39 N	104° 1' 10.76 W	
- actual wellpath hits target center										
- Point										