

		Bend Index														
		CUSTOMER/CONTRACTOR				Precision Pipeline / EQT				PIPE DIAMETER		42.000 in				
		CUSTOMER LINE ID				(MVP) - Spread H - Test Section 6				WALL THICKNESS		.617 in				
		JOB NUMBER				B20-998B				PRODUCT		Air				
		LAUNCH STATION				Dillions Mill Launcher				RUN DATE		15-Jan-2024				
						Callaway, VA				FIELD ENGINEER		Trent Hill				
		RECEIVE STATION				Cahas Receiver				CHART ANALYST		Trent Hill				
						Boones Mill, VA				REPORT DATE		01/15/2024				
		PIPELINE LENGTH				4.63 mi				ISSUE #		1				
Event ID	Event Description	Comment	Enduro Station	Projected Station	Customer Station	Tool Spd	W.T.	Clock Ori.	MCSD	To U/S Weld	Cur. Joint Len.	To D/S Weld	Len. D/S Joint	Latitude	Longitude	Elevation
F1	Begin Line Pipe	Dillions Mill Launcher Callaway, VA	0.00	13179+21	0+35.5	0.5	0.864		40.18	0.0	40.7	40.7	40.3	(b) (7)(F)	(b) (7)(F)	1591
W1	Wall change to .864 for 641.06 feet - Customer supplied	Begin 0.864 w.t.	0.00	13179+21	0+35.5	0.5	0.864			0.0	40.7	40.7	40.3			1591
B1	Fld Bnd 6.28 deg. Right Turn MCSD: 39.27		98.44	13180+20		1.9	0.864		39.27	17.5	36.6	19.1	40.3			1583
B2	Bend 16.7 deg. 3.0 Ds Down & Left Turn MCSD: 39.22	Before u/s w.: 0.6%(0.266) MCSD: 40.0 ID:40.3 mph:5.6 Clk:2 to 8 After d/s w.: 1.2%(0.510) MCSD: 39.7 ID:40.2 mph:11.3 Clk:2 to 8 MPH coming into Bend (-10ft): 3.9 Leaving Bend (+10ft): 7.3 Min MPH over range: 0.4 at index 943583	639.38	13185+61		12.0	0.864		39.22	1.7	3.3	1.7	10.6			1538
W2	Wall change from .864 to .888 for 48.74 feet - Customer supplied		641.06	13185+62	6+74.5	12.4	0.888			0.0	10.6	10.6	38.2	(b) (7)(F)	(b) (7)(F)	1538
W3	Wall change from .888 to .864 for 241.22 feet - Customer supplied		689.80	13186+11	7+23.0	3.4	0.864			0.0	40.0	40.0	39.1			1521
W4	Wall change from .864 to .888 for 51.07 feet - Customer supplied		931.02	13188+52	9+62.3	9.0	0.888			0.0	8.8	8.8	2.6			1441
B3	Bend 43.74 deg. 3.0 Ds Right Turn MCSD: 39.41	Before u/s w.: 0.8%(0.322) MCSD: 39.9 ID:40.3 mph:6.7 Clk:2 to 8 After d/s w.: 0.8%(0.325) MCSD: 39.8 ID:40.2 mph:12.1 Clk:2 to 8 MPH coming into Bend (-10ft): 3.6 Leaving Bend (+10ft): 10.5 Min MPH over range: 3.4 at index 978985	935.43	13188+57		12.0	0.888		39.41	4.4	8.8	4.4	2.6			1440
W5	Wall change from .888 to .864 for 615.66 feet - Customer supplied		982.09	13189+03	10+13.5	2.6	0.864			0.0	7.7	7.7	39.9			1439
W6	Wall change from .864 to .888 for 63.61 feet - Customer supplied		1597.75	13195+19	16+26.3	3.3	0.888			0.0	23.6	23.6	40.0			1429
W7	Wall change from .888 to .864 for 12.27 feet - Customer supplied		1661.36	13195+83	16+89.7	12.3	0.864			0.0	3.8	3.8	8.5			1428
B4	Bend 41.13 deg. 3.0 Ds Left Turn MCSD: 39.72	Before u/s w.: 0.1%(0.056) MCSD: 40.2 ID:40.3 mph:10.4 Clk:6 to 12 After d/s w.: 0.5%(0.214) MCSD: 40.0 ID:40.2 mph:8.6 Clk:2 to 8 MPH coming into Bend (-10ft): 11.6 Leaving Bend (+10ft): 10.8 Min MPH over range: 0.8 at index 1067990	1669.39	13195+91		4.6	0.864		39.72	4.3	8.5	4.2	32.1			1428
W8	Wall change from .864 to .888 for 32.10 feet - Customer supplied		1673.63	13195+95	17+00.9	8.4	0.888			0.0	32.1	32.1	36.4			1428

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W9	Wall change from .888 to .864 for 88.87 feet - Customer supplied		1705.73	13196+27	17+32.9	11.5	0.864			0.0	36.4	36.4	40.2	(b) (7)(F)		1427
B5	Bend 32.66 deg. 3.0 Ds Up Turn MCSD: 39.83	Before u/s w.: 0.2%(0.089) MCSD: 40.2 ID:40.3 mph:8.9 Clk:6 to 12 After d/s w. : 0.3%(0.110) MCSD: 40.1 ID:40.2 mph:6.4 Clk:5 to 11 MPH coming into Bend (-10ft): 2.5 Leaving Bend (+10ft): 7.1 Min MPH over range: 0.2 at index 1081716	1791.72	13197+13		7.1	0.864		39.83	2.9	5.7	2.9	36.6			1426
W10	Wall change from .864 to .888 for 36.61 feet - Customer supplied		1794.60	13197+16	18+21.0	7.2	0.888			0.0	36.6	36.6	3.6	(b) (7)(F)		1427
W11	Wall change from .888 to .864 for 9.75 feet - Customer supplied		1831.21	13197+52	18+53.9	7.3	0.864			0.0	3.6	3.6	6.1			1445
B6	Bend 32.74 deg. 3.0 Ds Down Turn MCSD: 39.65	Before u/s w.: 0.7%(0.280) MCSD: 40.0 ID:40.3 mph:8.0 Clk:4 to 10 After d/s w. : 0.4%(0.169) MCSD: 40.0 ID:40.2 mph:7.6 Clk:4 to 10 MPH coming into Bend (-10ft): 5.8 Leaving Bend (+10ft): 5.8 Min MPH over range: 5.7 at index 1089561	1837.89	13197+59		10.3	0.864		39.65	3.1	6.1	3.1	22.8			1448
W12	Wall change from .864 to .888 for 41.59 feet - Customer supplied		1840.96	13197+62	18+67.7	9.1	0.888			0.0	22.8	22.8	18.7			1449
W13	Wall change from .888 to .864 for 5.47 feet - Customer supplied		1882.55	13198+04	19+09.6	5.2	0.864			0.0	5.5	5.5	5.0			1449
B7	Bend 35.23 deg. 3.0 Ds Up Turn MCSD: 39.38	Before u/s w.: 0.8%(0.330) MCSD: 39.9 ID:40.2 mph:5.5 Clk:2 to 8 After d/s w. : 1.1%(0.467) MCSD: 39.7 ID:40.2 mph:7.8 Clk:2 to 8 MPH coming into Bend (-10ft): 1.8 Leaving Bend (+10ft): 7.0 Min MPH over range: 1.8 at index 1092919	1885.29	13198+06		6.7	0.864		39.38	2.7	5.5	2.7	5.0			1450
