



PO Box 1370
Artesia, NM 88211-1370
(575) 748-1288

September 2, 2011

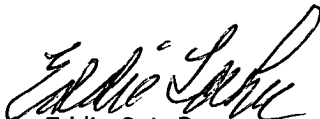
COG, LLC
Fasken Center, Tower II
550 West Texas Ave, Suite 1300
Midland, TX 79701

RE: Burch Keely Unit #594
510' FNL & 1919' FEL
Sec. 23, T17S, R29E
Eddy County, New Mexico

Dear Sir,

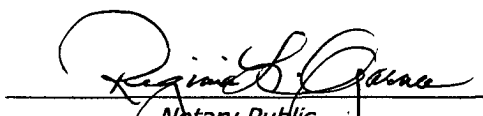
The attached is the Deviation Survey for the above captioned well.

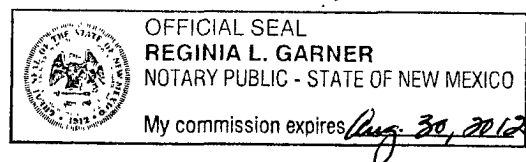
Very truly yours,


Eddie C. LaRue
Operations Manager

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 2nd day of September, 2011.


Notary Public



Burch Keely Unit #594

Date	Depth	Dev/Inc	Dir/AZ	TVD
8/24/2011	311	0.40		
8/24/2011	852	2.00		
8/26/2011	1041	1.10	52.00	
8/26/2011	1105	0.90	21.80	
8/26/2011	1168	1.10	340.60	
8/26/2011	1232	1.70	331.00	
8/26/2011	1296	2.10	312.60	
8/26/2011	1360	2.90	314.00	
8/26/2011	1679	4.60	329.40	
8/26/2011	2029	4.30	317.20	
8/27/2011	2093	4.40	314.90	
8/27/2011	2157	5.00	322.20	
8/27/2011	2220	4.80	323.10	
8/27/2011	2412	4.60	333.60	
8/27/2011	2507	3.90	330.10	
8/27/2011	2603	4.00	329.40	
8/27/2011	2698	4.40		
8/27/2011	2793	4.00	334.50	
8/27/2011	2889	3.50	333.20	
8/28/2011	2984	3.70	332.60	
8/28/2011	3080	4.30	338.10	
8/28/2011	3176	3.90		
8/28/2011	3366	3.30	328.70	
8/28/2011	3462	3.40	311.60	
8/28/2011	3558	3.30	316.70	
8/28/2011	3654	3.70	318.80	
8/28/2011	3717	3.70	319.50	
8/28/2011	3781	3.20	327.90	
8/29/2011	3845	3.30	328.00	
8/29/2011	3908	3.10	334.50	
8/29/2011	3972	2.40	334.70	
8/29/2011	4099	2.00	157.50	
8/29/2011	4163	0.60	186.10	
8/30/2011	4259	0.40	146.50	
8/30/2011	4354	0.40	162.70	
8/30/2011	4545	0.30	85.50	
8/30/2011	4768	0.20	91.90	
8/30/2011	4773	0.30	26.00	



Ryan Energy Directional Drilling Report

Field: Eddy Co, NM
Site: Burch Keely Unit #594
Well: #594
Wellpath: OH

Prepared For:

COG Operating LLC



Ryan Energy Technology

19510 Oil Center Blvd
Houston, TX 77073
Ph 281-443-1414
Fx 281-443-1676

www.ryanenergy.com



Ryan Energy Technologies COMPLETION REPORT



Company: COG Operating LLC
Field: Eddy Co, NM
Site: Burch Keely Unit #594
Well: #594
Wellpath: OH

Date: 8/31/2011 Time: 10 50:18 Page: 1
Co-ordinate(NE) Reference: Site: Burch Keely Unit #594, Grid North
Vertical (TVD) Reference: SITE 3598.0
Section (VS) Reference: Well (0.00N,0.00E,333.08Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Field: Eddy Co, NM
New Mexico
U.S.A.

