



May 19, 2014

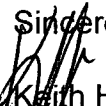
30-015-42242

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

Attn: Kanicia Castillo

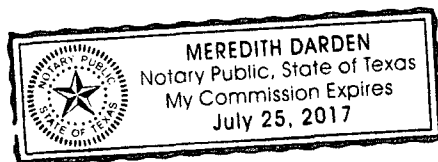
RE: **Burch Keely Unit No. 958H**

Please find enclosed a copy of the survey from 0.00' to 4,252.00' ran on the above referenced well.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 19th day of May, A.D., 2014, by Keith Havelka.




Meredith Darden
Notary Public, State of Texas



Company: COG Operating, LLC (Concho)

Lease/Well: Burch Keely Unit /No. 958H

Location: 2 miles from Loco Hills, NM

Rig Name: UDI #43

State/County: New Mexico/Eddy

Latitude: 32.82, Longitude: -104.04

GRID North is 0.16 Degrees East of True North

VS-Azi: 0.00 Degrees



Depth Reference : RKB: 14.5'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut

Minimum Curvature Method

Report Date/Time: 5/20/2014 / 13:07

VES Survey International

Midland, TX

(432)-563-5444

Surveyor: Tim Dillon

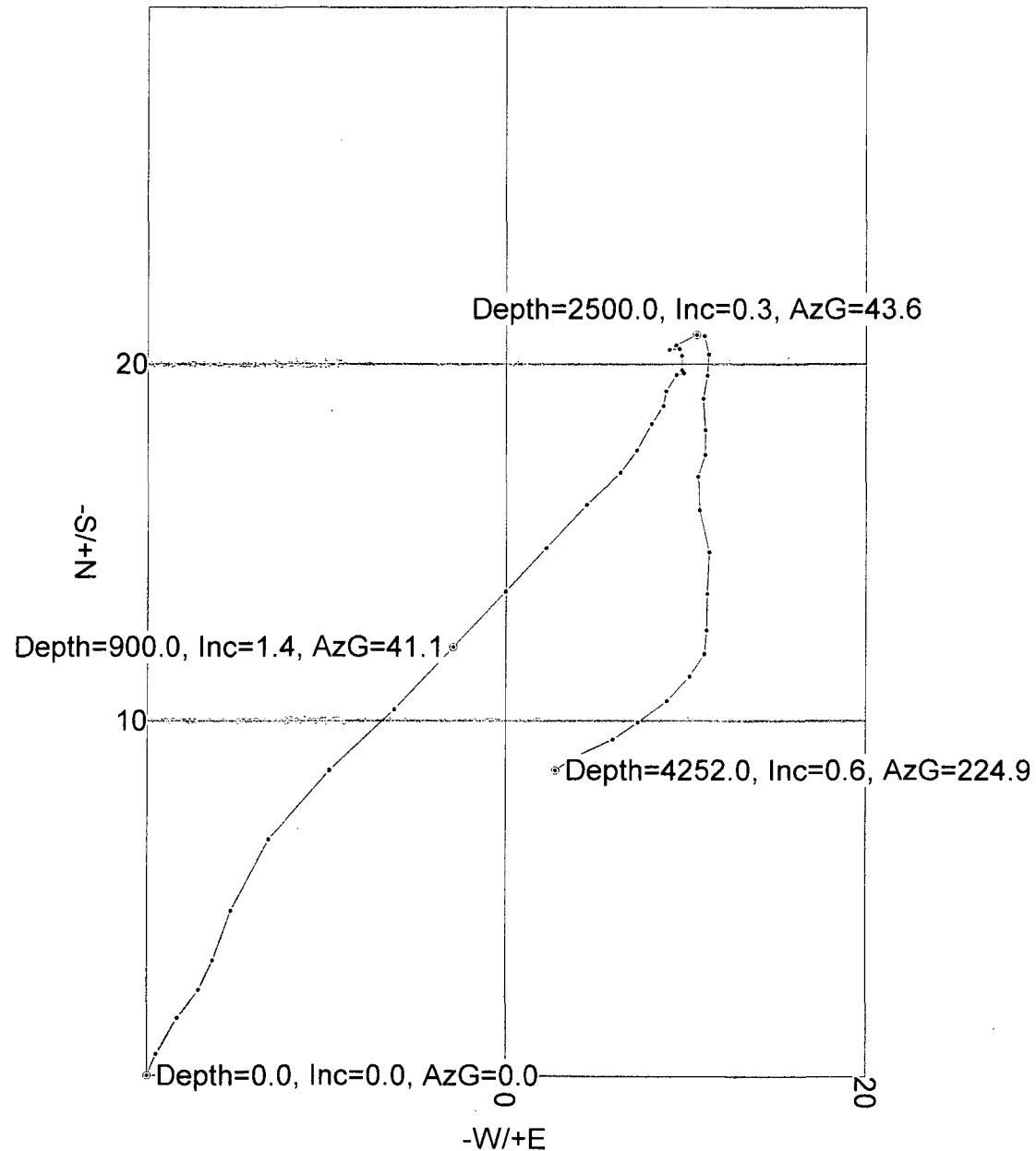
Burch Keely Unit No. 958H / API 30-015-42242