W14	Wall change from .864 to .888 for 88.50 feet - Customer supplied		1888.02	13198+09	19+14.1	7.4	0.888			0.0	5.0	5.0	31.9			1450
B8	Bend 22.28 deg. 3.0 Ds Left Turn MCSD: 39.41	Before u/s w.: 0.2%(0.066) MCSD: 40.1 ID:40.2 mph:4.9 Clk:6 to 12 After d/s w. : 0.3%(0.112) MCSD: 40.1 ID:40.2 mph:10.2 Clk:4 to 10 MPH coming into Bend (-10ft): 7.7 Leaving Bend (+10ft): 14.1 Min MPH over range: 0.8 at index 1098561	1927.12	13198+48		9.9	0.888		39.41	2.2	4.4	2.2	6.2			1471
W15	Wall change from .888 to .864 for 34.67 feet - Customer supplied		1976.52	13198+98	20+09.0	15.9	0.864			0.0	34.7	34.7	5.6			1491
W16	Wall change from .864 to .888 for 5.62 feet - Customer supplied		2011.19	13199+32	20+44.1	5.0	0.888			0.0	5.6	5.6	30.1			1503
W17	Wall change from .888 to .864 for 270.37 feet - Customer supplied		2016.81	13199+38	20+49.8	9.3	0.864			0.0	30.1	30.1	39.7			1505
W18	Wall change from .864 to .888 for 7.12 feet - Customer supplied		2287.17	13202+08	23+17.9	5.3	0.888			0.0	7.1	7.1	40.6			1608
W19	Wall change from .888 to .740 for 486.10 feet - Customer supplied		2294.29	13202+15	23+25.0	4.6	0.740			0.0	40.6	40.6	39.4			1611
W20	Wall change from .740 to .888 for 23.79 feet - Customer supplied		2780.39	13207+02	28+09.3	2.9	0.888			0.0	8.3	8.3	5.1			1735

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B9	Bend 26.45 deg. 3.0 Ds Right Turn MCSD: 39.36	Before u/s w.: 0.5%(0.222) MCSD: 40.0 ID:40.2 mph:1.6 Clk:6 to 12 After d/s w.: 0.7%(0.291) MCSD: 39.9 ID:40.2 mph:3.4 Clk:6 to 12 MPH coming into Bend (-10ft): 2.7 Leaving Bend (+10ft): 2.6 Min MPH over range: 0.2 at index 1202268	2791.28	13207+12		3.6	0.888		39.36	2.6	5.1	2.5	10.3	(b) (7)(F)		1737
W21	Wall change from .888 to .740 for 3439.09 feet - Customer supplied		2804.18	13207+25	28+32.7	3.7	0.740			0.0	28.0	28.0	40.6			1741
B10	Bend 36.29 deg. 3.0 Ds Left Turn MCSD: 39.92	Before u/s w.: 0.3%(0.142) MCSD: 40.4 ID:40.5 mph:2.7 Clk:1 to 7 After d/s w.: 0.6%(0.249) MCSD: 40.2 ID:40.5 mph:4.2 Clk:2 to 8 MPH coming into Bend (-10ft): 3.4 Leaving Bend (+10ft): 4.6 Min MPH over range: 2.4 at index 1257345	3249.61	13211+71		3.5	0.740		39.92	3.7	7.3	3.7	2.2	(b) (7)(F)		1874
B11	Fld Bnd 7.85 deg. Down & Left Turn MCSD: 40.03		3273.56	13211+95		1.4	0.740		40.03	18.0	40.8	22.8	30.1			1875
B12	Fld Bnd 12.42 deg. Left Turn MCSD: 39.95		3521.38	13214+43		2.5	0.740		39.95	18.7	40.9	22.3	40.6			1883
B13	Fld Bnd 7.17 deg. Left & Up Turn MCSD: 40.12		3560.12	13214+81		1.7	0.740		40.12	16.4	40.6	24.2	40.4			1892
B14	Bend 91.7 deg. 3.0 Ds Right Turn MCSD: 39.83	Before u/s w.: 1.0%(0.404) MCSD: 40.2 ID:40.5 mph:2.6 Clk:2 to 8 After d/s w.: 1.1%(0.450) MCSD: 40.0 ID:40.5 mph:8.2 Clk:3 to 9 MPH coming into Bend (-10ft): 3.6 Leaving Bend (+10ft): 8.1 Min MPH over range: 3.2 at index 1353627	4057.71	13219+79		6.6	0.740		39.83	8.9	17.8	8.9	2.3			2058
B15	Fld Bnd 5.28 deg. Down & Left Turn MCSD: 40.13		4084.54	13220+06		6.5	0.740		40.13	15.6	40.4	24.8	40.5			2057
B16	Fld Bnd 12.82 deg. Left Turn MCSD: 40.00		4203.34	13221+25		2.6	0.740		40.00	19.2	40.8	21.6	40.8			2044
B17	Fld Bnd 7.76 deg. Left & Up Turn MCSD: 40.00		4240.62	13221+62		5.9	0.740		40.00	15.7	40.8	25.1	40.4			2045
B18	Bend 46.2 deg. 3.0 Ds Right Turn MCSD: 39.91	Before u/s w.: 0.4%(0.158) MCSD: 40.4 ID:40.5 mph:3.4 Clk:3 to 9 After d/s w.: 0.4%(0.170) MCSD: 40.3 ID:40.5 mph:5.4 Clk:3 to 9 MPH coming into Bend (-10ft): 2.8 Leaving Bend (+10ft): 7.2 Min MPH over range: 0.3 at index 1402799	4461.06	13223+82		2.8	0.740		39.91	4.5	9.0	4.5	2.3			2047
B19	Fld Bnd 9.86 deg. Right Turn MCSD: 39.91		5148.36	13230+70		7.2	0.740		39.91	18.1	40.3	22.2	38.8			1992
B20	Bend 30.36 deg. 3.0 Ds Left Turn MCSD: 39.76	Before u/s w.: 0.6%(0.260) MCSD: 40.2 ID:40.5 mph:8.7 Clk:3 to 9 After d/s w.: 0.8%(0.355) MCSD: 40.1 ID:40.5 mph:8.7 Clk:3 to 9 MPH coming into Bend (-10ft): 8.8 Leaving Bend (+10ft): 9.0 Min MPH over range: 7.3 at index 1504517	5310.57	13232+32		8.9	0.740		39.76	3.0	6.0	3.0	2.3			2021
B21	Fld Bnd 5.47 deg. Right & Down Turn MCSD: 40.11		5333.31	13232+55		5.5	0.740		40.11	17.4	40.6	23.2	33.7			2024
B22	Fld Bnd 11.97 deg. Left Turn MCSD: 39.83		5646.14	13235+67		6.7	0.740		39.83	20.8	40.8	20.0	26.2			2029

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B23	Fld Bnd 11.57 deg. Right Turn MCSD: 40.10		5730.40	13236+52		0.9	0.740		40.10	18.1	40.4	22.3	40.5	(b) (7)(F)	(b) (7)(F)	2023
B24	Fld Bnd 7.6 deg. Right Turn MCSD: 40.09		5769.87	13236+91		3.1	0.740		40.09	17.2	40.5	23.3	20.5			2019
W22	Wall change from .740 to .617 for 920.31 feet - Customer supplied		6243.27	13241+64	62+55.7	5.2	0.617			0.0	40.0	40.0	39.7			1953
B25	Fld Bnd 6.25 deg. Down & Left Turn MCSD: 40.51		6644.45	13245+66		2.9	0.617		40.51	18.8	40.0	21.2	39.6			1896
B26	Fld Bnd 11.44 deg. Left Turn MCSD: 40.38		6947.36	13248+69		3.4	0.617		40.38	20.2	40.2	20.1	40.4			1823
B27	Fld Bnd 7.27 deg. Left Turn MCSD: 40.55		6985.12	13249+06		2.2	0.617		40.55	17.7	40.4	22.7	39.9			1815