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Site Centre
Geomagnetic Model: IGRF2010

Site: Burch Keely Unit #594

Eddy Co., NM

Site Position: Northing: 664253 60 ft Latitude: 32 49 32.817 N
From: Map Easting: 589311 30 ft Longitude: 104 2 33.332 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 3598 00 ft Grid Convergence: 0.16 deg

Well: #594

Slot Name:

Well Position: +N/-S 0.00 ft Northing: 664253.60 ft Latitude: 32 49 32.817 N
+E/-W 0.00 ft Easting: 589311 30 ft Longitude: 104 2 33.332 W
Position Uncertainty: 0.00 ft

Wellpath: OH

Drilled From: Surface
Tie-on Depth: 0.00 ft
Above System Datum: Mean Sea Level
Declination: 7.83 deg
Mag Dip Angle: 60 66 deg
Direction deg

Current Datum: SITE Height 3598.00 ft
Magnetic Data: 8/24/2011
Field Strength: 48933 nT
Vertical Section: Depth From (TVD) +N/-S
ft ft
0 00 0 00 0.00 333 08

Survey

MD ft	Incl deg	TVD ft	VS ft	Azim deg	N/S ft	E/W ft	Clsr Dist. ft	Clsr Azi. deg	DLS deg/100ft	Tool
0.00	0.00	0.00	0.00	0 00	0.00	0 00	0 00	0.00	0 00	TIE LINE
100.00	0.26	100.00	0.23	328.98	0 19	-0.12	0.23	328.98	0.26	Gyro
200.00	0.25	200.00	0.66	350.75	0.60	-0.27	0.66	336.01	0.10	Gyro
300.00	0.48	300.00	1.29	338.54	1 21	-0.46	1.29	339.29	0.24	Gyro
400.00	0.64	399.99	2.25	344.75	2 14	-0.76	2.27	340.49	0.17	Gyro
500.00	0.80	499.98	3.38	7.07	3 37	-0.82	3.47	346.35	0.32	Gyro
600.00	1.19	599.97	4.50	31.32	4 95	-0.19	4.95	357.77	0.57	Gyro
700.00	1.85	699.93	5.62	42.24	7.03	1.43	7.18	11 51	0.72	Gyro
800.00	2.04	799.88	6.77	44.18	9.50	3.76	10.22	21 57	0.20	Gyro
900.00	1.59	899.83	7.54	55.04	11 57	6.14	13.10	27 93	0.56	Gyro
1000.00	1.34	999.79	7.96	52.15	13 09	8.20	15.44	32.06	0.26	Gyro
1042.00	1.00	1041.78	8.12	52.00	13 61	8.87	16.25	33.09	0.81	Ryan MWD
1106.00	0.90	1105.78	8.56	21.80	14 42	9.50	17.27	33.37	0.79	Ryan MWD
1150.00	0.99	1149.77	9.15	351.02	15.12	9.57	17.89	32.32	1.16	Ryan MWD
1169.00	1.10	1168.77	9.49	340.60	15 45	9.48	18.13	31.53	1.15	Ryan MWD
1233.00	1.70	1232.75	11.05	331.00	16.86	8.82	19.03	27.60	1.00	Ryan MWD
1297.00	2.10	1296.71	13.09	312.60	18.49	7.49	19.95	22.06	1.13	Ryan MWD
1350.50	2.77	1350.16	15.23	313.83	20.05	5.84	20.88	16.24	1.26	Ryan MWD
1361.00	2.90	1360.65	15.72	314.00	20 41	5.47	21.13	14.99	1.24	Ryan MWD
1424.00	3.30	1423.56	18.92	312.40	22.74	2.98	22.93	7.47	0.65	Ryan MWD
1488.00	4.20	1487.42	22.90	317.00	25.69	0.02	25.69	0.05	1.48	Ryan MWD
1551.00	4.70	1550.23	27.65	321.90	29 41	-3.14	29.58	353.90	1.00	Ryan MWD
1615.00	4.70	1614.02	32.82	326.20	33 65	-6.22	34.22	349.53	0.55	Ryan MWD
1679.00	4.60	1677.81	37.99	329.40	38.04	-8.99	39.09	346.71	0.43	Ryan MWD
1742.00	3.70	1740.64	42.54	332.40	42.02	-11.21	43.49	345.06	1.47	Ryan MWD
1838.00	3.60	1836.45	48.64	339.30	47.58	-13.71	49.52	343.92	0.47	Ryan MWD
1902.00	3.80	1900.31	52.75	334.80	51 38	-15.33	53.62	343.39	0.55	Ryan MWD
1965.00	3.70	1963.18	56.81	318.80	54 80	-17.56	57.54	342.24	1.66	Ryan MWD



Ryan Energy Technologies COMPLETION REPORT



Company: COG Operating LLC
Field: Eddy Co, NM
Site: Burch Keely Unit #594
Well: #594
Wellpath: OH