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	0.75	22.39	100.00	0.61	0.25	0.61	0.66	22.39	0.75
200.00	0.64	41.38	199.99	1.63	0.87	1.63	1.85	28.01	0.26
300.00	0.51	31.49	299.98	2.42	1.47	2.42	2.83	31.15	0.16
400.00	0.54	18.80	399.98	3.25	1.85	3.25	3.74	29.65	0.12
500.00	1.17	20.58	499.97	4.65	2.36	4.65	5.22	26.90	0.63
600.00	1.43	33.11	599.94	6.66	3.40	6.66	7.48	27.07	0.38
700.00	1.55	48.45	699.91	8.60	5.10	8.60	10.00	30.65	0.41
800.00	1.33	44.62	799.88	10.32	6.92	10.32	12.43	33.84	0.24
900.00	1.40	41.12	899.85	12.07	8.54	12.07	14.79	35.28	0.11
1000.00	1.03	45.79	999.83	13.62	9.99	13.62	16.89	36.26	0.39
1100.00	0.88	38.76	1099.81	14.85	11.12	14.85	18.55	36.82	0.19
1200.00	1.00	45.74	1199.80	16.06	12.23	16.06	20.19	37.28	0.17
1300.00	0.50	48.05	1299.79	16.96	13.18	16.96	21.48	37.84	0.51
1400.00	0.42	21.45	1399.79	17.59	13.63	17.59	22.25	37.78	0.22
1500.00	0.56	34.70	1499.78	18.33	14.04	18.33	23.09	37.46	0.18
1600.00	0.13	24.53	1599.78	18.84	14.37	18.84	23.69	37.34	0.44
1700.00	0.35	4.53	1699.78	19.25	14.44	19.25	24.06	36.88	0.24
1800.00	0.35	60.26	1799.78	19.70	14.73	19.70	24.60	36.78	0.33

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	0.13	207.27	1899.78	19.75	14.94	19.75	24.76	37.10	0.46
2000.00	0.21	0.10	1999.78	19.83	14.88	19.83	24.79	36.89	0.34
2100.00	0.26	358.41	2099.78	20.24	14.88	20.24	25.12	36.32	0.04
2200.00	0.08	245.41	2199.78	20.43	14.81	20.43	25.23	35.93	0.29
2300.00	0.26	271.34	2299.78	20.41	14.52	20.41	25.05	35.43	0.19
2400.00	0.50	73.45	2399.78	20.54	14.72	20.54	25.27	35.62	0.75
2500.00	0.26	43.63	2499.77	20.83	15.29	20.83	25.84	36.28	0.30
2600.00	0.23	163.85	2599.77	20.79	15.50	20.79	25.94	36.70	0.43
2700.00	0.37	167.21	2699.77	20.28	15.63	20.28	25.60	37.62	0.14
2800.00	0.35	201.75	2799.77	19.68	15.59	19.68	25.11	38.38	0.22
2900.00	0.41	179.66	2899.77	19.04	15.48	19.04	24.54	39.11	0.16
3000.00	0.60	173.77	2999.76	18.16	15.54	18.16	23.90	40.55	0.19
3100.00	0.21	198.46	3099.76	17.46	15.54	17.46	23.37	41.66	0.41
3200.00	0.52	197.71	3199.76	16.85	15.34	16.85	22.79	42.31	0.31
3300.00	0.61	161.06	3299.75	15.91	15.37	15.91	22.13	44.01	0.37
3400.00	0.78	172.28	3399.75	14.73	15.64	14.73	21.48	46.71	0.21
3500.00	0.59	195.96	3499.74	13.56	15.59	13.56	20.66	48.97	0.34
3600.00	0.62	165.86	3599.74	12.55	15.58	12.55	20.00	51.15	0.31
3700.00	0.27	233.33	3699.73	11.88	15.52	11.88	19.54	52.56	0.57
3800.00	0.62	204.48	3799.73	11.25	15.10	11.25	18.83	53.32	0.40
3900.00	0.51	244.06	3899.73	10.56	14.48	10.56	17.92	53.89	0.40
4000.00	0.66	225.39	3999.72	9.96	13.67	9.96	16.91	53.92	0.24
4100.00	0.33	253.73	4099.72	9.47	12.97	9.47	16.06	53.87	0.40
4200.00	0.96	241.82	4199.71	9.00	11.96	9.00	14.96	53.04	0.64
4252.00	0.57	224.93	4251.70	8.61	11.39	8.61	14.28	52.92	0.86