W23	Wall change from .617 to .740 for 30.64 feet - Customer supplied		7163.58	13250+85	71+71.5	3.6	0.740			0.0	8.0	8.0	2.5			1784
B28	Bend 60.54 deg. 3.0 Ds Left Turn MCSD: 40.11	Before u/s w.: 0.4%(0.155) MCSD: 40.5 ID:40.5 mph:4.2 Clk:6 to 12 After d/s w.: 0.0%(0.013) MCSD: 40.5 ID:40.5 mph:7.2 Clk:2 to 8 MPH coming into Bend (-10ft): 3.3 Leaving Bend (+10ft): 7.2 Min MPH over range: 2.8 at index 1728190	7180.18	13251+01		7.1	0.740		40.11	6.0	12.1	6.0	2.4			1781
W24	Wall change from .740 to .617 for 955.72 feet - Customer supplied		7194.22	13251+15	72+01.2	6.3	0.617			0.0	40.0	40.0	31.7			1778
B29	Fld Bnd 12.68 deg. Right Turn MCSD: 40.42		7405.82	13253+27		5.8	0.617		40.42	20.2	39.7	19.5	39.6			1695
B30	Fld Bnd 8.7 deg. Right Turn MCSD: 40.40		7448.30	13253+69		6.3	0.617		40.40	23.0	39.6	16.6	39.3	(b) (7)(F)	(b) (7)(F)	1680
B31	Fld Bnd 9.91 deg. Left Turn MCSD: 40.53		7765.18	13256+86		3.8	0.617		40.53	18.8	43.5	24.7	40.1			1591
B32	Fld Bnd 9.81 deg. Right Turn MCSD: 40.56		7951.32	13258+73		4.8	0.617		40.56	21.5	41.4	19.8	19.8			1529
W25	Wall change from .617 to .740 for 580.16 feet - Customer supplied		8149.95	13260+71	81+54.3	5.7	0.740			0.0	40.7	40.7	2.9			1464
B33	Bend 22.63 deg. 3.0 Ds Left & Up Turn MCSD: 39.93	Before u/s w.: 0.5%(0.194) MCSD: 40.4 ID:40.5 mph:3.2 Clk:6 to 12 After d/s w.: 0.2%(0.101) MCSD: 40.4 ID:40.5 mph:3.1 Clk:6 to 12 MPH coming into Bend (-10ft): 4.2 Leaving Bend (+10ft): 5.1 Min MPH over range: 0.2 at index 1851281	8195.74	13261+17		2.5	0.740		39.93	2.2	4.3	2.2	10.5			1451
B34	Fld Bnd 5.41 deg. Down & Left Turn MCSD: 40.17		8246.45	13261+68		4.2	0.740		40.17	17.8	40.3	22.6	27.3			1445
B35	Bend 19.2 deg. 3.0 Ds Up & Right Turn MCSD: 39.37	Before u/s w.: 0.8%(0.338) MCSD: 40.2 ID:40.5 mph:6.2 Clk:5 to 11 After d/s w.: 0.7%(0.288) MCSD: 40.2 ID:40.5 mph:6.3 Clk:5 to 11 MPH coming into Bend (-10ft): 6.9 Leaving Bend (+10ft): 8.3 Min MPH over range: 4.9 at index 1863876	8300.42	13262+22		6.4	0.740		39.37	1.7	3.4	1.7	2.6			1434
B36	Bend 17.89 deg. 3.0 Ds Up Turn MCSD: 39.91	Before u/s w.: 0.4%(0.179) MCSD: 40.3 ID:40.5 mph:3.4 Clk:2 to 8 After d/s w.: 0.1%(0.048) MCSD: 40.4 ID:40.5 mph:4.3 Clk:6 to 12 MPH coming into Bend (-10ft): 3.3 Leaving Bend (+10ft): 7.0 Min MPH over range: 0.3 at index 1899639	8596.37	13265+18		3.4	0.740		39.91	1.5	3.1	1.5	2.0			1446

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B37	Bend 19.5 deg. 3.0 Ds Right Turn MCSD: 39.72	Before u/s w.: 0.7%(0.293) MCSD: 40.2 ID:40.5 mph:9.9 Clk:6 to 12 After d/s w. : 0.4%(0.177) MCSD: 40.3 ID:40.5 mph:10.3 Clk:6 to 12 MPH coming into Bend (-10ft): 9.5 Leaving Bend (+10ft): 11.0 Min MPH over range: 9.3 at index 1907840	8669.07	13265+90		12.2	0.740		39.72	2.2	4.5	2.2	4.6	(b) (7)(F)		1473
W26	Wall change from .740 to .617 for 3709.62 feet - Customer supplied		8730.11	13266+51	87+31.3	10.7	0.617			0.0	39.8	39.8	33.9	(b) (7)(F)		1488
B38	Fld Bnd 6.05 deg. Right Turn MCSD: 40.48		9064.52	13269+86		3.6	0.617		40.48	21.1	39.7	18.6	40.1			1545
B39	Bend 23.64 deg. 3.0 Ds Left Turn MCSD: 39.82	Before u/s w.: 0.5%(0.205) MCSD: 40.5 ID:40.8 mph:8.0 Clk:1 to 7 After d/s w. : 0.4%(0.188) MCSD: 40.6 ID:40.8 mph:6.9 Clk:2 to 8 MPH coming into Bend (-10ft): 7.4 Leaving Bend (+10ft): 9.6 Min MPH over range: 6.8 at index 1988244	9346.37	13272+68		9.2	0.617		39.82	2.2	4.3	2.2	2.4			1589
B40	Fld Bnd 5.31 deg. Right Turn MCSD: 40.58		9370.95	13272+92		10.4	0.617		40.58	20.0	39.7	19.7	39.9			1595
B41	Bend 80.83 deg. 3.0 Ds Right Turn MCSD: 40.31	Before u/s w.: 0.5%(0.228) MCSD: 40.6 ID:40.8 mph:4.5 Clk:3 to 9 After d/s w. : 0.4%(0.182) MCSD: 40.6 ID:40.8 mph:5.1 Clk:4 to 10 MPH coming into Bend (-10ft): 4.5 Leaving Bend (+10ft): 5.7 Min MPH over range: 0.1 at index 2031446	9692.97	13276+14		3.5	0.617		40.31	7.8	15.6	7.8	2.4			1663
B42	Bend 21.55 deg. 3.0 Ds Right Turn MCSD: 40.25	Before u/s w.: 0.3%(0.120) MCSD: 40.6 ID:40.8 mph:7.0 Clk:3 to 9 After d/s w. : 0.1%(0.060) MCSD: 40.7 ID:40.8 mph:5.6 Clk:3 to 9 MPH coming into Bend (-10ft): 6.6 Leaving Bend (+10ft): 6.6 Min MPH over range: 5.5 at index 2041749	9778.58	13277+00		8.5	0.617		40.25	2.1	4.2	2.1	2.3			1663
B43	Fld Bnd 5.48 deg. Left & Up Turn MCSD: 40.38		10042.69	13279+64		8.8	0.617		40.38	20.9	39.7	18.8	43.0			1625
B44	Bend 22.37 deg. 3.0 Ds Left Turn MCSD: 40.26	Before u/s w.: 0.2%(0.076) MCSD: 40.7 ID:40.8 mph:9.4 Clk:4 to 10 After d/s w. : 0.3%(0.126) MCSD: 40.6 ID:40.8 mph:8.3 Clk:3 to 9 MPH coming into Bend (-10ft): 9.2 Leaving Bend (+10ft): 10.5 Min MPH over range: 8.1 at index 2093143	10206.02	13281+27		10.4	0.617		40.26	2.3	4.5	2.3	2.2			1610
B45	Bend 23.24 deg. 3.0 Ds Left Turn MCSD: 40.16	Before u/s w.: 0.6%(0.251) MCSD: 40.5 ID:40.8 mph:10.0 Clk:4 to 10 After d/s w. : 0.4%(0.172) MCSD: 40.6 ID:40.8 mph:7.8 Clk:4 to 10 MPH coming into Bend (-10ft): 10.2 Leaving Bend (+10ft): 10.1 Min MPH over range: 7.7 at index 2134374	10550.52	13284+72		9.7	0.617		40.16	2.2	4.5	2.2	2.3			1587
