



Helmer Directional Drilling Inc.

Smith Production Company Baccigolopi #1 Rev. #4 Little Cheniere As Drilled		Page: 1 Minimum of Curvature Slot Location: 428609.00', 1485625.00' Plane of Vertical Section: 140.45°
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Measured Depth Feet	BORE Inc Degrees	HOLE Direction Degrees	True Vertical Depth Feet	RECTANGULAR COORDINATES		LAMBERT COORDINATES		Vertical Section Feet	CLOSURES		Dogleg Severity Deg/100'
				North(-South) Feet	East(-West) Feet	Y Feet	X Feet		Distance Feet	Direction Deg	
0.00	0.00	0.00	0.00	0.00	0.00	428609.00	1485625.00	0.00	0.00	0.00	0.00
100.00	0.25	325.71	100.00	0.18	-0.12	428609.18	1485624.88	-0.22	0.22	325.71	0.25
200.00	0.25	182.97	200.00	0.14	-0.26	428609.14	1485624.74	-0.27	0.29	299.02	0.47
300.00	0.25	164.10	300.00	-0.29	-0.21	428608.71	1485624.79	0.09	0.35	216.20	0.08
400.00	0.25	133.23	400.00	-0.64	0.01	428608.36	1485625.01	0.50	0.64	179.11	0.13
500.00	0.25	198.36	500.00	-1.00	0.10	428608.00	1485625.10	0.84	1.01	174.28	0.27
600.00	0.25	300.49	600.00	-1.10	-0.16	428607.90	1485624.84	0.75	1.11	188.11	0.39
700.00	0.25	293.62	700.00	-0.90	-0.54	428608.10	1485624.46	0.35	1.05	211.19	0.03
800.00	0.25	241.75	799.99	-0.91	-0.94	428608.09	1485624.06	0.11	1.31	225.66	0.22
900.00	0.25	178.88	899.99	-1.24	-1.12	428607.76	1485623.88	0.24	1.67	222.28	0.26
1000.00	0.25	346.01	999.99	-1.24	-1.17	428607.76	1485623.83	0.21	1.71	223.34	0.50
1100.00	0.25	322.14	1099.99	-0.86	-1.36	428608.14	1485623.64	-0.20	1.61	237.72	0.10
1200.00	0.50	246.28	1199.99	-0.86	-1.89	428608.14	1485623.11	-0.54	2.08	245.51	0.50
1300.00	0.75	238.06	1299.98	-1.38	-2.85	428607.62	1485622.15	-0.75	3.17	244.08	0.26
1400.00	1.25	244.19	1399.97	-2.20	-4.38	428606.80	1485620.62	-1.09	4.91	243.30	0.51
1500.00	1.00	228.32	1499.95	-3.26	-6.02	428605.74	1485618.98	-1.32	6.84	241.56	0.40
1600.00	1.25	224.45	1599.93	-4.62	-7.43	428604.38	1485617.57	-1.17	8.75	238.15	0.26
1700.00	1.00	209.58	1699.91	-6.16	-8.63	428602.84	1485616.37	-0.75	10.60	234.49	0.38
1800.00	0.75	205.71	1799.90	-7.51	-9.34	428601.49	1485615.66	-0.16	11.98	231.23	0.26
1900.00	0.50	218.84	1899.89	-8.43	-9.90	428600.57	1485615.10	0.20	13.01	229.57	0.29
2000.00	0.25	244.97	1999.89	-8.87	-10.37	428600.13	1485614.63	0.23	13.65	229.47	0.30
2100.00	0.50	282.10	2099.89	-8.87	-11.00	428600.13	1485614.00	-0.16	14.13	231.12	0.34
2200.00	0.25	293.18	2199.89	-8.69	-11.62	428600.31	1485613.38	-0.70	14.51	233.22	0.26
2300.00	0.50	279.26	2299.89	-8.53	-12.26	428600.47	1485612.74	-1.22	14.93	235.15	0.26
2400.00	0.75	277.34	2399.88	-8.38	-13.33	428600.62	1485611.67	-2.03	15.75	237.85	0.25
2500.00	0.50	280.42	2499.87	-8.22	-14.41	428600.78	1485610.59	-2.84	16.59	240.31	0.25
2600.00	0.75	261.50	2599.87	-8.24	-15.49	428600.76	1485609.51	-3.51	17.54	242.00	0.32

Helmer Directional Drilling Inc.