VES Survey International
Midland, TX
(432)-563-5444
Surveyor: Tim Dillon
Burch Keely Unit No. 958H / API 30-015-42242



V.E.S Survey Date: 05/14/2014



Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well Burch Keely Unit Well No. 958 H
Project:	Eddy County New Mexico	TVD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Site:	Burch Keely	MD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Well:	Burch Keely Unit Well No. 958 H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original hole	Database:	EDM 5000.1 Database

Project: Eddy County, New Mexico			
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								
Site Position:			Northing:			663,867.50 usft			Latitude:			32.82466575		
From:			Easting:			596,362.80 usft			Longitude:			-104.01964094		
Position Uncertainty:			Slot Radius:			13-3/16 "			Grid Convergence:			0.17 °		
Map														
0.00 usft														

Well: Burch Keely Unit Well No. 958 H						
Well Position	+N-S	0.00 usft	Northing:	661,758.90 usft	Latitude:	32.81890895
	+E-W	0.00 usft	Easting:	591,445.00 usft	Longitude:	-104.03566912
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,591.00 usft

Wellbore	Original hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/24/2014	7.49	60.59	48,636

Design: Surveys Original hole				
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	89.66



Standard_report



Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well Burch Keely Unit Well No 958 H
Project:	Eddy County - New Mexico	TVD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Site:	Burch Keely	MD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Well:	Burch Keely Unit Well No 958 H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original hole	Database:	EDM 5000.1 Database

Survey Program		Date: 5/23/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.00	4,252.00	Gyro (Original hole)	NS-GYRO-MS	North sensing gyrocompassing m/s
4,267.00	10,010.00	MWD (Original hole)	MWD	MWD - Standard

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	661,758.90	591,445.00
100.00	0.75	22.39	100.00	0.61	0.25	0.75	0.25	661,759.51	591,445.25
Gyro									
200.00	0.64	41.38	199.99	1.63	0.87	0.25	0.88	661,760.53	591,445.87
300.00	0.51	31.49	299.98	2.43	1.47	0.16	1.48	661,761.33	591,446.47
400.00	0.54	18.80	399.98	3.25	1.85	0.12	1.87	661,762.15	591,446.85
500.00	1.17	20.58	499.97	4.66	2.36	0.63	2.39	661,763.56	591,447.36
600.00	1.43	33.11	599.94	6.66	3.41	0.38	3.44	661,765.56	591,448.41
700.00	1.55	48.45	699.91	8.60	5.10	0.42	5.15	661,767.50	591,450.10
800.00	1.33	44.62	799.88	10.32	6.93	0.24	6.99	661,769.22	591,451.93
900.00	1.40	41.12	899.85	12.07	8.54	0.11	8.62	661,770.97	591,453.54
1,000.00	1.03	45.79	999.83	13.62	9.99	0.38	10.07	661,772.52	591,454.99
1,100.00	0.88	38.76	1,099.81	14.84	11.12	0.19	11.21	661,773.74	591,456.12
1,200.00	1.00	45.74	1,199.80	16.05	12.22	0.17	12.32	661,774.95	591,457.22
1,300.00	0.50	48.05	1,299.79	16.95	13.17	0.50	13.27	661,775.85	591,458.17
1,400.00	0.42	21.45	1,399.79	17.58	13.63	0.23	13.74	661,776.48	591,458.63
1,500.00	0.56	34.70	1,499.78	18.32	14.04	0.18	14.15	661,777.22	591,459.04
1,600.00	0.13	24.53	1,599.78	18.83	14.37	0.43	14.48	661,777.73	591,459.37
1,700.00	0.35	4.53	1,699.78	19.24	14.44	0.23	14.55	661,778.14	591,459.44
1,800.00	0.35	60.26	1,799.78	19.69	14.73	0.33	14.85	661,778.59	591,459.73
1,900.00	0.13	207.27	1,899.78	19.74	14.94	0.46	15.06	661,778.64	591,459.94