B46	Fld Bnd 12.06 deg. Right Turn MCSD: 40.42		10736.74	13286+58		4.0	0.617		40.42	19.5	42.2	22.7	39.8			1571
B47	Fld Bnd 12.56 deg. Right Turn MCSD: 40.29		10827.51	13287+49		9.0	0.617		40.29	19.8	41.8	21.9	39.6			1566

Event ID	Event Description	Comment	Enduro Station	Projected Station	Customer Station	Tool Spd	W.T.	Clock Ori.	MCSD	To U/S Weld	Cur. Joint Len.	To D/S Weld	Len. D/S Joint	Latitude	Longitude	Elevation
B48	Bend 29.98 deg. 3.0 Ds Right Turn MCSD: 40.19	Before u/s w.: 0.3%(0.145) MCSD: 40.6 ID:40.8 mph:7.2 Clk:4 to 10 After d/s w. : 0.4%(0.169) MCSD: 40.7 ID:40.8 mph:6.8 Clk:4 to 10 MPH coming into Bend (-10ft): 9.3 Leaving Bend (+10ft): 9.0 Min MPH over range: 6.7 at index 2175579	10894.29	13288+15		8.1	0.617		40.19	3.0	6.0	3.0	2.1	(b) (7)(F)		1558
B49	Fld Bnd 9.81 deg. Left Turn MCSD: 40.51		11153.58	13290+75		6.4	0.617		40.51	17.8	40.2	22.4	40.0	(b) (7)(F)		1561
B50	Fld Bnd 6.42 deg. Left & Up Turn MCSD: 40.46		11195.99	13291+17		5.5	0.617		40.46	20.0	40.0	20.0	39.5			1567
B51	Fld Bnd 7.6 deg. Down & Left Turn MCSD: 40.43		11294.92	13292+16		3.0	0.617		40.43	24.2	40.4	16.2	17.6			1580
B52	Fld Bnd 9.98 deg. Left Turn MCSD: 40.48		11380.18	13293+01		3.9	0.617		40.48	18.2	40.2	22.0	40.0			1580
B53	Fld Bnd 10.52 deg. Right Turn MCSD: 40.51		12174.95	13300+96		4.2	0.617		40.51	18.4	41.3	22.9	40.1			1503
B54	Fld Bnd 11.32 deg. Right Turn MCSD: 40.48		12214.32	13301+36		2.7	0.617		40.48	16.5	40.1	23.6	41.1			1500
W27	Wall change from .617 to .740 for 1574.17 feet - Customer supplied		12439.72	13303+61	124+30.3	6.2	0.740			0.0	40.1	40.1	40.7			1457
B55	Bend 84.67 deg. 3.0 Ds Left Turn MCSD: 38.85	Before u/s w.: 1.3%(0.543) MCSD: 39.9 ID:40.5 mph:3.3 Clk:6 to 12 After d/s w. : 1.3%(0.542) MCSD: 38.9 ID:40.5 mph:6.7 Clk:6 to 12 MPH coming into Bend (-10ft): 3.4 Leaving Bend (+10ft): 6.9 Min MPH over range: 3.2 at index 2422042	12960.74	13308+82		6.6	0.740		38.85	0.0	9.1	9.1	2.6			1386
B56	Bend 14.94 deg. 3.0 Ds Down Turn MCSD: 39.44	Before u/s w.: 1.2%(0.510) MCSD: 40.0 ID:40.5 mph:5.7 Clk:3 to 9 After d/s w. : 1.2%(0.516) MCSD: 40.0 ID:40.5 mph:7.9 Clk:4 to 10 MPH coming into Bend (-10ft): 1.6 Leaving Bend (+10ft): 8.5 Min MPH over range: 1.6 at index 2433816	13060.11	13309+81		8.7	0.740		39.44	1.4	2.8	1.4	2.6			1369
B57	Bend 22.69 deg. 3.0 Ds Up Turn MCSD: 39.88	Before u/s w.: 0.6%(0.262) MCSD: 40.3 ID:40.5 mph:8.9 Clk:3 to 9 After d/s w. : 0.2%(0.099) MCSD: 40.4 ID:40.5 mph:7.0 Clk:3 to 9 MPH coming into Bend (-10ft): 8.7 Leaving Bend (+10ft): 10.2 Min MPH over range: 6.3 at index 2439416	13094.25	13310+15		7.2	0.740		39.88	2.1	4.2	2.1	16.1			1358
B58	Bend 29.73 deg. 3.0 Ds Left Turn MCSD: 39.35	Before u/s w.: 0.1%(0.054) MCSD: 40.5 ID:40.5 mph:12.3 Clk:3 to 9 After d/s w. : 0.4%(0.150) MCSD: 40.3 ID:40.5 mph:13.9 Clk:4 to 10 MPH coming into Bend (-10ft): 12.7 Leaving Bend (+10ft): 14.4 Min MPH over range: 11.4 at index 2469819	13354.41	13312+76		14.5	0.740		39.35	2.9	5.7	2.9	2.6			1365

Event ID	Event Description	Comment	Enduro Station	Projected Station	Customer Station	Tool Spd	W.T.	Clock Ori.	MCSD	To U/S Weld	Cur. Joint Len.	To D/S Weld	Len. D/S Joint	Latitude	Longitude	Elevation
B59	Bend 13.14 deg. 3.0 Ds Right & Down Turn MCSD: 39.80	Before u/s w.: 0.4%(0.177) MCSD: 40.3 ID:40.5 mph:14.6 Clk:2 to 8 After d/s w. : 0.5%(0.197) MCSD: 40.3 ID:40.5 mph:14.1 Clk:2 to 8 MPH coming into Bend (-10ft): 16.1 Leaving Bend (+10ft): 15.0 Min MPH over range: 11.0 at index 2476186	13403.44	13313+25		15.7	0.740		39.80	1.3	2.5	1.3	10.5	(b) (7)(F)		1375
B60	Bend 29.41 deg. 3.0 Ds Right Turn MCSD: 39.58	Before u/s w.: 1.1%(0.449) MCSD: 40.1 ID:40.5 mph:1.3 Clk:2 to 8 After d/s w. : 1.3%(0.540) MCSD: 39.9 ID:40.5 mph:3.2 Clk:2 to 8 MPH coming into Bend (-10ft): 3.9 Leaving Bend (+10ft): 1.0 Min MPH over range: 0.2 at index 2538460	13925.64	13318+47		3.6	0.740		39.58	3.0	5.9	3.0	2.4			1412
W28	Wall change from .740 to .888 for 2.90 feet - Customer supplied		14013.89	13319+35	139+95.7	0.2	0.888			0.0	2.9	2.9	2.3	(b) (7)(F)		1427
B61	Bend 18.06 deg. 3.0 Ds Up Turn MCSD: 39.96	Before u/s w.: 0.2%(0.101) MCSD: 40.2 ID:40.5 mph:2.4 Clk:4 to 10 After d/s w. : 0.1%(0.042) MCSD: 40.4 ID:40.5 mph:2.2 Clk:3 to 9 MPH coming into Bend (-10ft): 1.1 Leaving Bend (+10ft): 2.3 Min MPH over range: 0.2 at index 2549554	14015.35	13319+37		1.8	0.888		39.96	1.5	2.9	1.4	2.3			1427
W29	Wall change from .888 to .740 for 224.91 feet - Customer supplied		14016.79	13319+38	139+98.1	1.3	0.740			0.0	2.3	2.3	40.5			1428
W30	Wall change from .740 to .617 for 40.14 feet - Customer supplied		14241.70	13321+63	142+23.1	15.4	0.617			0.0	40.1	40.1	2.4			1505
W31	Wall change from .617 to .740 for 2.38 feet - Customer supplied		14281.84	13322+03	142+63.4	13.8	0.740			0.0	2.4	2.4	3.5			1517
W32	Wall change from .740 to .888 for 5.60 feet - Customer supplied		14284.22	13322+05	142+65.8	15.0	0.888			0.0	3.5	3.5	2.1			1518