Date: 8/31/2011 Time: 10:50 18 Page: 2
Co-ordinate(N/E) Reference: Site: Burch Keely Unit #594, Grid North
Vertical (TVD) Reference: SITE 3598.0
Section (VS) Reference: Well (0.00N,0.00E,333.08Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	TVD ft	VS ft	Azim deg	N/S ft	E/W ft	Clsr Dist. ft	Clsr Azi. deg	DLS deg/100ft	Tool
2029.00	4.30	2027.02	61.12	317.20	58.11	-20.55	61.64	340.53	0.95	Ryan MWD
2093.00	4.40	2090.84	65.76	314.90	61.61	-23.91	66.09	338.78	0.31	Ryan MWD
2157.00	5.00	2154.62	70.83	322.20	65.54	-27.36	71.03	337.34	1.32	Ryan MWD
2220.00	4.80	2217.39	76.12	323.10	69.82	-30.63	76.24	336.31	0.34	Ryan MWD
2284.00	4.50	2281.18	81.27	329.60	74.13	-33.51	81.35	335.68	0.95	Ryan MWD
2348.00	4.70	2344.98	86.39	334.50	78.66	-35.91	86.47	335.46	0.69	Ryan MWD
2412.00	4.60	2408.77	91.58	333.60	83.33	-38.18	91.65	335.38	0.19	Ryan MWD
2507.00	3.90	2503.51	98.62	330.00	89.54	-41.49	98.68	335.14	0.79	Ryan MWD
2603.00	4.00	2599.28	105.22	329.40	95.24	-44.82	105.26	334.80	0.11	Ryan MWD
2698.00	4.40	2694.02	112.15	327.90	101.18	-48.45	112.18	334.42	0.44	Ryan MWD
2793.00	4.00	2788.77	119.09	334.50	107.26	-51.81	119.12	334.22	0.66	Ryan MWD
2889.00	3.50	2884.56	125.37	333.20	112.90	-54.57	125.40	334.20	0.53	Ryan MWD
2984.00	3.70	2979.37	131.34	332.60	118.21	-57.29	131.36	334.14	0.21	Ryan MWD
3080.00	4.30	3075.14	138.02	338.00	124.30	-60.06	138.05	334.21	0.74	Ryan MWD
3176.00	3.90	3170.89	144.87	335.90	130.61	-62.74	144.90	334.34	0.44	Ryan MWD
3271.00	3.40	3265.70	150.91	329.50	135.99	-65.49	150.94	334.28	0.68	Ryan MWD
3366.00	3.30	3360.54	156.44	328.70	140.75	-68.34	156.47	334.10	0.12	Ryan MWD
3462.00	3.40	3456.38	161.85	311.60	145.00	-71.91	161.86	333.62	1.04	Ryan MWD
3558.00	3.30	3552.21	167.15	316.70	148.91	-75.93	167.15	332.98	0.33	Ryan MWD
3654.00	3.70	3648.03	172.80	318.80	153.25	-79.87	172.81	332.47	0.44	Ryan MWD
3717.00	3.70	3710.90	176.75	319.50	156.32	-82.53	176.77	332.17	0.07	Ryan MWD
3781.00	3.20	3774.79	180.53	327.90	159.41	-84.82	180.57	331.98	1.11	Ryan MWD
3806.00	3.24	3799.75	181.93	327.94	160.60	-85.56	181.97	331.95	0.16	Ryan MWD
3845.00	3.30	3838.68	184.15	328.00	162.48	-86.74	184.19	331.90	0.15	Ryan MWD
3908.00	3.10	3901.59	187.66	334.50	165.56	-88.44	187.70	331.89	0.66	Ryan MWD
3972.00	2.40	3965.51	190.73	334.70	168.33	-89.75	190.76	331.93	1.09	Ryan MWD
4035.00	0.40	4028.49	192.22	8.60	169.74	-90.28	192.26	331.99	3.30	Ryan MWD
4099.00	2.00	4092.48	191.29	157.50	168.93	-89.82	191.33	332.00	3.67	Ryan MWD
4163.00	0.60	4156.46	189.90	186.10	167.56	-89.43	189.94	331.91	2.35	Ryan MWD
4259.00	0.30	4252.46	189.23	146.40	166.86	-89.35	189.27	331.83	0.43	Ryan MWD
4354.00	0.30	4347.46	188.73	162.70	166.41	-89.14	188.78	331.83	0.09	Ryan MWD
4546.00	0.30	4539.46	188.05	85.50	165.97	-88.48	188.08	331.94	0.19	Ryan MWD
4737.00	0.20	4730.45	187.70	91.90	166.00	-87.65	187.72	332.16	0.05	Ryan MWD
4773.00	0.30	4766.45	187.72	26.00	166.08	-87.55	187.74	332.20	0.79	Ryan MWD
4821.00	0.30	4814.45	187.87	26.00	166.31	-87.44	187.89	332.27	0.00	PROJECTED