Smith Production Company Baccigolopi #1 Rev. #4 Little Cheniere As Drilled		Page: 2 Minimum of Curvature Slot Location: 428609.00', 1485625.00' Plane of Vertical Section: 140.45°
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Measured Depth Feet	BORE Inc Degrees	HOLE Direction Degrees	True Vertical Depth Feet	RECTANGULAR COORDINATES		LAMBERT COORDINATES		Vertical Section Feet	CLOSURES		Dogleg Severity Deg/100'
				North(-South) Feet	East(-West) Feet	Y Feet	X Feet		Distance Feet	Direction Deg	
2700.00	0.50	230.58	2699.86	-8.61	-16.47	428600.39	1485608.53	-3.85	18.59	242.41	0.41
2800.00	0.50	251.66	2799.86	-9.02	-17.23	428599.98	1485607.77	-4.01	19.45	242.35	0.18
2900.00	0.75	268.74	2899.85	-9.18	-18.29	428599.82	1485606.71	-4.57	20.47	243.36	0.31
3000.00	0.50	270.82	2999.85	-9.18	-19.38	428599.82	1485605.62	-5.26	21.45	244.65	0.25
3100.00	0.50	270.82	3099.84	-9.17	-20.26	428599.83	1485604.74	-5.83	22.24	245.64	0.00
3200.00	0.25	215.98	3199.84	-9.34	-20.82	428599.66	1485604.18	-6.06	22.82	245.84	0.41
3300.00	0.50	262.46	3299.84	-9.58	-21.38	428599.42	1485603.62	-6.23	23.43	245.88	0.37
3400.00	0.50	252.54	3399.83	-9.76	-22.23	428599.24	1485602.77	-6.63	24.28	246.29	0.09
3500.00	0.25	245.63	3499.83	-9.98	-22.85	428599.02	1485602.15	-6.85	24.93	246.39	0.25
3600.00	0.50	250.71	3599.83	-10.22	-23.46	428598.78	1485601.54	-7.06	25.59	246.46	0.25
3700.00	0.50	246.79	3699.83	-10.53	-24.27	428598.47	1485600.73	-7.33	26.46	246.54	0.03
3800.00	0.25	262.87	3799.82	-10.73	-24.89	428598.27	1485600.11	-7.57	27.10	246.67	0.27
3900.00	0.25	240.95	3899.82	-10.87	-25.29	428598.13	1485599.71	-7.73	27.53	246.75	0.10
4000.00	0.75	232.03	3999.82	-11.38	-26.00	428597.62	1485599.00	-7.79	28.38	246.37	0.50
4100.00	0.75	213.12	4099.81	-12.33	-26.87	428596.67	1485598.13	-7.61	29.57	245.36	0.25
4200.00	0.50	195.21	4199.80	-13.30	-27.35	428595.70	1485597.65	-7.16	30.41	244.07	0.31
4300.00	0.75	230.31	4299.80	-14.13	-27.96	428594.87	1485597.04	-6.91	31.33	243.19	0.45
4400.00	0.50	215.40	4399.79	-14.91	-28.72	428594.09	1485596.28	-6.79	32.36	242.57	0.30
4500.00	0.25	204.49	4499.79	-15.46	-29.06	428593.54	1485595.94	-6.58	32.92	241.99	0.26
4600.00	0.50	255.58	4599.79	-15.77	-29.58	428593.23	1485595.42	-6.67	33.52	241.93	0.39
4700.00	0.75	233.68	4699.78	-16.27	-30.53	428592.73	1485594.47	-6.90	34.59	241.95	0.34
4800.00	1.00	239.77	4799.77	-17.09	-31.81	428591.91	1485593.19	-7.07	36.11	241.75	0.27
4855.00	1.00	237.95	4854.76	-17.59	-32.63	428591.41	1485592.37	-7.22	37.07	241.67	0.06
4948.00	0.70	166.80	4947.75	-18.57	-33.19	428590.43	1485591.81	-6.81	38.03	240.77	1.10
5043.00	3.00	147.10	5042.70	-21.23	-31.70	428587.77	1485593.30	-3.82	38.15	236.20	2.48
5138.00	3.50	151.60	5137.55	-25.86	-28.97	428583.14	1485596.03	1.49	38.84	228.25	0.59
5232.00	6.30	146.70	5231.19	-32.70	-24.78	428576.30	1485600.22	9.44	41.03	217.15	3.01

Helmer Directional Drilling Inc.