B62	Bend 18.38 deg. 3.0 Ds Down Turn MCSD: 39.67	Before u/s w.: 0.5%(0.201) MCSD: 40.3 ID:40.5 mph:14.2 Clk:2 to 8 After d/s w. : 0.3%(0.107) MCSD: 40.1 ID:40.2 mph:12.9 Clk:2 to 8 MPH coming into Bend (-10ft): 14.3 Leaving Bend (+10ft): 13.1 Min MPH over range: 12.2 at index 2582989	14285.97	13322+07		13.3	0.888		39.67	1.7	3.5	1.7	2.1			1518
W33	Wall change from .888 to .740 for 28.77 feet - Customer supplied		14289.82	13322+11	142+71.7	13.1	0.740			0.0	9.8	9.8	9.0			1519
F2	Valve	Operator Normal	14304.12	13322+25		10.3	0.740		39.58	4.5	9.0	4.5	10.0			1519
W34	Wall change from .740 to .888 for 12.49 feet - Customer supplied		14318.60	13322+40	143+01.3	8.8	0.888			0.0	2.1	2.1	2.7			1519
B63	Bend 28.15 deg. 3.0 Ds Down & Left Turn MCSD: 39.71	Before u/s w.: 0.3%(0.131) MCSD: 40.2 ID:40.2 mph:8.3 Clk:3 to 9 After d/s w. : 0.3%(0.109) MCSD: 40.1 ID:40.2 mph:12.2 Clk:2 to 8 MPH coming into Bend (-10ft): 9.5 Leaving Bend (+10ft): 12.2 Min MPH over range: 6.8 at index 2586436	14326.05	13322+47		11.1	0.888		39.71	2.7	5.4	2.7	2.3			1518
W35	Wall change from .888 to .740 for 2.52 feet - Customer supplied		14331.09	13322+52	143+14.1	11.8	0.740			0.0	2.5	2.5	11.0			1517
W36	Wall change from .740 to .617 for 205.23 feet - Customer supplied		14333.62	13322+55	143+16.6	10.5	0.617			0.0	11.0	11.0	32.1			1516

Event ID	Event Description	Comment	Enduro Station	Projected Station	Customer Station	Tool Spd	W.T.	Clock Ori.	MCSD	To U/S Weld	Cur. Joint Len.	To D/S Weld	Len. D/S Joint	Latitude	Longitude	Elevation
W37	Wall change from .617 to .740 for 2.98 feet - Customer supplied		14538.85	13324+60	145+21.4	7.6	0.740			0.0	3.0	3.0	1.9	(b) (7)(F)		1428
W38	Wall change from .740 to .888 for 6.49 feet - Customer supplied		14541.83	13324+63	145+24.2	5.7	0.888			0.0	1.9	1.9	4.6			1427
B64	Bend 28.08 deg. 3.0 Ds Up Turn MCSD: 39.78	Before u/s w.: 0.7%(0.311) MCSD: 40.0 ID:40.2 mph:5.8 Clk:3 to 9 After d/s w. : 0.9%(0.358) MCSD: 40.2 ID:40.5 mph:3.3 Clk:3 to 9 MPH coming into Bend (-10ft): 7.7 Leaving Bend (+10ft): 5.4 Min MPH over range: 0.3 at index 2613383	14546.02	13324+67		1.0	0.888		39.78	2.3	4.6	2.3	2.4			1426
W39	Wall change from .888 to .740 for 2.42 feet - Customer supplied		14548.32	13324+70	145+30.2	3.0	0.740			0.0	2.4	2.4	41.5	(b) (7)(F)		1426
W40	Wall change from .740 to .617 for 376.46 feet - Customer supplied		14550.74	13324+72	145+32.6	3.5	0.617			0.0	41.5	41.5	39.8			1426
B65	Bend 22.57 deg. 3.0 Ds Right & Down Turn MCSD: 39.78	Before u/s w.: 0.7%(0.301) MCSD: 40.4 ID:40.8 mph:10.8 Clk:5 to 11 After d/s w. : 0.9%(0.382) MCSD: 40.4 ID:40.8 mph:11.4 Clk:4 to 10 MPH coming into Bend (-10ft): 10.7 Leaving Bend (+10ft): 14.0 Min MPH over range: 9.4 at index 2636931	14744.42	13326+66		12.3	0.617		39.78	2.1	4.3	2.1	2.2			1462
W41	Wall change from .617 to .740 for 15.45 feet - Customer supplied		14927.20	13328+48	149+14.3	1.5	0.740			0.0	6.7	6.7	8.7	(b) (7)(F)		1413
B66	Bend 24.06 deg. 3.0 Ds Up Turn MCSD: 39.77	Before u/s w.: 0.2%(0.103) MCSD: 40.6 ID:40.8 mph:2.2 Clk:3 to 9 After d/s w. : 0.9%(0.385) MCSD: 40.1 ID:40.5 mph:7.7 Clk:3 to 9 MPH coming into Bend (-10ft): 1.7 Leaving Bend (+10ft): 7.8 Min MPH over range: 0.3 at index 2658564	14930.57	13328+52		2.0	0.740		39.77	3.4	6.7	3.4	8.7			1413
W42	Wall change from .740 to .888 for 5.05 feet - Customer supplied		14942.65	13328+64	149+26.6	4.0	0.888			0.0	5.0	5.0	2.4			1413
B67	Bend 27.35 deg. 3.0 Ds Up Turn MCSD: 39.84	Before u/s w.: 0.6%(0.258) MCSD: 40.2 ID:40.5 mph:6.3 Clk:3 to 9 After d/s w. : 0.4%(0.156) MCSD: 40.4 ID:40.5 mph:4.3 Clk:3 to 9 MPH coming into Bend (-10ft): 7.3 Leaving Bend (+10ft): 7.3 Min MPH over range: 2.7 at index 2661542	14945.18	13328+66		3.7	0.888		39.84	2.5	5.0	2.5	2.4	(b) (7)(F)		1414
W43	Wall change from .888 to .740 for 2.39 feet - Customer supplied		14947.70	13328+69	149+29.0	3.4	0.740			0.0	2.4	2.4	30.7			1414
W44	Wall change from .740 to .617 for 899.62 feet - Customer supplied		14950.09	13328+71	149+31.5	4.2	0.617			0.0	30.7	30.7	40.5			1415
B68	Fld Bnd 12.87 deg. Right & Down Turn MCSD: 40.35		15487.35	13334+09		12.0	0.617		40.35	21.2	40.8	19.7	40.3	(b) (7)(F)		1544
B69	Fld Bnd 11.46 deg. Right & Down Turn MCSD: 40.51		15524.31	13334+46		8.2	0.617		40.51	17.3	40.3	23.0	40.3			1544
B70	Fld Bnd 11.85 deg. Down & Left Turn MCSD: 40.23		15569.22	13334+90		3.4	0.617		40.23	21.9	40.3	18.4	39.5			1539
B71	Fld Bnd 12.07 deg. Down & Left Turn MCSD: 40.52		15603.96	13335+25		6.9	0.617		40.52	16.3	39.5	23.1	40.3	(b) (7)(F)		1530
W45	Wall change from .617 to .740 for 17.98 feet - Customer supplied		15849.71	13337+71	158+30.1	4.3	0.740			0.0	9.2	9.2	5.2			1436

Event ID	Event Description	Comment	Enduro Station	Projected Station	Customer Station	Tool Spd	W.T.	Clock Ori.	MCSD	To U/S Weld	Cur. Joint Len.	To D/S Weld	Len. D/S Joint	Latitude	Longitude	Elevation
