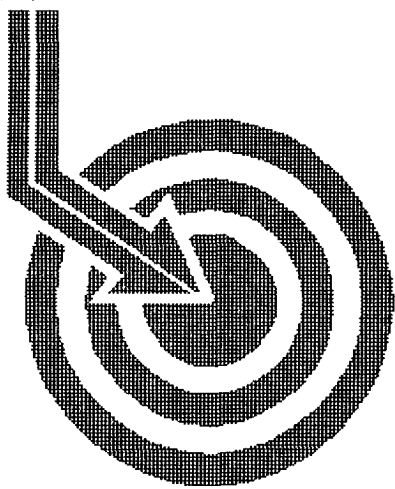
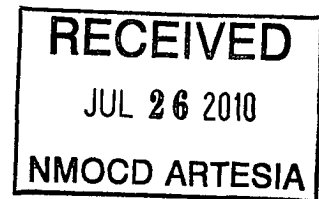


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Scientific Drilling



COG RESOURCES

Field: Grayburg Jackson
Site: Eddy County, NM
Well: GJ West Coop #306
Wellpath: DH - Job #32D0510391
Survey: 05/26/10-05/30/10

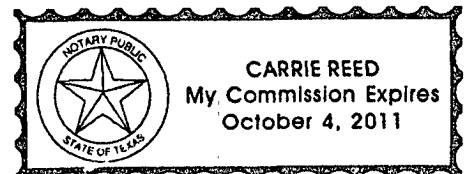
[Handwritten signature]

This survey is correct to the best of my knowledge and is supported by actual field data.

[Handwritten signature]
Company Representative

Notarized this date 21st of June, 2010.

[Handwritten signature: Carrie Reed]
Notary Signature
County of Midland
State of Texas





Scientific Drilling International, Inc.

Survey Report

Company: COG RESOURCES Date: 6/1/2010 Time: 20:21:18 Page: 1
Field: Grayburg Jackson Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North
Site: Eddy County, NM Vertical (TVD) Reference: SITE 0.0
Well: GJ West Coop #306 Section (VS) Reference: Well (0.00N,0.00E,143.93Azi)
Wellpath: VH - Job #32K0510396 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 05/26/10 Start Date: 5/26/2010
KSRG 0'-853'
Company: Scientific Drilling Internatio Engineer: Madrid/rowe/Renteria
Tool: Keeper,Keeper Gyro Tied-to: From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.0	0.00	359.86	0.0	0.0	0.0	0.0	0.00	0.0	0.00
100.0	0.60	12.23	100.0	-0.3	0.5	0.1	0.60	0.5	12.23
200.0	0.28	4.61	200.0	-0.9	1.3	0.2	0.32	1.3	10.79
300.0	0.32	9.28	300.0	-1.3	1.8	0.3	0.05	1.8	9.73
400.0	0.56	27.60	400.0	-1.7	2.5	0.6	0.28	2.6	13.04
500.0	1.20	63.23	500.0	-1.7	3.4	1.7	0.81	3.8	27.09
600.0	1.66	65.24	599.9	-1.3	4.5	4.0	0.46	6.0	41.70
700.0	2.01	61.28	699.9	-0.8	5.9	6.8	0.37	9.1	49.10
800.0	1.54	53.30	799.8	-0.6	7.6	9.5	0.53	12.1	51.32
853.0	1.65	59.77	852.8	-0.5	8.4	10.7	0.40	13.6	51.89



Scientific Drilling International, Inc.

