

LEAM Drilling Systems, Inc.

Survey Calculations

30-039-27544

LEAM Job Number: D-3846-MD

Operator: Conoco-Phillips

Location: Rio Arriba County, NM

Lease/Well: San Juan 29-6 Unit 203A

Calculation Method: Minimum Curvature

Proposed Azimuth: 90.00

Bearing: N90.00E

Units: English(ft)

MeasDepth	CrsLen	Drift	Azimuth	Bearing	TVD	Vsect	NS(±)	EW(±)	Build	Turn	Dogleg
Surface Location											
0.00	0.00	0.00	0.00	N0.00E	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MWD Surveys											
1855.00	1855.00	1.50	300.20	N59.80W	1854.79	-20.99	12.21	-20.99	0.08	-3.22	0.08
1954.00	99.00	1.30	305.90	N54.10W	1953.76	-23.01	13.52	-23.01	-0.20	5.76	0.25
1985.00	31.00	0.80	331.40	N28.60W	1984.75	-23.40	13.92	-23.40	-1.61	82.26	2.17
2077.00	92.00	2.50	79.00	N79.00E	2076.72	-21.74	14.87	-21.74	1.85	116.96	3.09
2170.00	93.00	4.00	93.60	S86.40E	2169.57	-16.51	15.05	-16.51	1.61	15.70	1.83
2263.00	93.00	4.10	83.10	N83.10E	2262.34	-9.97	15.25	-9.97	0.11	-11.29	0.80
2356.00	93.00	4.50	83.10	N83.10E	2355.08	-3.05	16.08	-3.05	0.43	0.00	0.43
2450.00	94.00	4.30	82.70	N82.70E	2448.80	4.10	16.97	4.10	-0.21	-0.43	0.22
2543.00	93.00	4.10	82.40	N82.40E	2541.55	10.86	17.86	10.86	-0.22	-0.32	0.22
2638.00	95.00	1.90	105.30	S74.70E	2636.42	15.74	17.89	15.74	-2.32	24.11	2.59
2669.00	31.00	1.70	109.40	S70.60E	2667.41	16.67	17.60	16.67	-0.65	13.23	0.77
Projection to bit											
2709.00	40.00	1.70	109.40	S70.60E	2707.39	17.79	17.21	17.79	0.00	0.00	0.00