B72	Bend 41.49 deg. 3.0 Ds Up Turn MCSD: 39.65	Before u/s w.: 1.0%(0.408) MCSD: 40.1 ID:40.5 mph:1.9 Clk:4 to 10 After d/s w. : 1.2%(0.496) MCSD: 40.1 ID:40.5 mph:1.1 Clk:3 to 9 MPH coming into Bend (-10ft): 4.1 Leaving Bend (+10ft): 3.8 Min MPH over range: 0.1 at index 2771180	15861.46	13337+83		0.2	0.740		39.65	2.6	5.2	2.6	3.7	(b) (7)(F)		1434
W46	Wall change from .740 to .617 for 120.20 feet - Customer supplied		15867.69	13337+89	158+47.4	3.1	0.617			0.0	13.2	13.2	35.8			1435
B73	Fld Bnd 10.88 deg. Left Turn MCSD: 40.26		15895.71	13338+17		3.8	0.617		40.26	14.8	35.8	21.0	38.0	(b) (7)(F)		1443
W47	Wall change from .617 to .740 for 3.37 feet - Customer supplied		15987.89	13339+09	159+67.0	3.4	0.740			0.0	3.4	3.4	4.7			1467
W48	Wall change from .740 to .888 for 4.71 feet - Customer supplied		15991.26	13339+12	159+70.4	1.3	0.888			0.0	4.7	4.7	2.9	(b) (7)(F)		1467
B74	Bend 23.05 deg. 3.0 Ds Right & Down Turn MCSD: 39.91	Before u/s w.: 0.4%(0.168) MCSD: 40.4 ID:40.5 mph:2.4 Clk:6 to 12 After d/s w. : 0.4%(0.150) MCSD: 40.4 ID:40.5 mph:0.3 Clk:5 to 11 MPH coming into Bend (-10ft): 3.0 Leaving Bend (+10ft): 7.3 Min MPH over range: 0.1 at index 2786153	15993.62	13339+15		2.1	0.888		39.91	2.4	4.7	2.3	2.9			1468
W49	Wall change from .888 to .740 for 2.92 feet - Customer supplied		15995.97	13339+17	159+75.1	1.4	0.740			0.0	2.9	2.9	27.5	(b) (7)(F)		1468
W50	Wall change from .740 to .617 for 156.52 feet - Customer supplied		15998.89	13339+20	159+78.0	3.3	0.617			0.0	27.5	27.5	40.1			1468
W51	Wall change from .617 to .740 for 8.40 feet - Customer supplied		16155.41	13340+77	161+35.5	14.6	0.740			0.0	2.0	2.0	4.2	(b) (7)(F)		1437
B75	Bend 23.12 deg. 3.0 Ds Up Turn MCSD: 39.59	Before u/s w.: 0.8%(0.336) MCSD: 40.2 ID:40.5 mph:15.3 Clk:3 to 9 After d/s w. : 0.9%(0.396) MCSD: 40.2 ID:40.5 mph:10.3 Clk:3 to 9 MPH coming into Bend (-10ft): 16.4 Leaving Bend (+10ft): 12.7 Min MPH over range: 9.5 at index 2807627	16159.54	13340+81		11.9	0.740		39.59	2.1	4.2	2.1	2.1			1435
W52	Wall change from .740 to .617 for 14.10 feet - Customer supplied		16163.81	13340+85	161+43.3	10.6	0.617			0.0	14.1	14.1	3.0	(b) (7)(F)		1435
W53	Wall change from .617 to .864 for 7.85 feet - Customer supplied		16177.91	13340+99	161+57.2	14.1	0.864			0.0	3.0	3.0	4.9			1434
B76	Bend 26.54 deg. 3.0 Ds Up Turn MCSD: 39.26	Before u/s w.: 1.4%(0.582) MCSD: 39.9 ID:40.3 mph:12.2 Clk:3 to 9 After d/s w. : 1.4%(0.585) MCSD: 40.0 ID:40.5 mph:10.9 Clk:3 to 9 MPH coming into Bend (-10ft): 13.4 Leaving Bend (+10ft): 11.7 Min MPH over range: 9.9 at index 2810306	16183.32	13341+05		10.6	0.864		39.26	2.4	4.9	2.4	3.1	(b) (7)(F)		1435
W54	Wall change from .864 to .740 for 3.07 feet - Customer supplied		16185.76	13341+07	161+63.7	10.4	0.740			0.0	3.1	3.1	13.2			1435
W55	Wall change from .740 to .617 for 55.52 feet - Customer supplied		16188.82	13341+10	161+67.5	10.5	0.617			0.0	13.2	13.2	42.3	(b) (7)(F)		1436
W56	Wall change from .617 to .740 for 3.26 feet - Customer supplied		16244.35	13341+66	162+22.6	12.6	0.740			0.0	3.3	3.3	7.2			1460
W57	Wall change from .740 to .888 for 7.20 feet - Customer supplied		16247.61	13341+69	162+25.1	11.9	0.888			0.0	7.2	7.2	3.1	(b) (7)(F)		1461

Event ID	Event Description	Comment	Enduro Station	Projected Station	Customer Station	Tool Spd	W.T.	Clock Ori.	MCSD	To U/S Weld	Cur. Joint Len.	To D/S Weld	Len. D/S Joint	Latitude	Longitude	Elevation
B77	Bend 39.54 deg. 3.0 Ds Left Turn MCSD: 39.78	Before u/s w.: 0.7%(0.277) MCSD: 40.2 ID:40.5 mph:12.5 Clk:1 to 7 After d/s w.: 0.7%(0.301) MCSD: 40.3 ID:40.5 mph:9.4 Clk:1 to 7 MPH coming into Bend (-10ft): 12.6 Leaving Bend (+10ft): 10.2 Min MPH over range: 9.0 at index 2818704	16251.21	13341+72		10.5	0.888		39.78	3.6	7.2	3.6	3.1	(b) (7)(F)		1462
W58	Wall change from .888 to .740 for 3.07 feet - Customer supplied		16254.81	13341+76	162+32.9	10.1	0.740			0.0	3.1	3.1	21.0			1464
W59	Wall change from .740 to .617 for 434.72 feet - Customer supplied		16257.87	13341+79	162+35.2	9.7	0.617			0.0	21.0	21.0	39.9			1464
B78	Fld Bnd 9.59 deg. Right Turn MCSD: 40.41		16379.04	13343+00		15.0	0.617		40.41	19.9	42.4	22.5	40.4			1490
B79	Fld Bnd 9.4 deg. Right Turn MCSD: 40.35		16415.11	13343+36		14.0	0.617		40.35	13.5	40.4	26.8	41.0			1494
B80	Fld Bnd 8.03 deg. Down & Left Turn MCSD: 40.50		16631.86	13345+53		7.5	0.617		40.50	19.5	40.1	20.6	40.1			1527
W60	Wall change from .617 to .740 for 80.74 feet - Customer supplied		16692.59	13346+14	166+70.9	4.2	0.740			0.0	40.5	40.5	40.2			1535
W61	Wall change from .740 to .617 for 313.68 feet - Customer supplied		16773.33	13346+95	167+51.5	2.5	0.617			0.0	40.1	40.1	39.9			1548
W62	Wall change from .617 to .740 for 9.42 feet - Customer supplied		17087.02	13350+08	170+65.9	7.0	0.740			0.0	7.2	7.2	2.2			1522
B81	Bend 36.84 deg. 3.0 Ds Right Turn MCSD: 40.08	Before u/s w.: 0.4%(0.182) MCSD: 40.5 ID:40.8 mph:6.5 Clk:1 to 7 After d/s w.: 0.2%(0.096) MCSD: 40.5 ID:40.5 mph:6.1 Clk:6 to 12 MPH coming into Bend (-10ft): 8.4 Leaving Bend (+10ft): 5.8 Min MPH over range: 5.1 at index 2919770	17090.61	13350+12		8.9	0.740		40.08	3.6	7.2	3.6	2.2			1521
