

LEAM Drilling Systems, Inc.
Survey Report

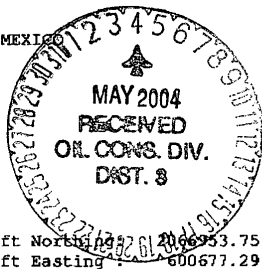
30-039-24529

Company: ConocoPhillips Company
Field: RIO ARriba COUNTY, NEW MEXICO
Site: SAN JUAN 29-6 NO. 109
Well: Q4021-MID
Wellpath: MWD

Survey: MWD
Tied-to: From Surface

Well: Q4021-MID

Well Position: +N/-S 0.00 ft Northing 2086953.75 ft
+E/-W 0.00 ft Easting 600677.29 ft
Position Uncertainty: 0.00 ft



Date: 3/12/2004 Time: 11:44:17 Page: 1
Co-ordinate(N/E) Reference: Site: SAN JUAN 29-6 NO. 109, True North
Vertical (TVD) Reference: RKB 13.0
Section (VS) Reference: Well (0.00N,0.00E,270.00Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Start Date: 3/12/2004

Slot Name:

Latitude: 36 40 48.000 N
Longitude: 107 29 24.000 W

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn 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	0.00	0.00
299.00	0.40	280.40	299.00	0.19	-1.03	1.03	0.13	0.13	0.00	1.04	280.40
358.00	2.70	281.30	357.97	0.50	-2.59	2.59	3.90	3.90	1.53	2.64	280.87
446.00	5.80	278.70	445.72	1.58	-9.02	9.02	3.53	3.52	-2.95	9.16	279.91
536.00	5.80	279.20	535.26	2.99	-18.01	18.01	0.06	0.00	0.56	18.25	279.43
596.00	7.80	270.60	594.84	3.52	-25.07	25.07	3.73	3.33	-14.33	25.32	277.99
687.00	9.80	270.00	684.76	3.58	-38.99	38.99	2.20	2.20	-0.66	39.16	275.25
776.00	10.50	272.90	772.37	3.99	-54.66	54.66	0.97	0.79	3.26	54.81	274.18
869.00	12.70	275.70	863.46	5.44	-73.30	73.30	2.44	2.37	3.01	73.50	274.24
963.00	14.70	268.10	954.79	6.07	-95.51	95.51	2.86	2.13	-8.09	95.70	273.64
1056.00	15.50	265.50	1044.58	4.70	-119.69	119.69	1.13	0.86	-2.80	119.78	272.25
1150.00	15.60	264.30	1135.14	2.46	-144.79	144.79	0.36	0.11	-1.28	144.81	270.97
1244.00	17.80	261.10	1225.17	-1.02	-171.56	171.56	2.54	2.34	-3.40	171.57	269.66
1337.00	18.80	262.00	1313.47	-5.30	-200.45	200.45	1.12	1.08	0.97	200.52	268.49
1430.00	18.60	269.50	1401.57	-7.52	-230.12	230.12	2.59	-0.22	8.06	230.25	268.13
1524.00	17.40	273.90	1490.97	-6.69	-259.14	259.14	1.93	-1.28	4.68	259.22	268.52
1617.00	16.50	275.20	1579.93	-4.55	-286.16	286.16	1.05	-0.97	1.40	286.20	269.09
1712.00	14.50	273.60	1671.47	-2.58	-311.47	311.47	2.15	-2.11	-1.68	311.48	269.53
1805.00	13.40	271.80	1761.73	-1.51	-333.86	333.86	1.27	-1.18	-1.94	333.87	269.74
1896.00	12.50	270.80	1850.41	-1.04	-354.25	354.25	1.02	-0.99	-1.10	354.25	269.83

MD ft	Incl deg	Asim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	ClsD ft	ClsA deg
1989.00	12.30	272.00	1941.24	-0.55	-374.21	374.21	0.35	-0.22	1.29	374.21	269.92
2082.00	9.40	273.40	2032.57	0.24	-391.70	391.70	3.13	-3.12	1.51	391.70	270.04
2188.00	7.90	267.90	2137.36	0.49	-407.62	407.62	1.61	-1.42	-5.19	407.62	270.07
2283.00	6.00	264.80	2231.66	-0.20	-419.09	419.09	2.04	-2.00	-3.26	419.09	269.97
2377.00	5.20	262.30	2325.21	-1.22	-428.20	428.20	0.89	-0.85	-2.66	428.21	269.84
2471.00	2.90	258.90	2418.97	-2.25	-434.76	434.76	2.46	-2.45	-3.62	434.77	269.70
2503.00	2.10	250.00	2450.94	-2.60	-436.11	436.11	2.77	-2.50	-27.81	436.11	269.66
2553.00	2.10	250.00	2500.91	-3.23	-437.83	437.83	0.00	0.00	0.00	437.84	269.58

Annotation

MD ft	TVD ft	
2553.00	2500.91	PROJECTION TO TD MD:2553'

Well : San Juan 29-6 Well 109
Rio Arriba County, New Mexico

*This Borehole Survey has been conducted and calculated
according to the highest professional standards and complies
with all known State & Federal requirements.*

Reviewed and approved

Date: 3/12/04

By:

Name:

Title:

Nora M. Tucker

Operations Manager

LEAM Drilling Systems, Inc.