Survey Report

Company: COG RESOURCES
Field: Grayburg Jackson
Site: Eddy County, NM
Well: GJ West Coop #306
Wellpath: DH - Job #32D0510391

Date: 6/1/2010
Co-ordinate(NE) Reference: Site. Eddy County, NM, Grid North
Vertical (TV D) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,143.93Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

Survey: 05/26/10-05/30/10
Start Date: 5/26/2010
Company: Scientific Drilling Internatio
Tool: MWD,MWD
Engineer: McCormick/Hansen/Stevens
Tied-to: From: Definitive Path

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
853.0	1.65	59.77	852.8	-0.5	8.4	10.7	0.00	13.6	51.89
889.0	1.57	55.61	888.8	-0.4	8.9	11.5	0.39	14.6	52.30
952.0	1.59	86.91	951.8	0.1	9.5	13.1	1.35	16.2	54.23
1016.0	2.26	125.13	1015.8	1.8	8.8	15.0	2.20	17.4	59.74
1080.0	3.62	134.74	1079.7	5.0	6.6	17.5	2.25	18.7	69.27
1144.0	4.55	137.45	1143.5	9.5	3.3	20.7	1.48	20.9	80.83
1207.0	5.31	140.23	1206.3	14.9	-0.7	24.2	1.26	24.2	91.76
1303.0	6.47	141.32	1301.8	24.7	-8.4	30.4	1.21	31.6	105.39
1366.0	6.05	140.46	1364.4	31.6	-13.7	34.8	0.68	37.4	111.52
1430.0	6.61	143.67	1428.0	38.6	-19.3	39.1	1.03	43.6	116.25
1501.0	7.75	143.11	1498.4	47.5	-26.4	44.4	1.61	51.7	120.74
1565.0	8.73	146.50	1561.8	56.6	-33.9	49.7	1.71	60.1	124.32
1660.0	8.58	149.47	1655.7	70.9	-46.0	57.2	0.50	73.5	128.79
1756.0	8.74	145.97	1750.6	85.3	-58.2	65.0	0.57	87.2	131.87
1851.0	8.86	149.45	1844.5	99.8	-70.5	72.7	0.57	101.3	134.12
1947.0	9.52	147.92	1939.3	115.1	-83.6	80.7	0.73	116.2	136.01
2042.0	8.70	144.34	2033.1	130.1	-96.1	89.1	1.05	131.0	137.18
2138.0	8.81	146.10	2127.9	144.7	-108.1	97.4	0.30	145.5	137.98
2234.0	9.42	151.33	2222.7	159.9	-121.1	105.3	1.07	160.5	139.00
2329.0	9.18	150.33	2316.5	175.1	-134.5	112.7	0.30	175.5	140.03
2425.0	9.05	150.40	2411.3	190.2	-147.7	120.3	0.14	190.5	140.85
2520.0	9.66	145.25	2505.0	205.6	-160.8	128.5	1.09	205.8	141.37
2616.0	9.32	145.22	2599.7	221.4	-173.8	137.5	0.35	221.6	141.64
2712.0	9.35	147.77	2694.4	237.0	-186.8	146.1	0.43	237.1	141.96
2807.0	8.46	145.73	2788.3	251.7	-199.1	154.2	0.99	251.8	142.24
2903.0	8.54	145.35	2883.2	265.9	-210.8	162.2	0.10	265.9	142.42
2998.0	7.88	150.24	2977.2	279.4	-222.2	169.4	1.01	279.4	142.67
3094.0	7.96	149.46	3072.3	292.5	-233.7	176.1	0.14	292.6	143.00
3189.0	7.91	149.06	3166.4	305.6	-244.9	182.8	0.08	305.6	143.27
3285.0	7.93	148.05	3261.5	318.8	-256.2	189.7	0.15	318.8	143.48
3380.0	7.96	148.41	3355.6	331.9	-267.4	196.6	0.06	331.9	143.67
3476.0	7.04	141.88	3450.8	344.4	-277.7	203.7	1.30	344.4	143.73
3572.0	6.17	144.66	3546.1	355.4	-286.5	210.3	0.97	355.4	143.72
3635.0	5.64	145.41	3608.8	361.9	-291.8	214.0	0.85	361.9	143.74
3699.0	4.82	142.43	3672.5	367.7	-296.5	217.5	1.35	367.7	143.74
3763.0	3.71	146.24	3736.4	372.5	-300.4	220.3	1.79	372.5	143.75
3827.0	2.11	158.34	3800.3	375.7	-303.2	221.8	2.66	375.7	143.81
3891.0	0.51	164.57	3864.3	377.1	-304.6	222.4	2.51	377.1	143.87