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Burch-Keely Unit Well No. 958 H
Project:	Eddy County, New Mexico	TVD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Site:	Burch-Keely	MD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Well:	Burch-Keely Unit Well No. 958 H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original hole	Database:	EDM 5000.1 Database

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)	
2,000.00	0.21	0.10	1,999.78	19.83	14.89	0.33	15.01	661,778.73	591,459.89	
2,100.00	0.26	358.41	2,099.78	20.24	14.88	0.05	15.00	661,779.14	591,459.88	
2,200.00	0.08	245.41	2,199.78	20.43	14.81	0.30	14.94	661,779.33	591,459.81	
2,300.00	0.26	271.34	2,299.78	20.41	14.52	0.19	14.65	661,779.31	591,459.52	
2,400.00	0.50	73.45	2,399.78	20.54	14.72	0.75	14.84	661,779.44	591,459.72	
2,500.00	0.26	43.63	2,499.77	20.83	15.29	0.30	15.41	661,779.73	591,460.29	
2,600.00	0.23	163.85	2,599.77	20.80	15.50	0.43	15.63	661,779.70	591,460.50	
2,700.00	0.37	167.21	2,699.77	20.29	15.63	0.14	15.75	661,779.19	591,460.63	
2,800.00	0.35	201.75	2,799.77	19.69	15.59	0.21	15.71	661,778.59	591,460.59	
2,900.00	0.41	179.66	2,899.77	19.05	15.48	0.16	15.59	661,777.95	591,460.48	
3,000.00	0.60	173.77	2,999.76	18.17	15.54	0.20	15.64	661,777.07	591,460.54	
3,100.00	0.21	198.46	3,099.76	17.48	15.54	0.42	15.64	661,776.38	591,460.54	
3,200.00	0.52	197.71	3,199.76	16.87	15.34	0.31	15.44	661,775.77	591,460.34	
3,300.00	0.61	161.06	3,299.76	15.94	15.37	0.37	15.47	661,774.84	591,460.37	
3,400.00	0.78	172.28	3,399.75	14.76	15.64	0.22	15.73	661,773.66	591,460.64	
3,500.00	0.59	195.96	3,499.74	13.59	15.59	0.34	15.67	661,772.49	591,460.59	
3,600.00	0.62	165.86	3,599.74	12.57	15.58	0.32	15.65	661,771.47	591,460.58	
3,700.00	0.27	233.33	3,699.73	11.91	15.52	0.57	15.59	661,770.81	591,460.52	
3,800.00	0.62	204.48	3,799.73	11.27	15.11	0.41	15.18	661,770.17	591,460.11	
3,900.00	0.51	244.06	3,899.73	10.59	14.48	0.40	14.55	661,769.49	591,459.48	
4,000.00	0.66	225.39	3,999.72	9.99	13.67	0.24	13.73	661,768.89	591,458.67	
4,100.00	0.33	253.73	4,099.72	9.50	12.99	0.40	13.04	661,768.40	591,457.99	
4,200.00	0.96	241.82	4,199.71	9.02	11.97	0.64	12.03	661,767.92	591,456.97	
4,252.00	0.57	224.93	4,251.70	8.64	11.41	0.86	11.46	661,767.54	591,456.41	
4,267.00	0.70	235.10	4,266.70	8.53	11.28	1.14	11.33	661,767.43	591,456.28	
MWD surveys										
4,298.00	0.90	219.30	4,297.70	8.23	10.97	0.95	11.02	661,767.13	591,455.97	



