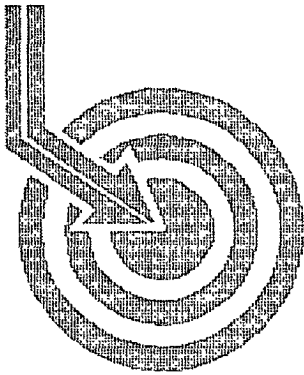
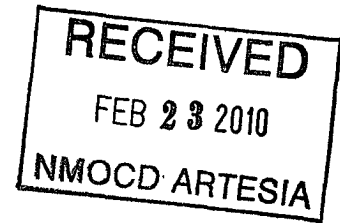


30 015 31353



Scientific Drilling



COG RESOURCES

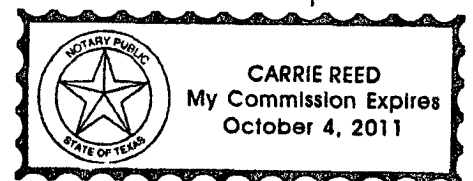
Field: Loco Hills
Site: Eddy County, NM
Well: Dexter Federal #12
Wellpath: DH - Job #32D1109509
Survey: 11/24/09-11/28/09

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

Richard Company Representative

Notorized this date 10th of December, 2009.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific Drilling International

Survey Report

Company: COG RESOURCES
Field: Loco Hills
Site: Eddy County, NM
Well: Dexter Federal #12
Wellpath: VH - Job #32K1109511

Date: 11/30/2009 Time: 12:37:43 Page: 1
Co-ordinate(N/E) Reference: Site: Eddy County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,347.63Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 11/24/09
KSRG 0'-1263'

Start Date: 11/24/2009

Company: Scientific Drilling Internatio
Tool: Keeper, Keeper Gyro

Engineer: Melendez w/Gray
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
0.00	0.00	359.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.48	256.07	100.00	-0.01	-0.10	-0.41	0.48	0.42	256.07
200.00	0.91	276.45	199.99	0.23	-0.11	-1.60	0.49	1.61	265.98
300.00	2.44	304.03	299.95	2.03	1.17	-4.16	1.69	4.32	285.70
400.00	2.34	300.27	399.86	4.96	3.39	-7.68	0.19	8.40	293.80
500.00	1.35	305.67	499.81	7.21	5.10	-10.40	1.00	11.59	296.14
600.00	1.23	307.16	599.78	8.91	6.44	-12.22	0.12	13.81	297.80
700.00	1.07	313.06	699.76	10.49	7.73	-13.75	0.20	15.77	299.32
800.00	0.84	311.13	799.75	11.85	8.85	-14.99	0.23	17.40	300.55
900.00	0.71	313.57	899.74	12.95	9.75	-15.99	0.13	18.73	301.39
1000.00	0.58	337.96	999.73	13.97	10.65	-16.63	0.30	19.75	302.64
1100.00	0.90	22.21	1099.72	15.11	11.85	-16.52	0.63	20.33	305.64
1200.00	1.21	32.48	1199.71	16.51	13.46	-15.66	0.36	20.65	310.70
1263.00	1.58	29.92	1262.69	17.62	14.78	-14.87	0.60	20.96	314.83



