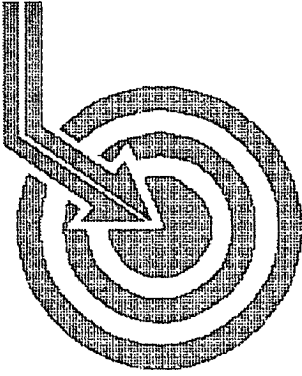




Scientific Drilling

30-045-33197

Surf 1030/N 1320/E

BHL 1958/N 829/E

BURLINGTON RESOURCES

MD-7443

TVL 7275

Field: Hardie

Site: Rio Arriba County, NM

Well: Hardie #5M

Wellpath: DH - Job #33D126989

Survey: 12/05/06-12/20/06

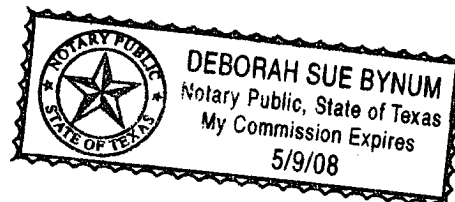
This survey is correct to the best of my knowledge
and is supported by actual field data.

Richard Company Representative

Notorized this date 16th of January, 2007.

Deborah Sue Bynum
Notary Signature

County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: BURLINGTON RESOURCES
Field: Hardie
Site: Rio Arriba County, NM
Well: Hardie #5M
Wellpath: DH - Job #33D126989

Date: 01/16/2007 Time: 16:42:59 Page: 1
Co-ordinate(NE) Reference: Site: Rio Arriba County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,151.78Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 12/05/06-12/20/06 Start Date: 12/05/2006
Company: Scientific Drilling Internatio Engineer: Calvert/Lowe/Oleniczak/Rasmuss
Tool: E-field;E-field Tied-to: From Surface

Survey

MD ft	Incl deg	Azlm deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
322.00	1.50	194.10	321.96	3.12	-4.09	-1.03	0.47	4.21	194.10
400.00	2.15	188.81	399.92	5.04	-6.52	-1.50	0.86	6.69	192.95
461.00	2.74	167.27	460.87	7.36	-9.08	-1.35	1.77	9.18	188.48
522.00	4.35	155.35	521.75	11.07	-12.60	-0.07	2.89	12.60	180.31
584.00	6.18	148.16	583.49	16.75	-17.57	2.67	3.13	17.78	171.35
645.00	8.39	149.23	643.99	24.47	-24.19	6.68	3.63	25.09	164.55
707.00	10.71	152.56	705.13	34.75	-33.19	11.65	3.85	35.18	160.65
768.00	13.19	150.92	764.80	47.38	-44.30	17.65	4.10	47.69	158.28
831.00	16.09	149.46	825.75	63.30	-58.11	25.58	4.64	63.49	156.24
893.00	19.03	149.15	884.85	81.98	-74.19	35.13	4.74	82.09	154.66
954.00	20.10	148.68	942.33	102.38	-91.68	45.68	1.77	102.43	153.52
1018.00	20.12	152.34	1002.43	124.37	-110.83	56.51	1.97	124.40	152.98
1082.00	19.89	154.52	1062.57	146.25	-130.40	66.30	1.22	146.29	153.05
1145.00	20.61	156.38	1121.68	168.01	-150.24	75.35	1.53	168.08	153.36
1205.00	21.29	154.05	1177.71	189.42	-169.71	84.35	1.79	189.51	153.57
1268.00	21.44	149.61	1236.39	212.36	-189.93	95.18	2.58	212.44	153.38
1331.00	20.90	148.56	1295.13	235.08	-209.45	106.87	1.05	235.13	152.97
1394.00	20.38	148.95	1354.09	257.26	-228.43	118.39	0.85	257.29	152.60
1457.00	19.99	151.53	1413.22	278.98	-247.30	129.18	1.54	279.00	152.42
1520.00	19.74	152.57	1472.47	300.39	-266.20	139.21	0.69	300.41	152.39
1583.00	19.24	151.48	1531.86	321.41	-284.77	149.07	0.98	321.43	152.37
1646.00	19.14	150.56	1591.36	342.12	-302.88	159.10	0.51	342.13	152.29
1708.00	18.53	151.00	1650.04	362.13	-320.35	168.88	1.01	362.14	152.20
1770.00	17.73	150.94	1708.96	381.42	-337.22	178.24	1.29	381.43	152.14
1832.00	18.42	152.04	1767.90	400.65	-354.13	187.42	1.24	400.66	152.11
1896.00	20.02	152.16	1828.34	421.72	-372.74	197.27	2.50	421.73	152.11
1960.00	20.42	152.30	1888.39	443.84	-392.32	207.58	0.63	443.85	152.12
2021.00	20.39	152.39	1945.56	465.11	-411.16	217.45	0.07	465.12	152.13
2084.00	19.95	151.07	2004.70	486.83	-430.29	227.74	1.00	486.84	152.11
2146.00	19.46	151.97	2063.07	507.73	-448.66	237.71	0.93	507.74	152.08
2209.00	20.35	152.78	2122.31	529.18	-467.67	247.65	1.48	529.19	152.10
2272.00	20.27	154.80	2181.39	551.03	-487.28	257.31	1.12	551.04	152.16
2334.00	19.98	154.04	2239.60	572.34	-506.52	266.52	0.63	572.36	152.25
2394.00	19.21	154.64	2296.13	592.44	-524.66	275.23	1.33	592.47	152.32
2458.00	18.84	151.14	2356.63	613.29	-543.22	284.73	1.87	613.32	152.34
2520.00	19.36	150.60	2415.22	633.58	-560.95	294.60	0.89	633.60	152.29
2583.00	18.68	150.29	2474.78	654.10	-578.81	304.73	1.09	654.12	152.23
2646.00	19.36	150.45	2534.34	674.63	-596.65	314.88	1.08	674.64	152.18
2710.00	18.35	150.12	2594.91	695.30	-614.62	325.13	1.59	695.32	152.12
2773.00	19.00	151.91	2654.59	715.47	-632.26	334.90	1.38	715.48	152.09
2836.00	19.31	150.77	2714.10	736.14	-650.40	344.82	0.77	736.15	152.07
2899.00	18.60	149.96	2773.69	756.60	-668.19	354.93	1.20	756.61	152.02
2962.00	18.95	151.51	2833.33	776.87	-685.88	364.84	0.97	776.88	151.99
3025.00	18.67	153.17	2892.97	797.18	-703.87	374.27	0.96	797.19	152.00
3088.00	17.95	152.52	2952.78	816.97	-721.48	383.30	1.19	816.98	152.02
3151.00	17.97	154.74	3012.71	836.38	-738.88	391.93	1.09	836.39	152.06
3214.00	18.88	153.80	3072.48	856.27	-756.81	400.58	1.52	856.29	152.11
3277.00	18.76	150.37	3132.11	876.59	-774.77	410.09	1.77	876.60	152.11