Standard_report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Burch Keely Unit Well No. 958 H
Project:	Eddy County, New Mexico	TVD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Site:	Burch Keely	MD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Well:	Burch Keely Unit Well No. 958 H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original hole	Database:	EDM 5000.1 Database

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)	
4,330.00	1.10	201.00	4,329.70	7.75	10.70	1.17	10.75	661,766.65	591,455.70	
4,361.00	1.90	145.50	4,360.69	7.05	10.88	5.05	10.93	661,765.95	591,455.88	
4,392.00	4.20	117.70	4,391.64	6.10	12.18	8.61	12.22	661,765.00	591,457.18	
4,424.00	7.40	107.90	4,423.48	4.92	15.18	10.43	15.21	661,763.82	591,460.18	
4,455.00	10.40	104.70	4,454.10	3.60	19.79	9.80	19.81	661,762.50	591,464.79	
4,487.00	13.90	103.00	4,485.38	2.00	26.33	10.99	26.34	661,760.90	591,471.33	
4,519.00	17.10	102.30	4,516.21	0.13	34.67	10.02	34.67	661,759.03	591,479.67	
4,550.00	20.40	101.50	4,545.56	-1.92	44.42	10.68	44.41	661,756.98	591,489.42	
4,582.00	23.60	100.80	4,575.23	-4.23	56.18	10.03	56.16	661,754.67	591,501.18	
4,613.00	26.90	99.80	4,603.26	-6.59	69.19	10.73	69.15	661,752.31	591,514.19	
4,645.00	30.10	98.70	4,631.38	-9.03	84.26	10.13	84.21	661,749.87	591,529.26	
4,676.00	33.40	98.40	4,657.74	-11.46	100.39	10.66	100.32	661,747.44	591,545.39	
4,708.00	36.60	97.00	4,683.95	-13.91	118.58	10.31	118.49	661,744.99	591,563.58	
4,711.00	36.85	96.86	4,686.35	-14.12	120.36	8.83	120.27	661,744.78	591,565.36	
330.Hard line intercept @ 4711.MD										
4,739.00	39.20	95.60	4,708.41	-15.99	137.50	8.83	137.41	661,742.91	591,582.50	
4,771.00	41.90	93.50	4,732.72	-17.63	158.24	9.45	158.13	661,741.27	591,603.24	
4,802.00	44.30	92.40	4,755.35	-18.71	179.39	8.11	179.27	661,740.19	591,624.39	
4,834.00	45.40	93.10	4,778.04	-19.80	201.93	3.77	201.81	661,739.10	591,646.93	
4,865.00	48.60	92.40	4,799.18	-20.88	224.57	10.45	224.45	661,738.02	591,669.57	
4,897.00	51.20	92.10	4,819.79	-21.84	249.03	8.16	248.90	661,737.06	591,694.03	
4,928.00	53.10	92.40	4,838.81	-22.80	273.49	6.18	273.35	661,736.10	591,718.49	
4,960.00	55.10	89.90	4,857.58	-23.32	299.40	8.89	299.26	661,735.58	591,744.40	
4,991.00	57.90	88.90	4,874.68	-23.04	325.25	9.42	325.10	661,735.86	591,770.25	
5,023.00	61.10	88.50	4,890.92	-22.41	352.81	10.06	352.67	661,736.49	591,797.81	
5,054.00	64.60	88.50	4,905.07	-21.69	380.38	11.29	380.24	661,737.21	591,825.38	
5,086.00	68.10	88.50	4,917.90	-20.93	409.67	10.94	409.54	661,737.97	591,854.67	



Standard_report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Burch Keely Unit Well No. 958 H
Project:	Eddy County New Mexico	TVD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Site:	Burch Keely	MD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Well:	Burch Keely Unit Well No. 958 H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original hole	Database:	EDM 5000.1 Database