W63	Wall change from .740 to .617 for 250.36 feet - Customer supplied		17096.43	13350+18	170+74.9	6.3	0.617			0.0	9.7	9.7	40.0			1521
W64	Wall change from .617 to .740 for 4.43 feet - Customer supplied		17346.79	13352+68	173+24.4	10.6	0.740			0.0	4.4	4.4	1.4			1502
W65	Wall change from .740 to .888 for 1.45 feet - Customer supplied		17351.22	13352+72	173+28.7	8.9	0.888			0.0	1.4	1.4	11.2			1502
B82	Bend 9.7 deg. 3.0 Ds Up Turn MCSD: 39.99	Before u/s w.: 0.3%(0.140) MCSD: 40.4 ID:40.5 mph:9.6 Clk:3 to 9 After d/s w.: 0.2%(0.089) MCSD: 40.4 ID:40.5 mph:6.7 Clk:2 to 8 MPH coming into Bend (-10ft): 11.0 Leaving Bend (+10ft): 6.5 Min MPH over range: 6.4 at index 2951034	17351.92	13352+73		8.3	0.888		39.99	0.7	1.4	0.7	11.2			1502
W66	Wall change from .888 to .740 for 24.77 feet - Customer supplied		17352.67	13352+74	173+30.1	7.3	0.740			0.0	11.2	11.2	13.5			1502
W67	Wall change from .740 to .617 for 319.77 feet - Customer supplied		17377.45	13352+99	173+54.9	4.8	0.617			0.0	39.9	39.9	40.5			1506
W68	Wall change from .617 to .740 for 17.41 feet - Customer supplied		17697.22	13356+18	176+74.1	5.4	0.740			0.0	6.6	6.6	4.3			1489
B83	Bend 25.23 deg. 3.0 Ds Up Turn MCSD: 39.93	Before u/s w.: 0.3%(0.145) MCSD: 40.4 ID:40.5 mph:4.3 Clk:3 to 9 After d/s w.: 0.8%(0.350) MCSD: 40.2 ID:40.5 mph:1.6 Clk:3 to 9 MPH coming into Bend (-10ft): 3.9 Leaving Bend (+10ft): 1.6 Min MPH over range: 0.1 at index 2992300	17706.02	13356+27		2.6	0.740		39.93	2.2	4.3	2.2	6.4			1489

Event ID	Event Description	Comment	Enduro Station	Projected Station	Customer Station	Tool Spd	W.T.	Clock Ori.	MCSD	To U/S Weld	Cur. Joint Len.	To D/S Weld	Len. D/S Joint	Latitude	Longitude	Elevation
W69	Wall change from .740 to .617 for 634.83 feet - Customer supplied		17714.63	13356+36	176+90.9	2.8	0.617			0.0	38.0	38.0	19.8	(b) (7)(F)		1491
B84	Bend 22.11 deg. 3.0 Ds Down Turn MCSD: 39.59	Before u/s w.: 1.2%(0.504) MCSD: 40.3 ID:40.8 mph:8.3 Clk:3 to 9 After d/s w.: 1.0%(0.413) MCSD: 40.4 ID:40.8 mph:7.7 Clk:3 to 9 MPH coming into Bend (-10ft): 8.9 Leaving Bend (+10ft): 9.6 Min MPH over range: 6.2 at index 3001397	17776.82	13356+98		8.8	0.617		39.59	2.1	4.3	2.1	2.2			1503
W70	Wall change from .617 to .740 for 4.23 feet - Customer supplied		18349.47	13362+71	183+26.1	5.1	0.740			0.0	4.2	4.2	3.3	(b) (7)(F)		1477
B85	Bend 26.14 deg. 3.0 Ds Up Turn MCSD: 39.89	Before u/s w.: 0.4%(0.177) MCSD: 40.6 ID:40.8 mph:6.4 Clk:3 to 9 After d/s w.: 0.6%(0.239) MCSD: 40.6 ID:40.8 mph:4.5 Clk:3 to 9 MPH coming into Bend (-10ft): 6.6 Leaving Bend (+10ft): 9.6 Min MPH over range: 0.1 at index 3070276	18351.59	13362+73		4.4	0.740		39.89	2.1	4.2	2.1	3.3			1477
W71	Wall change from .740 to .617 for 44.87 feet - Customer supplied		18353.70	13362+75	183+29.5	1.7	0.617			0.0	3.3	3.3	38.0			1478
W72	Wall change from .617 to .740 for 9.26 feet - Customer supplied		18398.57	13363+20	183+73.6	9.6	0.740			0.0	9.3	9.3	3.1			1482
B86	Bend 45.29 deg. 3.0 Ds Left Turn MCSD: 39.59	Before u/s w.: 1.5%(0.617) MCSD: 40.2 ID:40.8 mph:9.9 Clk:1 to 7 After d/s w.: 1.1%(0.455) MCSD: 40.3 ID:40.8 mph:7.7 Clk:5 to 11 MPH coming into Bend (-10ft): 10.5 Leaving Bend (+10ft): 8.8 Min MPH over range: 6.6 at index 3076963	18403.19	13363+24		8.2	0.740		39.59	4.6	9.3	4.6	3.1			1483
W73	Wall change from .740 to .617 for 634.90 feet - Customer supplied		18407.82	13363+29	183+81.2	7.4	0.617			0.0	3.1	3.1	33.9			1484
W74	Wall change from .617 to .740 for 5.23 feet - Customer supplied		19042.72	13369+64	190+15.6	2.2	0.740			0.0	2.9	2.9	2.3			1653
B87	Bend 16.29 deg. 3.0 Ds Left Turn MCSD: 39.84	Before u/s w.: 0.9%(0.390) MCSD: 40.5 ID:40.8 mph:5.0 Clk:1 to 7 After d/s w.: 1.5%(0.632) MCSD: 39.9 ID:40.5 mph:1.9 Clk:1 to 7 MPH coming into Bend (-10ft): 2.7 Leaving Bend (+10ft): 6.8 Min MPH over range: 0.4 at index 3153121	19044.20	13369+65		1.6	0.740		39.84	1.5	2.9	1.5	2.3			1653
W75	Wall change from .740 to .617 for 2482.20 feet - Customer supplied		19047.96	13369+69	190+20.3	1.6	0.617			0.0	40.7	40.7	36.5			1654
B88	Fld Bnd 8.12 deg. Left Turn MCSD: 40.54		19103.78	13370+25		2.1	0.617		40.54	15.1	36.5	21.4	41.6			1666
B89	Fld Bnd 12.04 deg. Left Turn MCSD: 40.50		19145.00	13370+66		8.8	0.617		40.50	19.8	41.6	21.8	40.3			1672
B90	Fld Bnd 12.86 deg. Right Turn MCSD: 40.56		19426.18	13373+47		5.8	0.617		40.56	18.9	40.2	21.3	33.8			1726
B91	Fld Bnd 12.04 deg. Right Turn MCSD: 40.55		19500.74	13374+22		6.9	0.617		40.55	19.5	40.1	20.7	40.1			1743

Event ID	Event Description	Comment	Enduro Station	Projected Station	Customer Station	Tool Spd	W.T.	Clock Ori.	MCSD	To U/S Weld	Cur. Joint Len.	To D/S Weld	Len. D/S Joint	Latitude	Longitude	Elevation