Scientific Drilling International Survey Report

Company: BURLINGTON RESOURCES	Date: 01/16/2007	Time: 16:42:59	Page: 2
Field: Hardie	Co-ordinate(NE) Reference:	Site: Rio Arriba County, NM, Grid North	
Site: Rio Arriba County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Hardie #5M	Section (VS) Reference:	Well (0.00N,0.00E,151.78Azi)	
Wellpath: DH - Job #33D126989	Survey Calculation Method:	Minimum Curvature	Db: Sybase

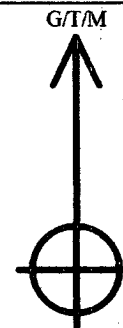
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
3339.00	18.37	150.48	3190.89	896.32	-791.93	419.83	0.63	896.33	152.07
3402.00	18.51	151.05	3250.65	916.25	-809.32	429.56	0.36	916.26	152.04
3465.00	18.55	152.79	3310.39	936.27	-826.99	438.99	0.88	936.28	152.04
3527.00	16.69	150.75	3369.48	955.03	-843.53	447.85	3.16	955.04	152.04
3590.00	16.17	151.39	3429.90	972.85	-859.12	456.47	0.87	972.86	152.02
3654.00	15.21	153.47	3491.52	990.15	-874.46	464.48	1.74	990.16	152.02
3716.00	13.95	152.93	3551.52	1005.75	-888.39	471.52	2.04	1005.76	152.04
3779.00	11.36	152.55	3612.99	1019.55	-900.66	477.84	4.11	1019.56	152.05
3842.00	7.93	153.59	3675.09	1030.10	-910.06	482.63	5.45	1030.12	152.06
3905.00	6.72	155.80	3737.57	1038.12	-917.31	486.07	1.97	1038.14	152.08
3968.00	5.15	156.60	3800.23	1044.62	-923.27	488.71	2.50	1044.64	152.11
4031.00	2.00	145.53	3863.10	1048.53	-926.77	490.45	5.10	1048.55	152.11
4036.00	1.92	144.82	3868.10	1048.70	-926.91	490.55	1.67	1048.72	152.11
4080.00	1.22	138.57	3912.08	1049.89	-927.87	491.29	1.64	1049.91	152.10



**Scientific
Drilling**

Field: Hardie
Site: Rio Arriba County, NM
Well: Hardie #5M
Wellpath: DH - Job #33D126989
Survey: 12/05/06-12/20/06



Azimuths to Grid North
True North: 0.00°
Magnetic North: 0.00°

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 01/16/2007
Model: igrf2000

West(-)/East(+) [200ft/in]

South(-)/North(+) [200ft/in]