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)	
5,117.00	72.00	88.90	4,928.48	-20.27	438.80	12.64	438.67	661,738.63	591,883.80	
5,149.00	75.50	89.20	4,937.43	-19.76	469.51	10.97	469.39	661,739.14	591,914.51	
5,180.00	79.20	88.50	4,944.22	-19.15	499.75	12.14	499.63	661,739.75	591,944.75	
5,212.00	83.20	88.90	4,949.11	-18.43	531.36	12.56	531.24	661,740.47	591,976.36	
5,319.00	90.60	88.90	4,954.89	-16.38	638.11	6.92	638.00	661,742.52	592,083.11	
5,413.00	91.00	88.20	4,953.58	-14.00	732.07	0.86	731.97	661,744.90	592,177.07	
5,508.00	91.70	88.50	4,951.34	-11.27	827.00	0.80	826.92	661,747.63	592,272.00	
5,604.00	91.10	87.10	4,949.00	-7.59	922.90	1.59	922.84	661,751.31	592,367.90	
5,698.00	91.00	89.60	4,947.28	-4.88	1,016.84	2.66	1,016.79	661,754.02	592,461.84	
5,792.00	90.40	89.90	4,946.13	-4.47	1,110.83	0.71	1,110.78	661,754.43	592,555.83	
5,887.00	90.40	90.70	4,945.46	-4.97	1,205.82	0.84	1,205.77	661,753.93	592,650.82	
5,982.00	90.30	90.70	4,944.88	-6.13	1,300.82	0.11	1,300.76	661,752.77	592,745.82	
6,076.00	91.50	91.00	4,943.41	-7.52	1,394.79	1.32	1,394.72	661,751.38	592,839.79	
6,171.00	91.80	91.00	4,940.67	-9.18	1,489.74	0.32	1,489.66	661,749.72	592,934.74	
6,266.00	92.20	91.00	4,937.36	-10.84	1,584.67	0.42	1,584.57	661,748.06	593,029.67	
6,346.00	91.50	89.60	4,934.77	-11.25	1,664.62	1.96	1,664.52	661,747.65	593,109.62	
6,440.00	91.50	89.20	4,932.31	-10.27	1,758.58	0.43	1,758.49	661,748.63	593,203.58	
6,535.00	91.10	88.90	4,930.16	-8.70	1,853.54	0.53	1,853.46	661,750.20	593,298.54	
6,630.00	91.00	89.20	4,928.42	-7.12	1,948.52	0.33	1,948.44	661,751.78	593,393.52	
6,724.00	91.10	88.50	4,926.69	-5.23	2,042.48	0.75	2,042.41	661,753.67	593,487.48	
6,820.00	90.60	88.20	4,925.27	-2.47	2,138.43	0.61	2,138.38	661,756.43	593,583.43	
6,914.00	90.80	88.20	4,924.12	0.48	2,232.38	0.21	2,232.34	661,759.38	593,677.38	
7,009.00	90.40	87.80	4,923.13	3.80	2,327.31	0.60	2,327.29	661,762.70	593,772.31	
7,104.00	89.00	88.90	4,923.62	6.53	2,422.27	1.87	2,422.26	661,765.43	593,867.27	
7,198.00	90.30	90.30	4,924.20	7.19	2,516.26	2.03	2,516.26	661,766.09	593,961.26	
7,294.00	92.20	91.00	4,922.10	6.10	2,612.23	2.11	2,612.22	661,765.00	594,057.23	
7,388.00	92.70	91.40	4,918.09	4.13	2,706.12	0.68	2,706.10	661,763.03	594,151.12	



Company:	COG Operating, LLC	Local Co-ordinate Reference:	Well Burch Keely Unit Well No. 958 H
Project:	Eddy County, New Mexico	TVD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Site:	Burch Keely	MD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Well:	Burch Keely Unit Well No. 958 H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original hole	Database:	EDM 5000.1 Ddatabase