Smith Production Company
Baccigolopi #1 Rev. #4
Little Cheniere
As Drilled



Minimum of Curvature
Slot Location: 428609.00', 1485625.00'
Plane of Vertical Section: 140.45°

Measured Depth Feet	BORE Inc Degrees	HOLE Direction Degrees	True Vertical Depth Feet	RECTANGULAR COORDINATES		LAMBERT COORDINATES		Vertical Section Feet	CLOSURES		Dogleg Severity Deg/100'
				North(-South) Feet	East(-West) Feet	Y Feet	X Feet		Distance Feet	Direction Deg	
5327.00	8.60	135.30	5325.39	-42.11	-16.92	428566.89	1485608.08	21.69	45.38	201.89	2.87
5422.00	11.60	137.40	5418.91	-54.19	-5.45	428554.81	1485619.55	38.31	54.46	185.75	3.18
5517.00	14.30	133.20	5511.49	-69.25	9.57	428539.75	1485634.57	59.49	69.91	172.14	3.01
5611.00	15.30	132.80	5602.37	-85.63	27.13	428523.37	1485652.13	83.30	89.82	162.42	1.07
5706.00	16.50	133.40	5693.73	-103.41	46.13	428505.59	1485671.13	109.11	113.24	155.96	1.27
5801.00	18.70	133.50	5784.28	-123.17	66.98	428485.83	1485691.98	137.62	140.20	151.46	2.32
5896.00	20.40	133.90	5873.80	-145.13	89.96	428463.87	1485714.96	169.19	170.75	148.21	1.80
5991.00	22.20	133.50	5962.30	-168.97	114.91	428440.03	1485739.91	203.46	204.34	145.78	1.90
6085.00	22.20	134.20	6049.34	-193.58	140.52	428415.42	1485765.52	238.74	239.20	144.02	0.28
6180.00	23.80	136.00	6136.78	-219.88	166.71	428389.12	1485791.71	275.69	275.93	142.83	1.84
6275.00	24.10	136.30	6223.60	-247.69	193.42	428361.31	1485818.42	314.15	314.26	142.01	0.34
6370.00	24.10	137.40	6310.32	-275.99	219.95	428333.01	1485844.95	352.86	352.91	141.45	0.47
6464.00	23.90	136.90	6396.20	-304.02	245.95	428304.98	1485870.95	391.03	391.05	141.03	0.30
6559.00	23.90	137.60	6483.05	-332.28	272.08	428276.72	1485897.08	429.46	429.46	140.69	0.30
6654.00	24.10	138.50	6569.84	-361.02	297.91	428247.98	1485922.91	468.06	468.06	140.47	0.44
6749.00	24.10	139.00	6656.56	-390.18	323.48	428218.82	1485948.48	506.84	506.84	140.34	0.21
6844.00	23.90	139.30	6743.34	-419.41	348.76	428189.59	1485973.76	545.47	545.47	140.26	0.25
6939.00	24.50	139.50	6829.99	-448.98	374.10	428160.02	1485999.10	584.40	584.41	140.20	0.64
7065.00	24.10	139.70	6944.83	-488.47	407.70	428120.53	1486032.70	636.25	636.26	140.15	0.32
7160.00	23.52	138.27	7031.75	-517.41	432.87	428091.59	1486057.87	674.58	674.60	140.08	0.86
7260.00	21.95	137.88	7123.97	-546.16	458.69	428062.84	1486083.69	713.20	713.22	139.98	1.58
7360.00	20.82	137.76	7217.09	-573.18	483.17	428035.82	1486108.17	749.62	749.66	139.87	1.13
7460.00	19.43	136.54	7310.98	-598.41	506.56	428010.59	1486131.56	783.97	784.03	139.75	1.45
7520.00	19.32	136.49	7367.58	-612.86	520.25	427996.14	1486145.25	803.83	803.90	139.67	0.19

Final Station Closure Distance: 803.90' Direction: 139.67°