B92	Bend 75.86 deg. 3.0 Ds Right Turn MCSD: 40.25	Before u/s w.: 0.5%(0.191) MCSD: 40.7 ID:40.8 mph:7.7 Clk:2 to 8 After d/s w. : 0.8%(0.341) MCSD: 40.5 ID:40.8 mph:1.4 Clk:5 to 11 MPH coming into Bend (-10ft): 7.5 Leaving Bend (+10ft): 2.4 Min MPH over range: 1.1 at index 3231023	19683.89	13376+05		3.7	0.617		40.25	7.0	14.0	7.0	2.4	(b) (7)(F)		1772
B93	Fld Bnd 11.87 deg. Left & Up Turn MCSD: 40.13		19952.89	13378+74		12.2	0.617		40.13	18.3	40.5	22.2	37.3			1761
B94	Fld Bnd 8.83 deg. Left Turn MCSD: 40.53		19992.02	13379+13		12.8	0.617		40.53	16.9	37.3	20.5	40.0			1765
B95	Fld Bnd 5.44 deg. Right & Down Turn MCSD: 40.56		20034.48	13379+56		11.0	0.617		40.56	22.0	40.0	18.0	40.9			1767
B96	Fld Bnd 6.26 deg. Right Turn MCSD: 40.52		20274.28	13381+95		6.0	0.617		40.52	20.3	40.5	20.2	40.5			1745
B97	Fld Bnd 9.66 deg. Right Turn MCSD: 40.35		20901.32	13388+23		15.7	0.617		40.35	19.1	42.3	23.2	40.8			1689
B98	Fld Bnd 9.83 deg. Left Turn MCSD: 40.43		21047.04	13389+68		7.1	0.617		40.43	18.1	41.8	23.7	42.4			1695
B99	Bend 30.36 deg. 3.0 Ds Right Turn MCSD: 40.18	Before u/s w.: 0.5%(0.202) MCSD: 40.5 ID:40.8 mph:15.2 Clk:4 to 10 After d/s w. : 0.7%(0.303) MCSD: 40.4 ID:40.8 mph:13.2 Clk:4 to 10 MPH coming into Bend (-10ft): 16.1 Leaving Bend (+10ft): 15.1 Min MPH over range: 11.5 at index 3424086	21304.32	13392+26		15.1	0.617		40.18	3.0	6.1	3.0	2.1			1689
W76	Wall change from .617 to .740 for 6.97 feet - Customer supplied		21530.16	13394+51	214+98.0	15.1	0.740			0.0	2.5	2.5	4.5			1685
B100	Bend 21.86 deg. 3.0 Ds Left Turn MCSD: 39.93	Before u/s w.: 0.4%(0.183) MCSD: 40.5 ID:40.5 mph:14.8 Clk:3 to 9 After d/s w. : 0.6%(0.266) MCSD: 40.4 ID:40.8 mph:11.8 Clk:2 to 8 MPH coming into Bend (-10ft): 15.5 Leaving Bend (+10ft): 13.1 Min MPH over range: 11.8 at index 3453059	21534.89	13394+56		14.2	0.740		39.93	2.2	4.5	2.2	2.5			1685
W77	Wall change from .740 to .617 for 1759.23 feet - Customer supplied		21537.12	13394+58	215+05.2	13.3	0.617			0.0	2.5	2.5	42.0			1685
B101	Fld Bnd 7.19 deg. Up & Right Turn MCSD: 40.39		21560.24	13394+81		6.1	0.617		40.39	20.6	42.0	21.4	31.9			1687
B102	Fld Bnd 10.45 deg. Right Turn MCSD: 40.59		22370.72	13402+92		10.1	0.617		40.59	17.6	42.6	25.0	42.6			1739
B103	Bend 52.82 deg. 3.0 Ds Left Turn MCSD: 39.83	Before u/s w.: 1.1%(0.450) MCSD: 40.4 ID:40.8 mph:4.0 Clk:6 to 12 After d/s w. : 0.4%(0.149) MCSD: 40.7 ID:40.8 mph:4.5 Clk:6 to 12 MPH coming into Bend (-10ft): 4.1 Leaving Bend (+10ft): 6.1 Min MPH over range: 0.4 at index 3610011	22853.62	13407+75		1.7	0.617		39.83	5.3	10.5	5.3	2.3			1739
B104	Fld Bnd 8.49 deg. Left Turn MCSD: 40.63		22950.96	13408+72		8.6	0.617		40.63	21.0	41.6	20.6	39.9			1708
W78	Wall change from .617 to .740 for 5.84 feet - Customer supplied		23296.36	13412+18	232+60.6	9.6	0.740			0.0	2.1	2.1	3.7			1586

Event ID	Event Description	Comment	Enduro Station	Projected Station	Customer Station	Tool Spd	W.T.	Clock Ori.	MCSD	To U/S Weld	Cur. Joint Len.	To D/S Weld	Len. D/S Joint	Latitude	Longitude	Elevation
B105	Bend 18.81 deg. 3.0 Ds Right Turn MCSD: 40.06	Before u/s w.: 0.6%(0.253) MCSD: 40.6 ID:40.8 mph:8.9 Clk:5 to 11 After d/s w. : 0.5%(0.229) MCSD: 40.3 ID:40.5 mph:6.9 Clk:4 to 10 MPH coming into Bend (-10ft): 11.8 Leaving Bend (+10ft): 3.1 Min MPH over range: 3.1 at index 3664808	23300.33	13412+22		7.1	0.740		40.06	1.9	3.7	1.9	2.4	(b) (7)(F)		1585
W79	Wall change from .740 to .617 for 792.36 feet - Customer supplied		23302.20	13412+23	232+66.2	6.2	0.617			0.0	2.4	2.4	43.2			1584
B106	Fld Bnd 11.86 deg. Down & Left Turn MCSD: 40.32		23636.31	13415+58		6.2	0.617		40.32	19.9	42.9	23.1	41.9			1523
B107	Bend 21.42 deg. 3.0 Ds Up Turn MCSD: 40.14	Before u/s w.: 0.4%(0.174) MCSD: 40.6 ID:40.8 mph:7.6 Clk:1 to 7 After d/s w. : 1.1%(0.467) MCSD: 40.3 ID:40.8 mph:3.9 Clk:6 to 12 MPH coming into Bend (-10ft): 1.8 Leaving Bend (+10ft): 10.8 Min MPH over range: 0.4 at index 3734589	23886.39	13418+08		5.3	0.617		40.14	2.1	4.3	2.1	2.2			1430
B108	Bend 38.01 deg. 3.0 Ds Right Turn MCSD: 39.81	Before u/s w.: 1.3%(0.554) MCSD: 40.2 ID:40.8 mph:10.5 Clk:3 to 9 After d/s w. : 1.3%(0.545) MCSD: 40.3 ID:40.8 mph:5.9 Clk:3 to 9 MPH coming into Bend (-10ft): 14.0 Leaving Bend (+10ft): 10.4 Min MPH over range: 0.3 at index 3741240	23942.62	13418+64		6.6	0.617		39.81	3.6	7.1	3.6	2.3			1432
W80	Wall change from .617 to .740 for 104.68 feet - Customer supplied		24094.56	13420+16	240+56.0	2.8	0.740			0.0	39.3	39.3	40.7			1428
B109	Bend 22.41 deg. 3.0 Ds Left Turn MCSD: 39.97	Before u/s w.: 0.4%(0.152) MCSD: 40.4 ID:40.5 mph:2.6 Clk:3 to 9 After d/s w. : 0.5%(0.204) MCSD: 40.6 ID:40.8 mph:1.2 Clk:3 to 9 MPH coming into Bend (-10ft): 5.5 Leaving Bend (+10ft): 9.8 Min MPH over range: 0.4 at index 3772018	24197.31	13421+19		5.1	0.740		39.97	1.9	3.9	1.9	41.7			1430
W81	Wall change from .740 to .617 for 245.29 feet - Customer supplied		24199.24	13421+20	241+59.3	4.8	0.617			0.0	41.7	41.7	40.7			1430
F3	End Line Pipe	Cahas Receiver Boones Mill, VA	24444.53	13423+66	244+04.5	6.2	0.617		40.60	0.0						1478