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)	
7,483.00	91.10	89.90	4,914.94	3.06	2,801.05	2.31	2,801.02	661,761.96	594,246.05	
7,578.00	91.50	89.90	4,912.78	3.22	2,896.03	0.42	2,896.00	661,762.12	594,341.03	
7,672.00	91.70	89.90	4,910.16	3.39	2,989.99	0.21	2,989.96	661,762.29	594,434.99	
7,767.00	91.10	89.20	4,907.84	4.13	3,084.96	0.97	3,084.93	661,763.03	594,529.96	
7,861.00	91.30	89.90	4,905.87	4.87	3,178.94	0.77	3,178.91	661,763.77	594,623.94	
7,956.00	91.30	89.60	4,903.71	5.29	3,273.91	0.32	3,273.88	661,764.19	594,718.91	
8,050.00	91.30	89.90	4,901.58	5.70	3,367.89	0.32	3,367.86	661,764.60	594,812.89	
8,145.00	91.00	89.60	4,899.67	6.11	3,462.87	0.45	3,462.84	661,765.01	594,907.87	
8,240.00	91.10	89.60	4,897.93	6.77	3,557.85	0.11	3,557.82	661,765.67	595,002.85	
8,334.00	91.50	89.90	4,895.80	7.18	3,651.82	0.53	3,651.80	661,766.08	595,096.82	
8,429.00	91.30	89.60	4,893.48	7.60	3,746.79	0.38	3,746.77	661,766.50	595,191.79	
8,524.00	91.30	89.60	4,891.32	8.26	3,841.77	0.00	3,841.75	661,767.16	595,286.77	
8,618.00	91.10	89.60	4,889.35	8.92	3,935.74	0.21	3,935.73	661,767.82	595,380.74	
8,713.00	90.80	89.20	4,887.78	9.91	4,030.72	0.53	4,030.71	661,768.81	595,475.72	
8,807.00	90.60	89.20	4,886.63	11.22	4,124.71	0.21	4,124.70	661,770.12	595,569.71	
8,902.00	90.60	89.20	4,885.64	12.55	4,219.69	0.00	4,219.69	661,771.45	595,664.69	
8,996.00	90.60	89.20	4,884.65	13.86	4,313.68	0.00	4,313.69	661,772.76	595,758.68	
9,091.00	91.00	89.20	4,883.32	15.19	4,408.66	0.42	4,408.67	661,774.09	595,853.66	
9,185.00	90.80	88.90	4,881.85	16.75	4,502.64	0.38	4,502.66	661,775.65	595,947.64	
9,279.00	90.40	88.90	4,880.86	18.55	4,596.61	0.43	4,596.64	661,777.45	596,041.61	
9,374.00	90.30	88.90	4,880.28	20.37	4,691.59	0.11	4,691.63	661,779.27	596,136.59	
9,469.00	89.90	88.20	4,880.12	22.78	4,786.56	0.85	4,786.61	661,781.68	596,231.56	
9,564.00	90.10	88.20	4,880.12	25.76	4,881.52	0.21	4,881.58	661,784.66	596,326.52	
9,658.00	89.20	88.20	4,880.69	28.72	4,975.47	0.96	4,975.55	661,787.62	596,420.47	
9,753.00	90.30	89.90	4,881.11	30.29	5,070.45	2.13	5,070.54	661,789.19	596,515.45	
9,847.00	90.40	89.20	4,880.53	31.03	5,164.44	0.75	5,164.54	661,789.93	596,609.44	
9,941.00	90.40	88.90	4,879.88	32.59	5,258.43	0.32	5,258.53	661,791.49	596,703.43	



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well Burch Keely Unit Well No. 958 H
Project:	Eddy County, New Mexico	TVD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Site:	Burch Keely	MD Reference:	RKB=3591+12.5 @ 3603.50usft (United #43)
Well:	Burch Keely Unit Well No. 958 H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original hole	Database:	EDM:5000.1 Database

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100ft)	V. Sec (usft)	Northing (usft)	Easting (usft)	
9,949.00	90.30	88.90	4,879.83	32.74	5,266.43	1.25	5,266.53	661,791.64	596,711.43	
10,010.00	90.30	88.90	4,879.51	33.91	5,327.41	0.00	5,327.52	661,792.81	596,772.41	
Survey projected to 10010.00 MD										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
100.00	100.00	0.61	0.25	Gyro
4,267.00	4,266.70	8.53	11.28	MWD surveys
4,711.00	4,686.35	-14.12	120.36	330 Hard line intercept @ 4711 MD
10,010.00	4,879.51	33.91	5,327.41	Survey projected to 10010.00 MD