Scientific Drilling International Survey Report

Company: COG RESOURCES	Date: 11/30/2009	Time: 16:13:10	Page: 1
Field: Loco Hills	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Dexter Federal #12	Section (VS) Reference:	Well (0.00N,0.00E,347.63Azi)	
Wellpath: DH - Job #32D1109509	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 11/24/09-11/28/09	Start Date: 11/24/2009
MWD 1327'-4394'	
Company: Scientific Drilling Internatio	Engineer: McCormick/Baldwin
Tool: MWD;MWD	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
1263.00	1.58	29.92	1262.69	17.62	14.78	-14.87	0.00	20.96	314.83
1327.00	1.59	25.35	1326.66	18.97	16.35	-14.05	0.20	21.55	319.33
1399.00	1.76	24.68	1398.63	20.65	18.25	-13.16	0.24	22.50	324.22
1463.00	2.93	17.47	1462.58	22.85	20.71	-12.25	1.88	24.06	329.38
1527.00	3.55	11.50	1526.48	26.08	24.21	-11.37	1.10	26.74	334.84
1590.00	4.44	3.06	1589.32	30.22	28.55	-10.85	1.69	30.55	339.20
1654.00	5.09	358.79	1653.10	35.39	33.87	-10.78	1.16	35.54	342.35
1718.00	6.00	356.59	1716.80	41.48	40.04	-11.04	1.46	41.54	344.59
1781.00	6.88	352.25	1779.40	48.49	47.07	-11.74	1.60	48.51	345.99
1845.00	7.92	347.42	1842.87	56.72	55.17	-13.22	1.89	56.73	346.53
1909.00	8.99	347.56	1906.17	66.13	64.36	-15.26	1.67	66.14	346.66
1973.00	9.15	348.70	1969.37	76.22	74.23	-17.33	0.38	76.23	346.86
2069.00	8.70	349.70	2064.21	91.11	88.86	-20.12	0.50	91.11	347.24
2163.00	8.26	347.90	2157.18	104.97	102.46	-22.81	0.55	104.97	347.45
2228.00	8.68	346.76	2221.47	114.54	111.80	-24.91	0.70	114.54	347.44
2292.00	8.55	347.04	2284.75	124.13	121.13	-27.09	0.21	124.13	347.40
2388.00	9.13	344.17	2379.61	138.86	135.42	-30.76	0.76	138.87	347.20
2483.00	8.69	345.07	2473.47	153.56	149.60	-34.67	0.49	153.57	346.95
2547.00	8.55	345.07	2536.74	163.14	158.87	-37.14	0.22	163.15	346.84
2643.00	8.19	346.46	2631.72	177.11	172.41	-40.58	0.43	177.13	346.76
2738.00	8.00	348.17	2725.77	190.48	185.46	-43.52	0.32	190.50	346.79
2802.00	8.85	344.73	2789.08	199.85	194.57	-45.73	1.54	199.87	346.77
2898.00	9.44	343.94	2883.86	215.08	209.26	-49.85	0.63	215.12	346.60
2993.00	8.37	347.04	2977.72	229.77	223.49	-53.56	1.23	229.81	346.52
3089.00	8.42	347.07	3072.69	243.79	237.15	-56.70	0.05	243.83	346.55
3153.00	8.42	347.10	3136.00	253.16	246.28	-58.79	0.01	253.20	346.57
3248.00	8.39	348.10	3229.98	267.04	259.84	-61.77	0.16	267.08	346.63
3344.00	8.65	347.73	3324.92	281.27	273.75	-64.75	0.28	281.30	346.69
3439.00	7.60	350.66	3418.96	294.68	286.93	-67.29	1.19	294.71	346.80
3534.00	7.59	351.43	3513.13	307.22	299.33	-69.24	0.11	307.24	346.97
3630.00	7.60	351.86	3608.29	319.87	311.89	-71.09	0.06	319.89	347.16
3726.00	7.63	351.97	3703.44	332.56	324.48	-72.88	0.03	332.56	347.34
3789.00	7.66	352.26	3765.88	340.92	332.78	-74.03	0.08	340.92	347.46
3853.00	6.97	349.65	3829.36	349.05	340.83	-75.30	1.20	349.05	347.54
3917.00	5.80	347.25	3892.96	356.16	347.80	-76.71	1.87	356.16	347.56
3949.00	5.60	346.55	3924.80	359.34	350.90	-77.43	0.66	359.34	347.56
4012.00	5.06	349.82	3987.53	365.19	356.62	-78.64	0.98	365.19	347.57
4076.00	3.96	353.94	4051.33	370.21	361.60	-79.37	1.79	370.21	347.62
4140.00	2.62	349.85	4115.23	373.87	365.24	-79.86	2.12	373.87	347.67
4203.00	1.59	328.09	4178.18	376.13	367.40	-80.58	2.04	376.13	347.63
4267.00	0.81	307.86	4242.17	377.31	368.43	-81.40	1.37	377.31	347.54
4331.00	0.41	327.84	4306.17	377.88	368.90	-81.88	0.70	377.88	347.49
4394.00	0.62	341.11	4369.16	378.43	369.41	-82.11	0.38	378.43	347.47